

Appendix B

AGENCY COORDINATION

Sample Early Coordination Letter | Responses to Early Coordination

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Sample Early Coordination Letter

November 3, 2010

Mr. Tim Monaghan, Director
Jennings County E.M.A.
925 South State Street
North Vernon, IN 47265

Subject: US 50 North Vernon Bypass Project
Designation # 0401402
Early Coordination Initiation
City of North Vernon, Jennings County, Indiana

Dear Mr. Monaghan:

The Indiana Department of Transportation (INDOT) intends to proceed with the above project in Jennings County, Indiana. This letter is part of the early coordination phase of the environmental review process. We are requesting comments from your area of expertise regarding any possible environmental effects associated with this project. **Please use the above designation number and description in your reply.** We will incorporate your comments into a study of the project's environmental impacts. The project limits are located approximately one quarter mile west of South CR 610 W at the west end of the project and one quarter mile east of N. Base Road on the east end of the project, a distance of approximately 7 miles (See Figure 1).

Since the February 2008 publication of the US 50 North Vernon Corridor Planning and Environmental Assessment Study the scope of the project has been scaled back to providing a connection between US 50 near CR 610 W and SR 3 north of its split with SR 7. This reduction is an effort to focus improvements in the areas in which they are most needed at this time. The objective of this element of the overall program is to improve traffic operation in and around North Vernon and increase accessibility to existing and potential growth areas. This project will provide the opportunity to complete the eastern section of the bypass back to US 50 in the future.

A separate project being developed concurrently with the US 50 North Vernon Bypass project will address notable operational problems along the existing US 50 from US 31 to County Road 15 N on the west side of North Vernon. These needs will be provided for through a variety of localized improvements such as auxiliary lanes, intersection passing blisters, and improved signage at select locations along US 50. While the limits of that project partially overlap this one, it addresses different needs and is being developed independently under a separate designation number (Des No. 1005104). Separate letters requesting your agency's input on those spot improvements will be sent, and comments on that project should be provided under its designation number.

Project Description

Through most of Jennings County, US 50 is a two-lane undivided highway that is classified as a Rural Principal Arterial that runs east-west from the Jackson County line to the Ripley County line. Within the North Vernon Urban Area Boundary, US 50 is also a two-lane undivided highway and is classified as an Urban Principal Arterial.

Project Background

The INDOT 2030 Long Range Transportation Plan lays out a strategy for the future of the state highway system. This extended planning period provides a long range vision of how the state jurisdictional highway system will develop in the future. Because US 50 is identified as a Statewide Mobility Corridor, there is a greater goal to be achieved in the improvement of US 50 (more than just addressing local traffic concerns). Statewide Mobility Corridors serve as the connection between urban areas of 25,000 persons or greater in Indiana and neighboring states, provide macro-level accessibility to cities and regions around the state, and play a vital role in economic development. These roadways carry long distance trips, heavier commercial vehicle flows and warrant high-type design standards, such as multiple travel lanes, railroad and highway grade separations, and bypasses of congested areas.

The INDOT Major Moves highway plan identifies added travel lanes in Jennings County for the portion of US 50 from the west side of North Vernon's urban area boundary to the east side of North Vernon's urban area boundary in the fiscal year 2015 (Des. No. 0401402). INDOT also has previously programmed projects along the US 50 corridor within the Study Area, including the replacement of the US 50 Bridge over Indian Creek and intersection improvements in North Vernon on US 50 at Hayden Pike, Poplar Street and Norris Avenue, on SR 3 at North Madison Street, and on SR 7 at Franklin Street, Washington Street/O & M Avenue and Hayden Pike.

Alternatives

The US 50 North Vernon Bypass Project will evaluate both positive and negative impacts associated with the following alternatives:

- **“No-action”** – For this alternative, the existing US 50 corridor would remain unchanged in its present condition (i.e., no upgrades/improvements, other than “committed” projects already in active development).
- **Build Alternatives** – Adding a bypass northwest of the City of North Vernon connecting US 50 to SR 3 (see Figure 2).

Environmental Issues

A combination of a review of existing resources and field investigations will evaluate the impacts of each alternative on the existing environment as well as identifying known environmental issues that may have an impact on the project. Resources identified to date are shown in Figure 3. An evaluation of environmental issues will include investigations of the following:

- Land Use
- Surface/Groundwater Resources
- Wetlands
- Threatened, Endangered, and Rare Species
- Vegetation and Wildlife
- Historic and Archaeological Resources
- Public Parks and Recreational Areas
- Farmland
- Floodplains
- Noise
- Hazardous Materials
- Air Quality
- Residential/Business Displacements
- Visual Impacts

Mr. Tim Monaghan
August 2, 2011

As noted above, we are requesting comments from your area of expertise regarding any possible environmental effects associated with this project. Should we not receive your response **within thirty (30) calendar days** from the date of this letter, it will be assumed that your agency feels that there will be no adverse effects incurred as a result of the proposed project. However, should you find that an extension to the response time is necessary, a reasonable amount may be granted upon request. If you have any questions regarding this matter, please feel free to contact me at (317) 616-1016. Thank you in advance for your input.

If you have any questions or need additional information, please feel free to contact us at (317) 616-1008. Thank you for your time and cooperation.

Sincerely,

PARSONS

A handwritten signature in black ink, appearing to read 'Steve Davidson', written in a cursive style.

Steve Davidson, P.E.
Project Manager

Attachment(s)

cc: Gary Pence, INDOT
Robert Dirks, FHWA

Responses To Early Coordination



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

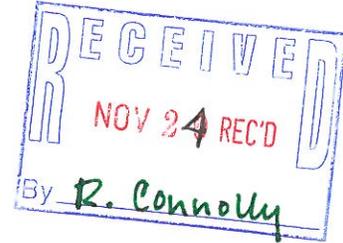
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

November 22, 2010



Steve Davidson
Parsons
101 West Ohio Street, Suite 2121
Indianapolis, Indiana 46204

RE: Wellhead Protection Area Proximity Determination
Designation Number 0401402, US 50 North Vernon
Bypass, Jennings County

Upon review of the above referenced site, it has been determined that the site **is not** located within a Wellhead Protection Area.

This information is accurate to the best of our knowledge. However, there are in some cases, a few factors that could impact the accuracy of this determination. For example, some Wellhead Protection Area Delineations have not been submitted or may not have been approved by this office. In these cases, we use a 3,000 foot fixed radius buffer to make the proximity determination. To find the status of a Public Water Supply System's Wellhead Protection Area Delineation, please visit our tracking database at <http://www.in.gov/idem/4289.htm>.

If you have any additional questions, please feel free to contact me at the address above or at (317) 234-7476.

Sincerely,

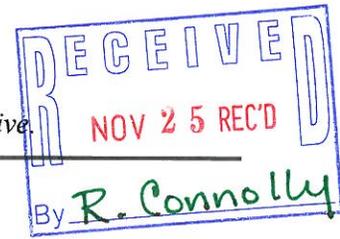
James Sullivan, Chief
Ground Water Section
Drinking Water Branch
Office of Water Quality

JS:gml



Indiana Department of Environmental Management

We make Indiana a cleaner, healthier place to live.



Mitchell E. Daniels, Jr.
Governor

100 North Senate Avenue
Indianapolis, Indiana 46206

Thomas W. Easterly
Commissioner

(317) 232-8603
800) 451-6027
www.IN.gov/idem

INDOT

100 N Senate Ave
Indianapolis, IN 46204

Parsons
Richard Connolly
101 W Ohio St
ste 2121
Indianapolis, IN 46204

Tuesday, November 23, 2010

To Engineers and Consultants Proposing Roadway Construction Projects:

RE: US 50 North Vernon Bypass Project Designation # 0401402 The Indiana Department of Transportation (INDOT) intends to proceed with the above project in Jennings County, Indiana. This letter is part of the early coordination phase of the environmental review process. We are requesting comments from your area of expertise regarding any possible environmental effects associated with this project. Please use the above designation number and description in your reply. We will incorporate your comments into a study of the project's environmental impacts. The project limits are located approximately one quarter mile west of South CR 610 W at the west end of the project and one quarter mile east of N. Base Road on the east end of the project, a distance of approximately 7 miles. Since the February 2008 publication of the US 50 North Vernon Corridor Planning and Environmental Assessment Study the scope of the project has been scaled back to providing a connection between US 50 near CR 610 W and SR 3 north of its split with SR 7. This reduction is an effort to focus improvements in the areas in which they are most needed at this time. The objective of this element of the overall program is to improve traffic operation in and around North Vernon and increase accessibility to existing and potential growth areas. This project will provide the opportunity to complete the eastern section of the bypass back to US 50 in the future.

This letter from the Indiana Department of Environmental Management (IDEM) serves as a standardized response to enquiries inviting IDEM comments on roadway construction, reconstruction, or other improvement projects within existing roadway corridors when the proposed scope of the project is beneath the threshold requiring a formal National Environmental Policy Act-mandated Environmental Assessment or Environmental Impact Statement. As the letter attempts to address all roadway-related environmental topics of potential concern, it is possible that not every topic addressed in the letter will be applicable to your particular roadway project.

For additional information on specific roadway-related topics of interest, please visit the appropriate Web pages cited below, many of which provide contact information for persons within the various program areas who can answer

questions not fully addressed in this letter. Also please be mindful that some environmental requirements may be subject to change and so each person intending to include a copy of this letter in their project documentation packet is advised to download the most recently revised version of the letter; found at: <http://www.in.gov/idem/5283.htm>.

