

Authorization for Incidental Take and Implementing Agreement

Pursuant to the Illinois Endangered Species Protection Act (520 ILCS 10/5.5) the Illinois Department of Transportation's (IDOT) authorization for the incidental take of the State endangered eastern massasauga rattlesnake (*Sistrurus catenatus catenatus*) in Piatt County, Illinois (as described/shown in the conservation plan received by the Department on 26 November 2007, and an addendum sent on 11 February 2008) is hereby granted, subject to the terms and conditions described in the attached Authorization and Implementing Agreement. The Illinois Department of Natural Resources has determined that this authorized take is incidental to the removal and replacement of three (3) bridge structures along Cisco-Monticello Road at Wolf Run Creek and Wildcat Creek (FAS 1531), in Piatt County, Illinois.

Procedural History

IDOT (in conjunction with the Illinois Natural History Survey), prepared a conservation plan as described by the Illinois Endangered Species Protection Act (520 ILCS 10/5.5). That plan and IDOT's request for authorization for incidental take of the State endangered eastern massasauga rattlesnake (*Sistrurus catenatus catenatus*) in Piatt County, Illinois was received by the Department on 26 November 2007, and an addendum sent on 11 February 2008. Public notice of IDOT's request for authorization of incidental take of the State endangered eastern massasauga rattlesnake was published in the Edwardsville Intelligencer (Official State newspaper) and the Champaign News-Gazette on December 5, 2007, as well as on December 21, 2007. Public comments on IDOT's conservation plan were accepted by the Department until January 21, 2008. Comments from the following entities: USFWS - Chicago Ecological Services Field Office and the Illinois Chapter of the Sierra Club-Shawnee Group were received during the period of December 5, 2007 through January 21, 2008. These comments were addressed and taken into consideration when preparing this Authorization for Incidental Take and Implementing Agreement.

I. State endangered eastern massasauga rattlesnake (*Sistrurus catenatus catenatus*) - EMR Compliance with the Endangered Species Protection Act

The Illinois Endangered Species Protection Act includes six (6) criteria which must be met for the authorization of incidental take of an endangered or threatened species. These criteria and the Department's determination for each criteria are listed below.

1. The taking will not be the purpose of, but will only be incidental to, the carrying out of an otherwise lawful activity:

The eastern massasauga (EMR) inhabits old fields, savannas, floodplain forest, marshland, and bogs. They are attracted to the prairie to feast on the small rodents found there, particularly the prairie vole. Eastern massasaugas shift their habitat with the seasons. They inhabit low-lying areas from October through May for hibernation. During the rest of the year, they utilize a variety of habitat types for foraging. These habitats are dominated by sedges or grasses and have at least a partially open tree and shrub canopy, which offers excellent areas for basking.

This project is located at the 3rd Principal Meridian, Township 18 North, Range 4 East, Sections 13 and 17 and Township 18 North, Range 5 East, Section 15. The project consists of replacing 2 culverts and 1 bridge on FAS 1531 (Cisco-Monticello Road) at Wolf Run Creek (Structure Number 074-0017), at a stream 3.5 miles East of Cisco (Structure Number 074-0049) and at Wildcat Creek (Structure Number 074-0018) in Piatt County.

IDOT proposes to replace three (3) structures on FAS Route 1531 between Cisco and Monticello, Illinois. Structure number (SN) 074-0017 is a concrete girder bridge over Wolf Run Ditch located approximately two miles east of Cisco, IL. The bridge span is approximately 40.0 feet. The proposed structure consists of three box culverts each 12 ft in width by 10 ft in height by 44 ft in length. SN 074-0049 consists of two box culverts 10 ft in width by 9 ft in height located at an unnamed stream crossing approximately 3.5 miles east of Cisco, IL. The proposed structure consists of one box culvert 12 ft in width by 9 ft in height. SN 074-0018 is a concrete girder bridge over Wildcat Creek located approximately 5.5 miles east of Cisco, IL. The bridge span is approximately 40.0 feet. The proposed structure consists of two precast concrete box culverts 12 ft in width by 10 ft in height. Those activities necessary for the removal or demolition of existing structures and the placement of new ones could result in the taking of massasauga(s). Minor earthwork would be necessary to tie new structures in with the existing road embankment and stream beds. Heavy machinery would be used to accomplish these activities.

Explanation of the anticipated adverse effects on the listed species.

Work activities along this section of roadway could result in incidental taking of the eastern massasauga. Earth excavation and fill could result in snakes or crayfish burrows being buried or crushed. The exact number of snakes inhabiting the existing right of way is unknown; although Illinois Natural History Survey (INHS) personnel have detected 18 live, individual snakes along the pathway corridor.

2. The parties to the conservation plan will, to the maximum extent practicable, minimize and mitigate the impact caused by the taking.

Plans are to minimize the area affected by the proposed action, the number of individuals of an endangered or threatened species that will be taken, and the amount of habitat affected.