To ensure that all environmentally-related issues are adequately addressed, IDEM recommends that you read this letter in its entirety, and consider each of the following issues as you move forward with the planning of your proposed roadway construction, reconstruction, or improvement project:

WATER AND BIOTIC QUALITY

1. Section 404 of the Clean Water Act requires that you obtain a permit from the U.S. Army Corps of Engineers (USACE) before discharging dredged or fill materials into any wetlands or other waters, such as rivers, lakes, streams, and ditches. Other activities regulated include the relocation, channelization, widening, or other such alteration of a stream, and the mechanical clearing (use of heavy construction equipment) of wetlands. Thus, as a project owner or sponsor, it is your responsibility to ensure that no wetlands are disturbed without the proper permit. Although you may initially refer to the U.S. Fish and Wildlife Service National Wetland Inventory maps as a means of identifying potential areas of concern, please be mindful that those maps do not depict jurisdictional wetlands regulated by the USACE or the Department of Environmental Management. A valid jurisdictional wetlands determination can only be made by the USACE, using the 1987 Wetland Delineation Manual.

USACE recommends that you have a consultant check to determine whether your project will abut, or lie within, a wetland area. To view a list of consultants that have requested to be included on a list posted by the USACE on their Web site, see USACE [Permits and Public Notices](http://www.lrl.usace.army.mil/orf/default.asp) (<http://www.lrl.usace.army.mil/orf/default.asp>) and then click on "Information" from the menu on the right-hand side of that page. Their "Consultant List" is the fourth entry down on the "Information" page. Please note that the USACE posts all consultants that request to appear on the list, and that inclusion of any particular consultant on the list does not represent an endorsement of that consultant by the USACE, or by IDEM.

Much of northern Indiana (Newton, Lake, Porter, LaPorte, St. Joseph, Elkhart, LaGrange, Steuben, and Dekalb counties; large portions of Jasper, Starke, Marshall, Noble, Allen, and Adams counties; and lesser portions of Benton, White, Pulaski, Kosciusko, and Wells counties) is served by the USACE District Office in Detroit (313-226-6812). The central and southern portions of the state (large portions of Benton, White, Pulaski, Kosciusko, and Wells counties; smaller portions of Jasper, Starke, Marshall, Noble, Allen, and Adams counties; and all other Indiana counties located in north-central, central, and southern Indiana) are served by the USACE Louisville District Office (502-315-6733).

Additional information on contacting these U.S. Army Corps of Engineers (USACE) District Offices, government agencies with jurisdiction over wetlands, and other water quality issues, can be found at <http://www.in.gov/idem/4396.htm>. IDEM recommends that impacts to wetlands and other water resources be avoided to the fullest extent.

2. In the event a Section 404 wetlands permit is required from the USACE, you also must obtain a Section 401 Water Quality Certification from the IDEM Office of Water Quality Wetlands Program. To learn more about the Wetlands Program, visit: <http://www.in.gov/idem/4384.htm>.
3. If the USACE determines that a wetland or other water body is isolated and not subject to Clean Water Act regulation, it is still regulated by the state of Indiana. A State Isolated Wetland permit from IDEM's Office of Water Quality (OWQ) is required for any activity that results in the discharge of dredged or fill materials into isolated wetlands. To learn more about isolated wetlands, contact the OWQ Wetlands Program at 317-233-8488.
4. If your project will involve over a 0.5 acre of wetland impact, stream relocation, or other large-scale alterations to water bodies such as the creation of a dam or a water diversion, you should seek additional input from the OWQ Wetlands Program staff. Consult the Web at: <http://www.in.gov/idem/4384.htm> for the appropriate staff

contact to further discuss your project.

5. Work within the one-hundred year floodway of a given water body is regulated by the Department of Natural Resources, Division of Water. The Division issues permits for activities regulated under the follow statutes:
 - IC 14-26-2 Lakes Preservation Act 312 IAC 11
 - IC 14-26-5 Lowering of Ten Acre Lakes Act No related code
 - IC 14-28-1 Flood Control Act 310 IAC 6-1
 - IC 14-29-1 Navigable Waterways Act 312 IAC 6
 - IC 14-29-3 Sand and Gravel Permits Act 312 IAC 6
 - IC 14-29-4 Construction of Channels Act No related code

For information on these Indiana (statutory) Code and Indiana Administrative Code citations, see the DNR Web site at: <http://www.in.gov/dnr/water/9451.htm> . Contact the DNR Division of Water at 317-232-4160 for further information.

The physical disturbance of the stream and riparian vegetation, especially large trees overhanging any affected water bodies should be limited to only that which is absolutely necessary to complete the project. The shade provided by the large overhanging trees helps maintain proper stream temperatures and dissolved oxygen for aquatic life.

6. For projects involving construction activity (which includes clearing, grading, excavation and other land disturbing activities) that result in the disturbance of one (1), or more, acres of total land area, contact the Office of Water Quality – Watershed Planning Branch (317/233-1864) regarding the need for of a Rule 5 Storm Water Runoff Permit. Visit the following Web page
 - <http://www.in.gov/idem/4902.htm>

To obtain, and operate under, a Rule 5 permit you will first need to develop a Construction Plan (<http://www.in.gov/idem/4917.htm#constreq>), and as described in 327 IAC 15-5-6.5 (<http://www.in.gov/legislative/iac/T03270/A00150> [PDF], pages 16 through 19). Before you may apply for a Rule 5 Permit, or begin construction, you must submit your Construction Plan to your county Soil and Water Conservation District (SWCD) (<http://www.in.gov/isda/soil/contacts/map.html>).

Upon receipt of the construction plan, personnel of the SWCD or the Indiana Department of Environmental Management will review the plan to determine if it meets the requirements of 327 IAC 15-5. Plans that are deemed deficient will require re-submittal. If the plan is sufficient you will be notified and instructed to submit the verification to IDEM as part of the Rule 5 Notice of Intent (NOI) submittal. Once construction begins, staff of the SWCD or Indiana Department of Environmental Management will perform inspections of activities at the site for compliance with the regulation.

Please be mindful that approximately 149 Municipal Separate Storm Sewer System (MS4) areas are now being established by various local governmental entities throughout the state as part of the implementation of Phase II federal storm water requirements. All of these MS4 areas will eventually take responsibility for Construction Plan review, inspection, and enforcement. As these MS4 areas obtain program approval from IDEM, they will be added to a list of MS4 areas posted on the IDEM Website at: <http://www.in.gov/idem/4900.htm>.

If your project is located in an IDEM-approved MS4 area, please contact the local MS4 program about meeting their storm water requirements. Once the MS4 approves the plan, the NOI can be submitted to IDEM.

Regardless of the size of your project, or which agency you work with to meet storm water requirements, IDEM recommends that appropriate structures and techniques be utilized both during the construction phase, and after completion of the project, to minimize the impacts associated with storm water runoff. The use of appropriate planning and site development and appropriate storm water quality measures are recommended to prevent soil from leaving the construction site during active land disturbance and for post construction water quality concerns. Information and assistance regarding storm water related to construction activities are available from the Soil and Water Conservation District (SWCD) offices in each county or from IDEM.

7. For projects involving impacts to fish and botanical resources, contact the Department of Natural Resources - Division of Fish and Wildlife (317/232-4080) for addition project input.
8. For projects involving water main construction, water main extensions, and new public water supplies, contact the Office of Water Quality - Drinking Water Branch (317-308-3299) regarding the need for permits.
9. For projects involving effluent discharges to waters of the State of Indiana, contact the Office of Water Quality - Permits Branch (317-233-0468) regarding the need for a National Pollutant Discharge Elimination System (NPDES) permit.
10. For projects involving the construction of wastewater facilities and sewer lines, contact the Office of Water Quality - Permits Branch (317-232-8675) regarding the need for permits.

AIR QUALITY

The above-noted project should be designed to minimize any impact on ambient air quality in, or near, the project area. The project must comply with all federal and state air pollution regulations. Consideration should be given to the following:

1. Regarding open burning, and disposing of organic debris generated by land clearing activities; some types of open burning are allowed (<http://www.in.gov/idem/4148.htm>) under specific conditions. You also can seek an open burning variance from IDEM.

However, IDEM generally recommends that you take vegetative wastes to a registered yard waste composting facility or that the waste be chipped or shredded with composting on site (you must register with IDEM if more than 2,000 pounds is to be composted; contact 317/232-0066). The finished compost can then be used as a mulch or soil amendment. You also may bury any vegetative wastes (such as leaves, twigs, branches, limbs, tree trunks and stumps) onsite, although burying large quantities of such material can lead to subsidence problems, later on.

Reasonable precautions must be taken to minimize fugitive dust emissions from construction and demolition activities. For example, wetting the area with water, constructing wind barriers, or treating dusty areas with chemical stabilizers (such as calcium chloride or several other commercial products). Dirt tracked onto paved roads from unpaved areas should be minimized.

Additionally, if construction or demolition is conducted in a wooded area where blackbirds have roosted or abandoned buildings or building sections in which pigeons or bats have roosted for 3-5 years precautionary measures should be taken to avoid an outbreak of histoplasmosis. This disease is caused by the fungus *Histoplasma capsulatum*, which stems from bird or bat droppings that have accumulated in one area for 3-5 years. The spores from this fungus become airborne when the area is disturbed and can cause infections over an entire community downwind of the site. The area should be wetted down prior to cleanup or demolition of the project site. For more detailed information on histoplasmosis prevention and control, please contact the Acute Disease Control Division of the Indiana State Department of Health at (317) 233-7272.

2. The U.S. EPA and the Surgeon General recommend that people not have long-term exposure to radon at levels above 4 pCi/L. (For a county-by-county map of predicted radon levels in Indiana, visit: <http://www.in.gov/idem/4145.htm>.)

The U.S. EPA further recommends that all homes (and apartments within three stories of ground level) be tested for radon. If in-home radon levels are determined to be 4 pCi/L, or higher, EPA recommends a follow-up test. If the second test confirms that radon levels are 4 pCi/L, or higher, EPA recommends the installation of radon-reduction measures. (For a list of qualified radon testers and radon mitigation (or reduction) specialists visit: http://www.in.gov/isdh/regsvcs/radhealth/pdfs/radon_testers_mitigators_list.pdf.) It also is recommended that radon reduction measures be built into all new homes, particularly in areas like Indiana that have moderate to

high predicted radon levels.

To learn more about radon, radon risks, and ways to reduce exposure visit:

<http://www.in.gov/isdh/regsvcs/radhealth/radon.htm>, <http://www.in.gov/idem/4145.htm>, or <http://www.epa.gov/radon/index.html>.

3. With respect to asbestos removal: all facilities slated for renovation or demolition (except residential buildings that have (4) four or fewer dwelling units and which will not be used for commercial purposes) must be inspected by an Indiana-licensed asbestos inspector prior to the commencement of any renovation or demolition activities. If regulated asbestos-containing material (RACM) that may become airborne is found, any subsequent demolition, renovation, or asbestos removal activities must be performed in accordance with the proper notification and emission control requirements.

If no asbestos is found where a renovation activity will occur, or if the renovation involves removal of less than 260 linear feet of RACM off of pipes, less than 160 square feet of RACM off of other facility components, or less than 35 cubic feet of RACM off of all facility components, the owner or operator of the project does not need to notify IDEM before beginning the renovation activity.

For questions on asbestos demolition and renovation activities, you can also call IDEM's Lead/Asbestos section at 1-888-574-8150.

However, in all cases where a demolition activity will occur (even if no asbestos is found), the owner or operator must still notify IDEM 10 working days prior to the demolition, using the form found at <http://www.in.gov/icpr/webfile/formsdiv/44593.pdf>.

Anyone submitting a renovation/demolition notification form will be billed a notification fee based upon the amount of friable asbestos containing material to be removed or demolished. Projects that involve the removal of more than 2,600 linear feet of friable asbestos containing materials on pipes, or 1,600 square feet or 400 cubic feet of friable asbestos containing material on other facility components, will be billed a fee of \$150 per project; projects below these amounts will be billed a fee of \$50 per project. All notification remitters will be billed on a quarterly basis.

For more information about IDEM policy regarding asbestos removal and disposal, visit:

<http://www.in.gov/idem/4983.htm>.

4. With respect to lead-based paint removal: IDEM encourages all efforts to minimize human exposure to lead-based paint chips and dust. IDEM is particularly concerned that young children exposed to lead can suffer from learning disabilities. Although lead-based paint abatement efforts are not mandatory, any abatement that is conducted within housing built before January 1, 1978, or a child-occupied facility is required to comply with all lead-based paint work practice standards, licensing and notification requirements. For more information about lead-based paint removal visit: <http://www.in.gov/isdh/19131.htm>.
5. Ensure that asphalt paving plants are permitted and operate properly. The use of cutback asphalt, or asphalt emulsion containing more than seven percent (7%) oil distillate, is prohibited during the months April through October. See 326 IAC 8-5-2, Asphalt Paving Rule (<http://www.ai.org/legislative/iac/T03260/A00080.PDF>).
6. If your project involves the construction of a new source of air emissions or the modification of an existing source of air emissions or air pollution control equipment, it will need to be reviewed by the IDEM Office of Air Quality (OAQ). A registration or permit may be required under 326 IAC 2 (View at: www.ai.org/legislative/iac/t03260/a00020.pdf.) New sources that use or emit hazardous air pollutants may be subject to Section 112 of the Clean Air Act and corresponding state air regulations governing hazardous air pollutants.
7. For more information on air permits visit: <http://www.in.gov/idem/4223.htm>, or to initiate the IDEM air permitting process, please contact the Office of Air Quality Permit Reviewer of the Day at (317) 233-0178 or

OAMPROD atdem.state.in.us.

LAND QUALITY

In order to maintain compliance with all applicable laws regarding contamination and/or proper waste disposal, IDEM recommends that:

1. If the site is found to contain any areas used to dispose of solid or hazardous waste, you need to contact the Office of Land Quality (OLQ) at 317-308-3103.
2. All solid wastes generated by the project, or removed from the project site, need to be taken to a properly permitted solid waste processing or disposal facility. For more information, visit <http://www.in.gov/idem/4998.htm>.
3. If any contaminated soils are discovered during this project, they may be subject to disposal as hazardous waste. Please contact the OLQ at 317-308-3103 to obtain information on proper disposal procedures.
4. If PCBs are found at this site, please contact the Industrial Waste Section of OLQ at 317-308-3103 for information regarding management of any PCB wastes from this site.
5. If there are any asbestos disposal issues related to this site, please contact the Industrial Waste Section of OLQ at 317-308-3103 for information regarding the management of asbestos wastes (Asbestos removal is addressed above, under Air Quality).
6. If the project involves the installation or removal of an underground storage tank, or involves contamination from an underground storage tank, you must contact the IDEM Underground Storage Tank program at 317/308-3039. See: <http://www.in.gov/idem/4999.htm>.

FINAL REMARKS

Should you need to obtain any environmental permits in association with this proposed project, please be mindful that IC 13-15-8 requires that you notify all adjoining property owners and/or occupants within ten days your submittal of each permit application. However, if you are seeking multiple permits, you can still meet the notification requirement with a single notice if all required permit applications are submitted with the same ten day period.

Should the scope of the proposed project be expanded to the extent that a National Environmental Policy Act Environmental Assessment (EA) or Environmental Impact Statement (EIS) is required, IDEM will actively participate in any early interagency coordination review of the project.

Meanwhile, please note that this letter does not constitute a permit, license, endorsement or any other form of approval on the part of the Indiana Department of Environmental Management regarding any project for which a copy of this letter is used. Also note that it is the responsibility of the project engineer or consultant using this letter to ensure that the most current draft of this document, which is located at <http://www.in.gov/idem/5284.htm>, is used.

Sincerely,



Thomas W. Easterly
Commissioner

Signature(s) of the Applicant

I acknowledge that the following proposed roadway project will be financed in part, or in whole, by public monies.

Project Description

US 50 North Vernon Bypass Project Designation # 0401402 The Indiana Department of Transportation (INDOT) intends to proceed with the above project in Jennings County, Indiana. This letter is part of the early coordination phase of the environmental review process. We are requesting comments from your area of expertise regarding any possible environmental effects associated with this project. Please use the above designation number and description in your reply. We will incorporate your comments into a study of the project's environmental impacts. The project limits are located approximately one quarter mile west of South CR 610 W at the west end of the project and one quarter mile east of N. Base Road on the east end of the project, a distance of approximately 7 miles. Since the February 2008 publication of the US 50 North Vernon Corridor Planning and Environmental Assessment Study the scope of the project has been scaled back to providing a connection between US 50 near CR 610 W and SR 3 north of its split with SR 7. This reduction is an effort to focus improvements in the areas in which they are most needed at this time. The objective of this element of the overall program is to improve traffic operation in and around North Vernon and increase accessibility to existing and potential growth areas. This project will provide the opportunity to complete the eastern section of the bypass back to US 50 in the future.

With my signature, I do hereby affirm that I have read the letter from the Indiana Department of Environment that appears directly above. In addition, I understand that in order to complete that project in which I am interested, with a minimum of impact to the environment, I must consider all the issues addressed in the aforementioned letter, and further, that I must obtain any required permits.

Date: _____

Signature of the INDOT
Project Engineer or Other Responsible Agent _____

Date: _____

Signature of the
For Hire Consultant _____

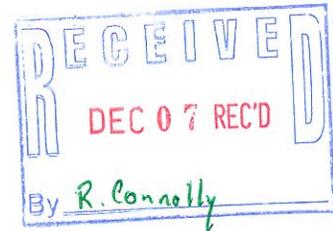
Richard Connolly

Representing the Company: Parsons



CITY OF NORTH VERNON

HAROLD "SOUP" CAMPBELL, MAYOR



December 2, 2010

Mr. Steve Davidson, P.E.
Project Manager
PARSONS
101 W. Ohio St., Suite 2121
Indianapolis, IN 46204

Reference: Subject: US 50 North Vernon Bypass Project
Designation # 0401402
Early Coordination Initiation
City of North Vernon, Jennings County, Indiana

Dear Mr. Davidson,

In reference to this project, I know of no Environmental issues that could have an impact on the project as it relates to the city.

My thoughts are to avoid as many buildings, and structures as possible in the projects path even though we do need right-of-ways and easements to accomplish the planned project.

Thank you,

Harold N. Campbell, Mayor
City of North Vernon

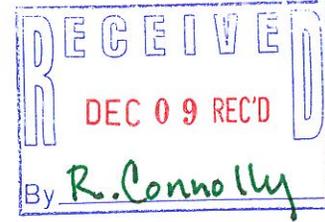


Division of Historic Preservation & Archaeology • 402 W. Washington Street, W274 • Indianapolis, IN 46204-2739
Phone 317-232-1646 • Fax 317-232-0693 • dhpa@dnr.IN.gov



December 7, 2010

Steve Davidson, P.E.
Project Manager
Parsons
101 W. Ohio Street, Suite 2121
Indianapolis, Indiana 46204



Federal Agency: Federal Highway Administration

Re: Early coordination initiation of the US 50 North Vernon Bypass Project (Des. No. 0401402; DHPA No. 1882)

Dear Mr. Davidson:

Pursuant to the National Environmental Policy Act of 1969 (42 U.S.C. § 4321, *et seq.*) and pursuant to Section 106 of the National Historic Preservation Act (16 U.S.C. § 470f) and implementing regulations at 36 C.F.R. Part 800, the staff of the Indiana State Historic Preservation Officer has reviewed your letter dated November 9, 2010 and received on November 10 for the above-indicated project at or near North Vernon, Jennings County, Indiana.

Thank you for notifying our office of the proposed project. Having commented previously on the US 50 North Vernon Corridor Planning and Environmental Study (Des. Nos. 0401401 and 0401402; please see our enclosed letters of July 9, 2007 and March 26, 2008), we can to some extent anticipate the likely purpose and need of this project. Because this proposal for a bypass, however, now would extend only from US 50 west of North Vernon to SR 3 on the north side of town, we are unclear about the extent to which the purpose and need of a bypass would be satisfied. Our impression, based on what we learned in the earlier corridor study, was that two of the principal circumstances giving rise to the need for a bypass were existing traffic congestion at the intersection of US 50 and SR 3/SR 7 just west of downtown North Vernon and the anticipated increase in troop carrier and other military vehicle movements between Camp Atterbury, north of Columbus, and Muscatatuck Urban Training Center, east of North Vernon. It seems apparent from even the casual observer's perspective that there already is a need to reduce traffic congestion within North Vernon, particularly at the US 50 intersection with SR 3/SR 7. It was not our impression from the earlier study, however, that traffic moving east on US 50 from western Jennings County and then north on SR 3 or SR 7—or, alternatively, moving south on SR 3 or SR 7 and then west on US 50 toward or beyond eastern Jennings County—was one of the major factors contributing to the existing and anticipated traffic congestion in North Vernon. Consequently, at the appropriate point in the environmental studies of this project—but preferably earlier rather than later—we would appreciate your addressing with specificity how a bypass that would not directly connect US 50 on the west side of North Vernon with US 50 on the east side would satisfy the need for a bypass project.

Another question that occurs to us, with respect to the partial bypass proposal, is how terminating the bypass at or just east of SR 3 should influence the delineation of the area of potential effects ("APE") under 36 C.F.R. § 800.4(a)(1). If this proposed bypass would be built with the anticipation that, in the future, it likely would be extended eastward to meet US 50 east of North Vernon, then it appears to us that the APE should extend far enough to the east of the eastern terminus of the bypass proposed here to permit the identification and evaluation of historic properties that unavoidably would be affected if the bypass were later extended.

As you undoubtedly realize, basic early coordination submissions of this nature do not provide us with enough information to comment substantively regarding impacts on historic properties. Please provide the following information to facilitate the identification and evaluation of historic properties in the project area:

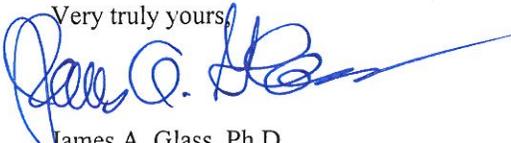
- ❖ Literature Review
- ❖ Historic Context
- ❖ Research Methodology
- ❖ Property Descriptions
- ❖ National Register of Historic Places eligibility evaluations and recommendations.

In regards to archaeology, please provide details and plans for the project, degree and types of disturbance of the project area, and archaeological information as stipulated in the Indiana Department of Transportation's ("INDOT'S") "Indiana Cultural Resources Manual." Once this information is provided, the Indiana SHPO will begin identification and evaluation procedures for this project. Please keep in mind that additional information may be requested in the future.

For further guidance on the requested information, please refer to appendices X, AA, and BB of INDOT's "Indiana Cultural Resources Manual" (http://www.in.gov/indot/files/January_2008_Manual.pdf). If you have questions regarding the "Indiana Cultural Resources Manual," please contact Staffan Peterson at (317) 232-5161 or stpeterson@indot.IN.gov.

A copy of the revised 36 C.F.R. Part 800 regulations that took effect on August 5, 2004 may be found on the Internet at www.achp.gov for your reference. If you have questions about archaeological issues, please contact Dr. Rick Jones at (317) 233-0953 or rjones@dnr.IN.gov. Questions about buildings or structures should be directed to John Carr at (317) 233-1949 or jcarr@dnr.IN.gov. Additionally, in all future correspondence regarding this project, please refer to DHPA No. 1882.

Very truly yours,



James A. Glass, Ph.D.
Deputy State Historic Preservation Officer

JAG:JRJ:JLC:jlc

Enclosures (2)

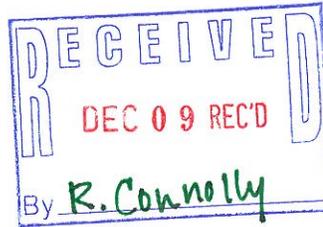
emc: Michelle Allen, Indiana Division, Federal Highway Administration (with copies of enclosures)
Staffan Peterson, Cultural Resources Section, Office of Environmental Services, Indiana Department of Transportation (with copies of enclosures)
Ben Lawrence, P.E., Environmental Policy Section, Cultural Resources Section, Office of Environmental Services, Indiana Department of Transportation
(with copies of enclosures)
Patrick Carpenter, Cultural Resources Section, Office of Environmental Services, Indiana Department of Transportation (with copies of enclosures)
Shaun Miller, Cultural Resources Section, Office of Environmental Services, Indiana Department of Transportation (with copies of enclosures)



Natural Resources Conservation Service
6013 Lakeside Blvd.
Indianapolis, IN 46278

December 7, 2010

Steve Davidson, P.E.
Project Manager
Parsons
101 W. Ohio St., Suite 2121
Indianapolis, IN 46204



Dear Mr. Davidson:

At this time a determination cannot be made regarding the proposed project to construct a bypass in the City of North Vernon, Jennings County, Indiana, as referred to in your letter received November 10, 2010. When specific right-of-way has been determined, please resubmit this project.

If you need additional information, please contact Lisa Bolton at 317-290-3200, extension 342.

Sincerely,

A handwritten signature in blue ink that reads "Jane E. Hardisty".

JANE E. HARDISTY
State Conservationist

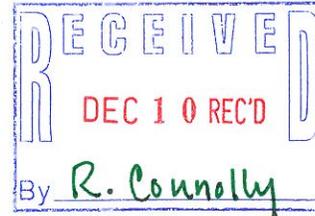


FPBH, Inc.

Engineers ⊕ Surveyors ⊕ Planners ⊕ Inspectors

December 8, 2010

Parsons
101 West Ohio
Suite 2121
Indianapolis, IN 46204



Attn: Steve Davidson

Re: Des No 0401402
US 50 North Vernon Bypass Project

Our firm acts as City Engineer for the City of North Vernon and we are in receipt of your letter dated November 9, 2010 for the above referenced project.

We understand that you are looking for environmental comments, but the following addresses other issues as well.

- In the first paragraph, and in other portions of the letter, you state the Western project limits are ¼ mile West of Co Rd 610W (which is near Hayden). Whereas the map you included shows the connection near or around Co Rd 375W. Co Rd 610W is near where other previous studies linked up the proposed bypass, so it appears that this location was carried over from those previous documents in error. If this is not the case then please clarify the project limits.
- Because this route appears to split existing contiguous farmground, we believe there may be some negative but indeterminate effects. There may also be some historic farm houses, barns and outbuildings near this alignment.
- We are also concerned about the alignment, creating a “T” intersection to the existing highway, followed closely by an at-grade railroad crossing, the combination of which does not appear conducive to best traffic flow. An overpass would be expected over the railroad, particularly when there is an alternative immediately to the West of this location, where a curve could be extended as an overpass over the existing deep railroad cut. This could be connected to the existing County Road and thereby eliminate an existing wooden bridge carrying the County Road over the railroad.



FPBH, Inc.

Engineers ● Surveyors ● Planners ● Inspectors

- There is also concern that the Eastern terminus ends at existing County Roads that funnel traffic directly to City Streets. This lack of continued bypass construction around the East side of North Vernon may create impacts, environmental and otherwise, by way of increased traffic flow to the most congested area of State Road 3. Though existing traffic may then be removed from West US 50 near town, that traffic (particularly through trucks) would now be positioned along State Highway 3 & 7 (North State Street) back into North Vernon.
- Based on the above routing comment, we need further clarification: Is this bypass intended to serve all US 50 traffic, or just traffic bound for State Road 3 and 7 Northbound? Is it proposed that US 50 through traffic, and /or Southbound State Highway 3 & 7 traffic, would continue to stay on the existing roadway?

Answers to these issues may generate additional comments as we further understand this plan.

If you have any questions or desire any additional information, please feel free to contact us at any time.

Sincerely Yours,

Bradley R. Bender
Project Manager

Xc:
Mayor Harold Canmpbell
City Council
File: 08-7656



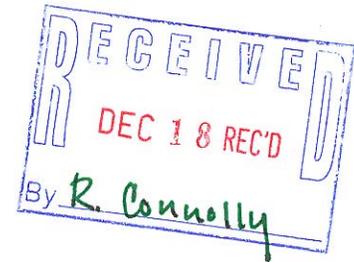
United States Department of the Interior Fish and Wildlife Service



Bloomington Field Office (ES)
620 South Walker Street
Bloomington, IN 47403-2121
Phone: (812) 334-4261 Fax: (812) 334-4273

December 16, 2010

Mr. Steve Davidson
Parsons
101 West Ohio Street, Suite 2121
Indianapolis, Indiana 46240



Project No.: Des. 0401402
Road(s): US 50
Work Type: North Vernon Bypass
County(ies): Jennings

Dear Mr. Davidson:

This responds to your letter dated November 9, 2010 requesting U.S. Fish and Wildlife Service (FWS) comments on the aforementioned project.

These comments are consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, and the U. S. Fish and Wildlife Service's Mitigation Policy.

Your letter states that the project limits extend from 1/4 mile west of CR 610W (overlapping the project limits for the concurrent US 50 spot improvement project [Des. #1005104]), to 1/4 mile east of North Base Road north of North Vernon. However, the maps provided with your letter depict the west project limit as halfway between CR 400W and CR 300W, and the east project limit as CR 75. Two route alternatives are currently proposed, both beginning at the same western project limit. Alternative 2W-A ends at the CR 75/CR 350 intersection north of North Vernon. Alternative 2W-B, which is shorter, ends at the SR 3/CR 250 intersection on the north end of town. Your letter further states that the Major Moves plan identifies added travel lanes for this project, and lists preliminary environmental issues.

The FWS reviewed and commented on the US 50 corridor study in a letter dated July 11, 2007 (copy attached). The applicable comments and recommendations in our previous letter are still appropriate for this stage of project planning. In summary, our recommendations addressed the need for a wetland delineation; minimization of impacts to streams, wetlands and upland forest; best management practices to protect water quality; identification and protection of karst surface features (if present) and consideration of impacts from secondary development.

The proposed routes will require stream crossings at the headwaters of Sixmile Creek and possibly at smaller intermittent streams. In addition to our previous comments this office recommends the following standard mitigation measures for stream crossings:

1. Post DO NOT DISTURB signs at the construction zone boundaries in forested areas and do not clear trees or understory vegetation outside the boundaries.
2. Where bridges are used restrict below low-water work to placement of piers, pilings and/or footings, shaping of the spill slopes around the bridge abutments, and placement of riprap.
3. Restrict channel work and vegetation clearing to the minimum necessary for installation of the bridge or culvert.
4. For culverted crossings, culverts should span the active stream channel, should be either embedded or a 3-sided or open-arch culvert, and installed where practicable on an essentially flat slope. When an open-bottomed culvert or arch is used in a stream which has a good natural bottom substrate, such as gravel, cobbles and boulders, the existing substrate should be left undisturbed beneath the culvert to provide natural habitat for the aquatic community.
5. Minimize the extent of artificial bank stabilization, using bioengineering methods where feasible.
6. If riprap is utilized for bank stabilization, extend it below low-water elevation to provide aquatic habitat.
7. Implement temporary erosion and siltation control devices such as placement of riprap check dams in drainage ways and ditches, installation of silt fences, covering exposed areas with erosion control materials, and grading slopes to retain runoff in basins.
8. Revegetate all disturbed soil areas immediately upon project completion, using native species of trees and shrubs wherever feasible in riparian areas.
9. Avoid channel work in perennial streams during fish spawning season (April 1- June 30).

10. Evaluate the use of wildlife crossings in appropriate situations. Suitable crossings include flat areas below bridge abutments with suitable ground cover, high water shelves in culverts, amphibian tunnels and diversion fencing.

ENDANGERED SPECIES

The proposed project is within the range of the federally endangered Indiana bat (*Myotis sodalis*). Indiana bats hibernate in caves, then disperse to reproduce and forage in relatively undisturbed forested areas associated with water resources during spring and summer. Recent research has shown that they will inhabit fragmented landscapes with adequate forest for roosting and foraging. Young are raised in nursery colony roosts in trees, typically near drainageways in undeveloped areas.

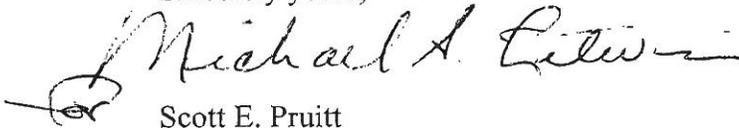
There is suitable summer habitat for this species present throughout the vicinity of the study area. There are multiple recent records of Indiana bats in Jennings County, from the Muscatatuck National Wildlife in the west, Big Oaks National Wildlife Refuge in the east, and the North Fork/Vernon Fork Muscatatuck River in the northeast.

This office provided site-specific endangered species permit approval for a bat survey for the North Vernon bypass study on July 15, 2009, and we reviewed the survey report dated August, 2009. The survey of 5 mist net sites captured 29 bats of 6 species, including the State-endangered evening bat (*Nycticeius humeralis*). Because the survey used the FWS' survey protocols but did not capture any Indiana bats, we concur that Indiana bats are unlikely to be present in the vicinity of the survey sites. However, based on the available information we cannot determine whether the survey was adequate to address the current route alternatives. It appears that the survey sites were developed for the Alternative 2W-B route, extending eastward beyond the current study area, but not for the north leg of Alternative 2W-A. We cannot make a determination regarding potential adverse effects on Indiana bats or the need for additional mist net sites until more information about habitat impacts becomes available.

This endangered species information is provided for technical assistance only, and does not fulfill the requirements of Section 7 of the Endangered Species Act.

We appreciate the opportunity to comment at this early stage of project planning. For further discussion please call Mike Litwin at (812) 334-4261 (Ext. 205).

Sincerely yours,



Scott E. Pruitt

Field Supervisor

cc: Federal Highway Administration, Indianapolis, IN

USFWS, Muscatatuck National Wildlife Refuge, Seymour, IN

FILE COPY



United States Department of the Interior Fish and Wildlife Service



Bloomington Field Office (ES)
620 South Walker Street
Bloomington, IN 47403-2121
Phone: (812) 334-4261 Fax: (812) 334-4273

July 11, 2007

Mr. Carl Camacho
Bernardin Lochmueller & Associates, Inc.
6200 Vogel Road
Evansville, Indiana 47715-4006

Project Des.# 0401401, 0401402
Road(s): US 50
Waterway: Vernon Fork of Muscatatuck River and numerous tributaries
Work Type: Highway reconstruction, possible new route
County(ies): Jennings, Jackson

Dear Mr. Camacho:

This responds to your letter dated July 8, 2007 requesting U.S. Fish and Wildlife Service (FWS) comments on the aforementioned project. The following comments are based on the information provided with that letter and on the discussion at the agency meeting of June 29, 2007, representing the FWS' Bloomington Field Office, Muscatatuck National Wildlife Refuge and Big Oaks National Wildlife Refuge.

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et. seq.) and are consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, and the U. S. Fish and Wildlife Service's Mitigation Policy.

At this time the project is being considered as an Environmental Assessment for a corridor study, and the primary documents under agency review are the "Draft Identification of Existing and Future Conditions and Issues", and "Draft Definition of Purpose and Need and Identification of

Attachment

Preliminary Alternatives". We will comment on these documents separately.

Identification of Existing and Future Conditions and Issues

This document discusses project future conditions in North Vernon and Jennings County. At the June 29 meeting a considerable amount of discussion was devoted to development of the Muscatatuck Urban Training Center (MUTC) by the Department of Homeland Security. The site is expected to become a significant traffic generator due to commuter traffic on a daily basis and weekly movements of military convoys, and may therefore influence which route alternative is selected. The MUTC is discussed only briefly in the document; we recommend that it's role in the project analysis be expanded.

The Issues section provides a good preliminary discussion of natural resources in the study area. The evaluation of these resources will need to become more detailed as project development progresses. The discussion of wildlife habitat focuses on plant communities and rare species, but will also need to address the resident native faunal communities of both terrestrial and aquatic habitats. With regard to wetlands it should be noted that portions of the study area contain large interfluvial expanses of Cobbsfork soils which typically support perched wetlands. These wetlands sometimes do not appear on the National Wetland Inventory, but must be considered when conducting wetland delineations in the study area.

Purpose and Need and Preliminary Alternatives

We have no specific comments regarding the purpose and need section. Natural resource issues were discussed briefly at the June 29 meeting. We do not have adequate information to do a thorough analysis of the preliminary alternatives within the current time frame for comments. The issues that should be considered are as follows:

1. Stream Impacts

All route alternatives should be designed to minimize stream/riparian impacts and to avoid the need to realign or relocate stream channels. The FWS would oppose realignments of perennial streams and good-quality intermittent streams. The environmental document should provide fish community information from existing data or, as appropriate, from site-specific stream surveys. Stream impacts for each alternative should be estimated in terms of number of crossings, quality of the stream at each crossing and extent of impacts at each crossing. Stream crossings on new alignments should be located to minimize riparian forest impacts and to avoid areas of high quality aquatic habitats such as rock riffles and mussel beds.

2. Terrestrial Wildlife Habitat

All route alternatives should be designed to minimize forest loss and avoid forest fragmentation. Walk-through bird surveys should be conducted during migration season and nesting season.

3. Wetlands

Extensive wetlands are present in the floodplains of the Muscatatuck River and its tributaries,

and on Cobbsfork soils in interfluvial areas. A preliminary wetland survey should be conducted for all routes, using all available mapping and orthophotography resources. A comprehensive wetland delineation of alternatives carried forward should be conducted as soon as access becomes available. Wetland impacts should be avoided to the extent possible, and unavoidable impacts should be mitigated in accordance with the MOU between INDOT, the FWS and the Indiana DNR.

4. Water Quality

The environmental document should include a discussion of best management practices to be used to avoid erosion and runoff of soil and other pollutants during construction, and to mitigate the effects of polluted road runoff from traffic on new routes.

5. Karst

A portion of the study area is underlain by karst geologic formations. A karst survey should be conducted in accordance with our karst MOU with INDOT. All route alternatives should be designed to avoid adverse physical and water quality/quantity impacts on significant karst resources (e.g. caves, springs, water supply wells).

6. Secondary Impacts

New route alternatives will generate the potential for extensive impacts from secondary development. Secondary impacts should be minimized by not locating new routes near good quality habitats and sensitive areas, and by implementing access control near such areas.

7. Executive Order #13186, issued on January 10, 2001, directs each federal agency taking actions having or likely to have a negative effect on migratory bird populations to work with the FWS to develop an agreement to conserve migratory birds. In addition to avoiding or minimizing impacts to migratory birds populations, agencies are expected to take reasonable steps to restore and enhance habitat and incorporate migratory bird conservation into agency planning processes whenever possible. The Environmental Document you are preparing will need to address this issue.

8. Muscatatuck National Wildlife Refuge and Big Oaks National Wildlife Refuge

These federal properties are managed by the FWS. Some of the above issues related to wildlife habitat, aquatic habitat and water quality may affect one or both Refuges. Additionally, widening of US 50 on the south side may directly impact the Muscatatuck Refuge. Attachment A highlights the most significant wildlife resources at the Muscatatuck Refuge, whose concerns were discussed at the agency meeting of April 20, 2007. In summary, the major issues are as follows:

- i. Effects on visitation traffic flow and safety. The Refuge is opposed to the addition of a southern lane to US 50 and would like to see wider shoulders. Major safety issue include visitors exiting the Refuge to US 50 in either direction and those entering the refuge from US 50 from either direction.
- ii. Water quality. Mutton Creek and Storm Creek are a significant water source for the Refuge wetland units. Water quality could be adversely affected by construction runoff, increased post-construction runoff of road pollutants, and potential hazmat spills from increased industrial/large carrier traffic.
- iii. Aquatic habitat. Increases in pollutant loading or alteration in stream flow regimes could adversely affect the aquatic habitat of the stream faunal communities.
- iv. The Refuge supports a reproducing population of the state-endangered copperbelly watersnake. This species is federally listed as threatened in the northern part of its range. Listing was precluded in southern Indiana through a conservation agreement, but the FWS still classifies the species as a Regional Resource Priority. It occupies wetlands and forested riparian areas associated with Storm Creek and Mutton Creek.

The current route alternatives would not directly affect the Big Oaks Refuge, however the aforementioned water quality issues are of concern for streams draining to the Refuge. In addition to surface drainage concerns, Big Oaks also has karst groundwater concerns. The following state-endangered species are known to occur at Big Oaks and may be present in the adjacent portion of the study area: 4-toed salamander, northern crawfish frog, Kirtland's snake, barn owl, sedge wren, yellow-crowned night heron, river otter, and bobcat.

Endangered Species

The proposed project is within the range of the federally endangered Indiana bat (*Myotis sodalis*) and federally threatened bald eagle (*Haliaeetus leucocephalus*). There are currently no bald eagle nests within the study area, however the Muscatatuck River and large reservoirs provide suitable nesting habitat, and bald eagles are rapidly expanding their nesting range in Indiana.

Indiana bats hibernate in caves, then disperse to reproduce and forage in relatively undisturbed forested areas associated with water resources during spring and summer. Recent research has shown that they will inhabit fragmented landscapes with adequate forest for roosting and foraging. Young are raised in nursery colony roosts in trees, typically near drainageways in undeveloped areas. Like all other bat species in Indiana, the Indiana bat diet consists exclusively of insects.

There are no known Indiana bat hibernacula in the project study area, but it and the surrounding area contain extensive suitable summer habitat for this species. There are numerous recent summer records of Indiana bats from the Muscatatuck River watershed in Jennings, Ripley and Jefferson Counties, including both National Wildlife Refuges. Some of those records are very near the project corridor at both Refuges and in the eastern segment of Alternative D. Informal consultation for the US 50 project will be necessary pursuant to Section 7 of the Endangered

Species Act. As the project progresses we will address consultation in more detail. Depending upon the extent of habitat impacts we may recommend site-specific bat surveys for some or all route alternatives to determine whether the project may adversely affect the Indiana bat.

This endangered species information is provided for technical assistance only, and does not fulfill the requirements of Section 7 of the Endangered Species Act. Please coordinate with the Indiana Department of Natural Resources for comprehensive information on species listed as endangered or special concern by the State of Indiana.

For general coordination with the FWS please contact Mike Litwin at (812) 334-4261 ext. 205 (Bloomington Field Office). For Refuge issues please contact Susan Knowles at (812) 522-4352 (Muscatatuck NWR); or Joe Robb (812) 273-0783 .

Sincerely yours,



Scott E. Pruitt
Field Supervisor

cc: IDEM, Water Quality Standards Section, Indianapolis, IN
Christie Stanifer, Indiana Division of Fish and Wildlife, Indianapolis, IN
Federal Highway Administration, Indianapolis, IN
Virginia Laszewski, US EPA, Chicago, IL B-19J
USFWS, Muscatatuck NWR
USFWS, Big Oaks NWR

ES: MLitwin/332-4261/US 50 corridor-jennings county-jul

*** RX REPORT ***

RECEPTION OK

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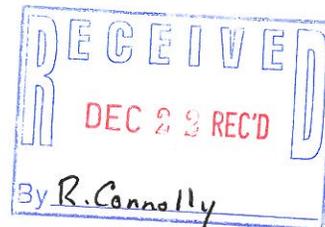


United States Department of the Interior Fish and Wildlife Service



Bloomington Field Office (ES)
620 South Walker Street
Bloomington, IN 47403-2121
Phone: (812) 334-4261 Fax: (812) 334-4273

December 16, 2010



Mr. Steve Davidson
Parsons
101 West Ohio Street, Suite 2121
Indianapolis, Indiana 46240

Project No.: Des. 0401402
Road(s): US 50
Work Type: North Vernon Bypass
County(ies): Jennings

Dear Mr. Davidson:

This responds to your letter dated November 9, 2010 requesting U.S. Fish and Wildlife Service (FWS) comments on the aforementioned project.

These comments are consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, and the U. S. Fish and Wildlife Service's Mitigation Policy.

Your letter states that the project limits extend from 1/4 mile west of CR 610W (overlapping the project limits for the concurrent US 50 spot improvement project [Des. #1005104]), to 1/4 mile east of North Base Road north of North Vernon. However, the maps provided with your letter depict the west project limit as halfway between CR 400W and CR 300W, and the east project limit as CR 75. Two route alternatives are currently proposed, both beginning at the same western project limit. Alternative 2W-A ends at the CR 75/CR 350 intersection north of North Vernon. Alternative 2W-B, which is shorter, ends at the SR 3/CR 250 intersection on the north end of town. Your letter further states that the Major Moves plan identifies added travel lanes for this project, and lists preliminary environmental issues.

The FWS reviewed and commented on the US 50 corridor study in a letter dated July 11, 2007 (copy attached). The applicable comments and recommendations in our previous letter are still appropriate for this stage of project planning. In summary, our recommendations addressed the need for a wetland delineation; minimization of impacts to streams, wetlands and upland forest; best management practices to protect water quality; identification and protection of karst surface features (if present) and consideration of impacts from secondary development.

The proposed routes will require stream crossings at the headwaters of Sixmile Creek and possibly at smaller intermittent streams. In addition to our previous comments this office recommends the following standard mitigation measures for stream crossings:

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ENDANGERED SPECIES

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There is suitable summer habitat for this species present throughout the vicinity of the study area.

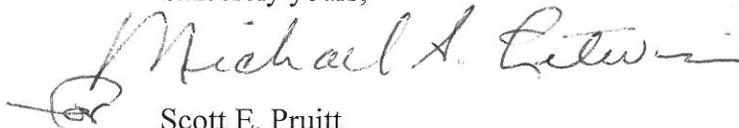
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We appreciate the opportunity to comment at this early stage of project planning. For further discussion please call Mike Litwin at (812) 334-4261 (Ext. 205).

Sincerely yours,



Scott E. Pruitt

Field Supervisor

cc: Federal Highway Administration, Indianapolis, IN

USFWS, Muscatatuck National Wildlife Refuge, Seymour, IN

FILE COPY



United States Department of the Interior Fish and Wildlife Service



Bloomington Field Office (ES)
620 South Walker Street
Bloomington, IN 47403-2121
Phone: (812) 334-4261 Fax: (812) 334-4273

July 11, 2007

Mr. Carl Camacho
Bernardin Lochmueller & Associates, Inc.
6200 Vogel Road
Evansville, Indiana 47715-4006

Project Des.# 0401401, 0401402
Road(s): US 50
Waterway: Vernon Fork of Muscatatuck River and numerous tributaries
Work Type: Highway reconstruction, possible new route
County(ies): Jennings, Jackson

Dear Mr. Camacho:

This responds to your letter dated July 8, 2007 requesting U.S. Fish and Wildlife Service (FWS) comments on the aforementioned project. The following comments are based on the information provided with that letter and on the discussion at the agency meeting of June 29, 2007, representing the FWS' Bloomington Field Office, Muscatatuck National Wildlife Refuge and Big Oaks National Wildlife Refuge.

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et. seq.) and are consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, and the U. S. Fish and Wildlife Service's Mitigation Policy.

At this time the project is being considered as an Environmental Assessment for a corridor study, and the primary documents under agency review are the "Draft Identification of Existing and Future Conditions and Issues", and "Draft Definition of Purpose and Need and Identification of

Attachment

VOLUME 1

Preliminary Alternatives". We will comment on these 2 documents separately.

Identification of Existing and Future Conditions and Issues

This document discusses project future conditions in North Vernon and Jennings County. At the June 29 meeting a considerable amount of discussion was devoted to development of the Muscatatuck Urban Training Center (MUTC) by the Department of Homeland Security. The site is expected to become a significant traffic generator due to commuter traffic on a daily basis and weekly movements of military convoys, and may therefore influence which route alternative is selected. The MUTC is discussed only briefly in the document; we recommend that it's role in the project analysis be expanded.

The Issues section provides a good preliminary discussion of natural resources in the study area. The evaluation of these resources will need to become more detailed as project development progresses. The discussion of wildlife habitat focuses on plant communities and rare species, but will also need to address the resident native faunal communities of both terrestrial and aquatic habitats. With regard to wetlands it should be noted that portions of the study area contain large interfluvial expanses of Cobbsfork soils which typically support perched wetlands. These wetlands sometimes do not appear on the National Wetland Inventory, but must be considered when conducting wetland delineations in the study area.

Purpose and Need and Preliminary Alternatives

We have no specific comments regarding the purpose and need section. Natural resource issues were discussed briefly at the June 29 meeting. We do not have adequate information to do a thorough analysis of the preliminary alternatives within the current time frame for comments. The issues that should be considered are as follows:

1. Stream Impacts

All route alternatives should be designed to minimize stream/riparian impacts and to avoid the need to realign or relocate stream channels. The FWS would oppose realignments of perennial streams and good-quality intermittent streams. The environmental document should provide fish community information from existing data or, as appropriate, from site-specific stream surveys. Stream impacts for each alternative should be estimated in terms of number of crossings, quality of the stream at each crossing and extent of impacts at each crossing. Stream crossings on new alignments should be located to minimize riparian forest impacts and to avoid areas of high quality aquatic habitats such as rock riffles and mussel beds.

2. Terrestrial Wildlife Habitat

All route alternatives should be designed to minimize forest loss and avoid forest fragmentation. Walk-through bird surveys should be conducted during migration season and nesting season.

3. Wetlands

Extensive wetlands are present in the floodplains of the Muscatatuck River and its tributaries,

and on Cobbsfork soils in interfluvial areas. A preliminary wetland survey should be conducted for all routes, using all available mapping and orthophotography resources. A comprehensive wetland delineation of alternatives carried forward should be conducted as soon as access becomes available. Wetland impacts should be avoided to the extent possible, and unavoidable impacts should be mitigated in accordance with the MOU between INDOT, the FWS and the Indiana DNR.

4. Water Quality

The environmental document should include a discussion of best management practices to be used to avoid erosion and runoff of soil and other pollutants during construction, and to mitigate the effects of polluted road runoff from traffic on new routes.

5. Karst

A portion of the study area is underlain by karst geologic formations. A karst survey should be conducted in accordance with our karst MOU with INDOT. All route alternatives should be designed to avoid adverse physical and water quality/quantity impacts on significant karst resources (e.g. caves, springs, water supply wells).

6. Secondary Impacts

New route alternatives will generate the potential for extensive impacts from secondary development. Secondary impacts should be minimized by not locating new routes near good quality habitats and sensitive areas, and by implementing access control near such areas.

7. Executive Order #13186, issued on January 10, 2001, directs each federal agency taking actions having or likely to have a negative effect on migratory bird populations to work with the FWS to develop an agreement to conserve migratory birds. In addition to avoiding or minimizing impacts to migratory birds populations, agencies are expected to take reasonable steps to restore and enhance habitat and incorporate migratory bird conservation into agency planning processes whenever possible. The Environmental Document you are preparing will need to address this issue.

8. Muscatatuck National Wildlife Refuge and Big Oaks National Wildlife Refuge

These federal properties are managed by the FWS. Some of the above issues related to wildlife habitat, aquatic habitat and water quality may affect one or both Refuges. Additionally, widening of US 50 on the south side may directly impact the Muscatatuck Refuge. Attachment A highlights the most significant wildlife resources at the Muscatatuck Refuge, whose concerns were discussed at the agency meeting of April 20, 2007. In summary, the major issues are as follows:

- i. Effects on visitation traffic flow and safety. The Refuge is opposed to the addition of a southern lane to US 50 and would like to see wider shoulders. Major safety issues include visitors exiting the Refuge to US 50 in either direction and those entering the refuge from US 50 from either direction.
- ii. Water quality. Mutton Creek and Storm Creek are a significant water source for the Refuge wetland units. Water quality could be adversely affected by construction runoff, increased post-construction runoff of road pollutants, and potential hazmat spills from increased industrial/large carrier traffic.
- iii. Aquatic habitat. Increases in pollutant loading or alteration in stream flow regimes could adversely affect the aquatic habitat of the stream faunal communities.
- iv. The Refuge supports a reproducing population of the state-endangered copperbelly watersnake. This species is federally listed as threatened in the northern part of its range. Listing was precluded in southern Indiana through a conservation agreement, but the FWS still classifies the species as a Regional Resource Priority. It occupies wetlands and forested riparian areas associated with Storm Creek and Mutton Creek.

The current route alternatives would not directly affect the Big Oaks Refuge, however the aforementioned water quality issues are of concern for streams draining to the Refuge. In addition to surface drainage concerns, Big Oaks also has karst groundwater concerns. The following state-endangered species are known to occur at Big Oaks and may be present in the adjacent portion of the study area: 4-toed salamander, northern crawfish frog, Kirtland's snake, barn owl, sedge wren, yellow-crowned night heron, river otter, and bobcat.

Endangered Species

The proposed project is within the range of the federally endangered Indiana bat (*Myotis sodalis*) and federally threatened bald eagle (*Haliaeetus leucocephalus*). There are currently no bald eagle nests within the study area, however the Muscatatuck River and large reservoirs provide suitable nesting habitat, and bald eagles are rapidly expanding their nesting range in Indiana.

Indiana bats hibernate in caves, then disperse to reproduce and forage in relatively undisturbed forested areas associated with water resources during spring and summer. Recent research has shown that they will inhabit fragmented landscapes with adequate forest for roosting and foraging. Young are raised in nursery colony roosts in trees, typically near drainageways in undeveloped areas. Like all other bat species in Indiana, the Indiana bat diet consists exclusively of insects.

There are no known Indiana bat hibernacula in the project study area, but it and the surrounding area contain extensive suitable summer habitat for this species. There are numerous recent summer records of Indiana bats from the Muscatatuck River watershed in Jennings, Ripley and Jefferson Counties, including both National Wildlife Refuges. Some of those records are very near the project corridor at both Refuges and in the eastern segment of Alternative D. Informal consultation for the US 50 project will be necessary pursuant to Section 7 of the Endangered

Species Act. As the project progresses we will address consultation in more detail. Depending upon the extent of habitat impacts we may recommend site-specific bat surveys for some or all route alternatives to determine whether the project may adversely affect the Indiana bat.

This endangered species information is provided for technical assistance only, and does not fulfill the requirements of Section 7 of the Endangered Species Act. Please coordinate with the Indiana Department of Natural Resources for comprehensive information on species listed as endangered or special concern by the State of Indiana.

For general coordination with the FWS please contact Mike Litwin at (812) 334-4261 ext. 205 (Bloomington Field Office). For Refuge issues please contact Susan Knowles at (812) 522-4352 (Muscatatuck NWR); or Joe Robb (812) 273-0783 .

Sincerely yours,

A handwritten signature in cursive script that reads "Scott E. Pruitt". The signature is written in dark ink and includes a horizontal line at the end.

Scott E. Pruitt
Field Supervisor

cc: IDEM, Water Quality Standards Section, Indianapolis, IN
Christie Stanifer, Indiana Division of Fish and Wildlife, Indianapolis, IN
Federal Highway Administration, Indianapolis, IN
Virginia Laszewski, US EPA, Chicago, IL B-19J
USFWS, Muscatatuck NWR
USFWS, Big Oaks NWR

ES: MLitwin/332-4261/US 50 corridor-jennings county-jul

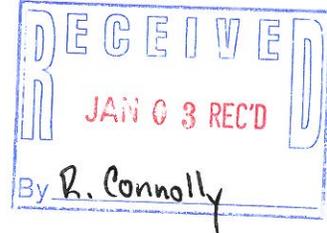
THIS IS NOT A PERMIT

State of Indiana
DEPARTMENT OF NATURAL RESOURCES
Division of Fish and Wildlife

Early Coordination/Environmental Assessment

DNR #: ER-12826-2 Request Received: November 10, 2010

Requestor: Parsons
Steve Davidson
101 West Ohio Suite 2121
Indianapolis, IN 46204



Project: US 50 North Vernon bypass, Des. # 0401402

County/Site info: Jennings

The Indiana Department of Natural Resources has reviewed the above referenced project per your request. Our agency offers the following comments for your information and in accordance with the National Environmental Policy Act of 1969.

Regulatory Assessment: This proposal will require the formal approval for construction in a floodway under the Flood Control Act, IC 14-28-1. Please submit a copy of this letter with the permit application.

Natural Heritage Database: The Natural Heritage Program's data have been checked. To date, no plant or animal species listed as state or federally threatened, endangered, or rare have been reported to occur in the project vicinity.

Fish & Wildlife Comments: We recommend the route that will result in the least amount of impacts to fish, wildlife, and botanical resources. Transportation options should focus on low impact alternatives that minimize road widening and that avoids new-terrain road construction as much as possible. Since environmental impacts from road construction are typically permanent and irreversible, new terrain road alignments should be laid out with avoidance and minimization of significant impacts as a top priority.

Alternatives 2W_A and 2W_B alignments are likely to have fewer impacts to fish, wildlife and botanical resources than the sections of previous alternatives A and B located west of North Vernon. A large forested area adjacent to SR 7, which includes a large forested wetland area according to National Wetland Inventory maps, would be impacted by 2W_A. Minor alignment changes should be made to avoid impacts to this area. If avoidance of this area is not possible, the impacts should be minimized by crossing along the edge of this forested area rather than through the middle of it as currently proposed. Any remaining impacts would have to be compensated.

The project information indicates that 2W_A and 2W_B will "provide the opportunity to build the eastern section of the bypass back to US 50 in the future". The eastern sections of the bypass previously proposed that would connect to 2W_A and 2W_B are sections of alternatives A and B east of North Vernon that are likely to cause significant impacts.

The 2W_A alternative is likely to be extended in the future with an eastern bypass alignment along or close to the previous alternative A. This alignment would impact large forested areas associated with Selmier State Forest and the Vernon Fork Muscatatuck River. Impacts to Selmier State Forest should be avoided by placing the centerline of the bypass to the north of the current centerline. Any bridge crossing of the Vernon Fork Muscatatuck River on this general alignment should be designed to avoid cut and fill impacts and bridge the entire floodplain of the Vernon Fork Muscatatuck River to minimize potential significant impacts.

State of Indiana
DEPARTMENT OF NATURAL RESOURCES
Division of Fish and Wildlife

Early Coordination/Environmental Assessment

Alignment 2W_B, if extended to the east of North Vernon along the previous alternative B alignment, could result in significant impacts due to the presence of remnant stands of eastern hemlock along the Vernon Fork Muscatatuck River. Remnant hemlock stands are uncommon in Indiana and essentially impossible to restore or recreate. As a post-glacial, relict tree, hemlock is used in understanding forests of 10-12 thousand years ago, as well as researching climate change. We recommend any future extension of 2W_B to be designed to avoid impacts to the forested areas along the Vernon Fork Muscatatuck River, including remnant eastern hemlock by avoiding cut and fill impacts and bridging the entire floodplain of the Vernon Fork Muscatatuck River without bridge piers placed on the north-facing slope. If impacts (temporary or permanent) to these high-quality and unique natural resources are unavoidable, the 2W_B alternative should not be selected. We recommend the selection of an alternative that continues to further avoid habitat and natural resources through minor shifts in the alignment.

Designs for new bridges should include an opening with minimum dimensions of 8' tall by 24' wide that does not include the size of the opening over the channel. This opening under the bridge with unsubmerged dry land is essential for wildlife passage. If riprap is planned under the bridge, only dry land unarmored with riprap is considered in the opening dimensions. Considerations can be made if alternative armoring materials are used.

For purposes of maintaining fish passage through a crossing structure, the Environmental Unit recommends bridges rather than culverts and bottomless culverts rather than box or pipe culverts. Wide culverts are better than narrow culverts, and culverts with shorter through lengths are better than culverts with longer through lengths. If box or pipe culverts are used, the bottoms should be buried a minimum of 6" (or 20% of the culvert height/pipe diameter, whichever is greater up to a maximum of 2') below the stream bed elevation to allow a natural streambed to form within or under the crossing structure. Crossings should: span the entire channel width (a minimum of 1.2 times the bankful width); maintain the natural stream substrate within the structure; have a minimum openness ratio (height x width / length) of 0.25; and have stream depth and water velocities during low-flow conditions that are approximate to those in the natural stream channel. The new structure must not create conditions that are less favorable for wildlife passage under the structure compared to the current conditions.

Impacts to non-wetland forest under 1 acre should be mitigated at a 1:1 ratio, while impacts to non-wetland forest over 1 acre should be mitigated at a minimum 2:1 ratio. Impacts to wetland and habitat should be mitigated at the appropriate ratio according to the USFWS/IDNR/INDOT MOU.

Fish, wildlife, and botanical resource losses as a result of this project can be minimized through implementation of the following measures, and will be a requirement of a permit.

Revegetate all bare and disturbed areas within the project area using a mixture of grasses, sedges, wildflowers, shrubs, and trees native to Southern Indiana and specifically for stream bank/floodway stabilization purposes as soon as possible upon completion.

Minimize and contain within the project limits inchannel disturbance and the clearing of trees and brush.

Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife.

Do not cut any trees suitable for Indiana bat roosting (greater than 3 inches dbh, living or dead, with loose hanging bark) from April 1 through September 30.

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Division of Fish and Wildlife**

Early Coordination/Environmental Assessment

Do not excavate in the low flow area except for the placement of piers, foundations, and riprap, or removal of the old structure.

Do not construct any temporary runarounds or causeways.

Use minimum average 6 inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids.

Plant native hardwood trees along the top of the bank and right-of-way to replace the vegetation destroyed during construction.

Post "Do Not Mow or Spray" signs along the right-of-way.

Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the stream or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.

Seed and protect all disturbed streambanks and slopes that are 3:1 or steeper with erosion control blankets (follow manufacturer's recommendation for installation); seed and apply mulch on all other disturbed areas.

Plant five native trees, at least 2 inches in diameter-at-breast height, for each tree which is removed that is ten inches or greater in diameter-at-breast height.

Contact Staff:

Christie L. Stanifer, Environ. Coordinator, Fish & Wildlife

Our agency appreciates this opportunity to be of service. Please do not hesitate to contact the above staff member at (317) 232-4160 or 1-877-928-3755 (toll free) if we can be of further assistance.



J. Matthew Buffington
Environmental Supervisor
Division of Fish and Wildlife

Date: December 30, 2010

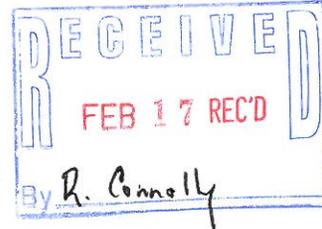


United States Department of the Interior Fish and Wildlife Service



Bloomington Field Office (ES)
620 South Walker Street
Bloomington, IN 47403-2121
Phone: (812) 334-4261 Fax: (812) 334-4273

February 11, 2011



Mr. Steve Davidson
Parsons
101 West Ohio Street, Suite 2121
Indianapolis, Indiana 46240

Project No.: Des. 0401402
Road(s): US 50
Work Type: North Vernon Bypass
County(ies): Jennings

Dear Mr. Davidson:

This is a follow-up to the agency meeting of January 28, 2011, at which you requested updated comments from the U.S. Fish and Wildlife Service (FWS) for the aforementioned project. This office submitted general comments for the North Vernon Bypass on December 16, 2010. The following comments reflect information that was provided since then, specifically for the January 28 meeting.

These comments are consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, and the U. S. Fish and Wildlife Service's Mitigation Policy.

The project corridor, which extends from US 50 west of North Vernon to SR 3 on the north side of the town, has been divided into 3 sections (north, middle and south) for environmental review, with multiple route alternatives for each section. The route alternative maps and accompanying right-of-way land use table provide an estimate of impacts from each alternative on several natural resources.

In the north section the greatest wetland impacts would be 6.84 acres in Alternative N1 (original Alternative A) and 5.82 acres in N5, with the other 4 alternatives ranging from 0 - 0.69 acres. All alternatives would have 3-4 stream crossings with impacts ranging from 1715 feet for Alternative N4 to 2034 feet for N3, and 1933 to 1997 feet for the other alternatives. Forest loss ranges from 10.17 acres in Alternative N4 to 22.7 acres in N1, and 11-19 acres for the other alternatives. The area of greatest potential impacts is a large forested wetland at the north end of Alternatives N1 and N5.

In the middle section, Alternative M2 has not been completely evaluated yet, however it would take 9.28 acres of forest, compared to 2.24 acres for M1. Alternative M1 would impact 2 streams for a total of 354 feet and 3.58 acres of open water (considerably more than all other alternatives), but no wetlands.

In the south section, wetland impacts are 0.004 acres for Alternative S1, and none for the other 3 alternatives. Stream crossings range from none for Alternative S2 to 3 crossings/2051 feet of impacts for S1. The other 2 alternatives have 2 crossings and 460-650 feet of impacts. The greatest forest loss is listed as 26.22 acres for Alternative S3, with impact ranging from 3.64-9.49 acres for the other 2 alternatives.

To conduct a thorough environmental comparison of alternative routes the following information is needed:

- An analysis of the quality of the stream reaches and wetlands being affected. Stream quality can be evaluated by use of stream habitat and biological indices such as the QHEI and IBI.
- An analysis of the quality of forest being affected, and the extent of forest fragmentation.

Based on the preliminary information we cannot recommend a preferred alternative for each section, but we can say that Alternatives N1 and N5 are unacceptable due to wetland impacts. Preliminarily, N4 appears to be the north section alternative with the least impacts. Alternative M2 also appears to be undesirable because it crosses and fragments a forested stream valley at the headwaters of Twomile Creek. Based on the aerial photo route maps it is not clear why Alternative S3 is listed as having by far the most forest loss (26.22 acres), as it appears to have the least. We recommend that the forest loss estimates be reevaluated. Otherwise, Alternative S1 would be the least desirable based on the extent of stream impacts (quality unknown). Alternatives S2 and S3 appear to have the least impacts.

Another issue of concern for wildlife is access for secondary development, which can result in more habitat loss and fragmentation than the direct project impacts. Ideally, access should be limited to intersections with major highways, and access should be especially avoided near areas of extensive forest and headwater streams where the terrain is conducive to development.

As discussed at the meeting, project design should incorporate the use of wildlife crossings in appropriate situations. Suitable crossings include flat areas below bridge abutments with walkable ground cover, high water shelves in culverts, amphibian tunnels and diversion fencing. Areas of greatest value for wildlife crossings include crossings of forested stream corridors such as Sixmile Creek in the north project section.

Mitigation

The amount of mitigation for stream and wetland impacts cannot be determined until a preferred alternative is selected. If combined mitigation is proposed for the North Vernon bypass and the west US 50 segment, serious consideration should be given to selecting a mitigation site which

will benefit wildlife habitat and water quality at Muscatatuck National Wildlife Refuge. Please contact the Refuge staff to discuss appropriate mitigation sites.

ENDANGERED SPECIES

The proposed project is within the range of the federally endangered Indiana bat (*Myotis sodalis*). As previously mentioned, there is suitable summer habitat for this species present throughout the vicinity of the US 50 corridor study area, but none near North Vernon. A mist net survey was conducted for the North Vernon Bypass project in July, 2009, resulting in the capture of 29 bats of 6 species but no Indiana bats. Five sites were surveyed, including 2 sites within the current US 50 to SR 3 study area. The other 3 sites were at least a mile east of SR 3 and are not relevant for this review.

Mist net Site 4 was at the upstream end of a lake in the headwaters of Twomile Creek and is relevant for the Middle Section of the bypass. Although Alternative M2 had not been conceived at the time of the survey, it is closer to the survey site than M1 (but on a different tributary). Both alternatives would impact the edge of a large upland woodlot approximately 1/4 mile east of Site 4. Due to the previous survey and relatively minor extent of habitat impacts we conclude that a seasonal tree clearing restriction would be adequate for the middle section.

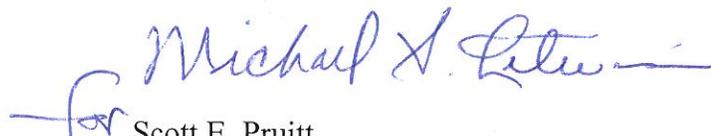
Mist Net Site 5 was on Indian Creek between US 50 Highway and the railroad tracks, and is relevant for the South Section of the bypass. Its location is appropriate for portions of all alternatives, but not for all portions of all routes. As mentioned above, the extent of forest impacts for Alternative S3 needs to be reevaluated, however based on the alternative maps we recommend an additional mist net survey site for Alternative S4, south of US 50. Pending the reevaluation, a seasonal tree clearing restriction would be adequate for the other alternatives.

None of the mist net sites were relevant for the north section of the bypass. We recommend additional mist net survey sites for the 2 large woodlots at the south end of the north section, which would be separated from each other by the proposed 4 lane highway in all route alternatives, and for the large forested drainage block east of the railroad which is crossed by all alternatives except N-4.

This endangered species information is provided for technical assistance only, and does not fulfill the requirements of Section 7 of the Endangered Species Act.

We appreciate the opportunity to comment at this early stage of project planning. As project plans develop please re-coordinate with our office as soon as possible. For further discussion please call Mike Litwin at (812) 334-4261 (Ext. 205).

Sincerely yours,


for Scott E. Pruitt
Field Supervisor

cc: Federal Highway Administration, Indianapolis, IN
USFWS, Muscatatuck National Wildlife Refuge, Seymour, IN
Christie Stanifer, Indiana Division of Fish and Wildlife, Indianapolis, IN