This project is anticipated to be constructed under a 30 day road closure with construction starting in late spring/early summer of the year of funding. This will minimize the construction time frame and will limit the time that the habitat could be impacted. Contractor staging areas will be limited to the existing roadway, possible because of the road closure. All construction activities will occur within the existing right of way. The amount of excavation and fill within the right of way will be kept to a minimum, but in quantities necessary to meet design standards. The number of individual eastern massasauga snakes that might be taken is undetermined. The amount of possible habitat, within the impact zone footprint, affected is estimated to be 1.0 acres, comprised of various amounts at each of the three (3) structures.

The estimated affect to the probable hibernacula is estimated to be 0.221 acres, also comprised of various amounts at each of the three structures.

The respective right-of- ways will be reseeded with a mix suitable to the area. IDOT personnel will notify INHS of proposed mowing time frames and the mowing will occur infrequently in an effort to minimize mowing mortality. The grass heights of these areas will not be cut below six to nine (6-9) inches to further reduce mortality.

A best effort will be made to perform a burn of the three impact zone footprints and as much surrounding area as possible during the winter months prior to construction. The burn will be coordinated with IDNR staff. The three impact zone footprints will be surrounded by silt fencing after the burn and prior to construction activities. Funnel traps will also be placed along the fences in the impact areas. INHS personnel will inspect the exclusion fence daily. The burned areas will then be thoroughly surveyed for eastern massasauga rattlesnakes. The burn will not just occur during the year of construction. INHS staff is continually studying this site and plan to continue the studies, including controlled burning and surveys at least until construction activities are started. In addition, at least one day, but no more than 10 days before construction begins, there will be a walk through inspection of the entire job-site by personnel trained in snake surveys to determine if any snakes are present. Any snakes found will be relocated by qualified personnel to areas beyond the project boundaries. INHS will conduct telemetry on any and all snakes that are moved out of the impact zone.

Construction activity will be limited to the existing right-of-way. These areas are shown on the design plans (not attached), and the contractor will be required to stay within these limits. INHS personnel will also conduct training for the Project Foreman, Resident Engineer/Technician, equipment operators, truck drivers, and all other workers on snake identification. Workers will be required to report any and all sightings of massasaugas.. They will be instructed not to intentionally kill or harm any snakes and to report sightings to INHS. If an accidental fatality occurs, a contingency plan will be in place. The plan shall include: a) construction will stop temporarily b) INHS staff will be contacted c) INHS will be prepared to respond immediately d) a thorough analysis of all factors will take place in order to determine how the snake(s) entered the exclusion area and e) the identified problem will be fixed before construction resumes.

Following construction, all disturbed areas will be re-seeded. The cost of seeding is included in the project cost. Mitigation of the impacts from construction of the culverts includes continued funding of the massasauga research at the site and surrounding habitats. From 2002 to 2007, INHS has conducted studies to determine the distribution and habitat of this snake within the project area. Identification tags have been injected into several of the species found within the roadway corridor. INHS continues to monitor the activity of the species. IDOT provides partial funding for this research and funding that allows INHS to leverage Federal Section 6 (endangered species/candidate species) dollars for continued research of the eastern massasauga at locations in Piatt County, Illinois, including this location.

3. The parties to the conservation plan will ensure that adequate funding for the conservation plan will be provided:

In an official correspondence to the Department dated 26 November 2007 and an addendum sent on 11 February 2008, IDOT verified that adequate funding exists to support and implement all (mitigation) activities described in the official Conservation Plan (for the eastern massasauga rattlesnake). This correspondence states that the FAS 1531 project is authorized by the Illinois Department of Transportation, which receives its funding from the Illinois General Assembly and the Federal Government in carrying out its programs. IDOT has committed to budget and authorize adequate funding to provide for project construction activities and implementation of all mitigation activities (via INHS staff) required and described in the official conservation plan.

4. Based on the best available scientific data, the Department has determined that the taking will not reduce the likelihood of the survival or recovery of the endangered species or threatened species in the wild in Illinois, the biotic community of which the species is a part, or the habitat essential to the species' existence in Illinois:

All parties to this incidental take authorization agree that any impact to the eastern massasauga (EMR) is not minor. The conservation plan is the best effort of all parties to insure that the species is not impacted.

The minimization and mitigation proposed in the Conservation Plan will render the least impact to this population. The eastern massasauga is known to occur in a section of the corridor that will not be directly impacted by the proposed construction activities. The species is also known from a second site in Piatt County, the Allerton Park Restoration Area. INHS personnel have been conducting surveys and monitoring of this site. This site will not be impacted by the proposed construction activities. Information from the Natural Heritage Database shows known occurrences of the species within the project corridor. All known occurrences have been between Wildcat Creek and the Unnamed Stream. No occurrences of an eastern massasauga rattlesnake have been documented at the structure over Wolf Run Ditch.

The estimated cost of construction of the project alternative is \$1,003,000.00. The estimated cost of continued monitoring and study by INHS is a minimum of \$5,000 up to \$20,000 per year. This estimate includes supplies, travel, wages, and other expenses.

Any knowledge gained from this study will counteract any impact resulting from construction of this bridge and culverts. Due to the nature of the project, IDOT does not anticipate any changed or unforeseen circumstances. The bridge and culvert replacements will be completed in one construction season. The replacement structures are designed for a 75-100 year life, which decreases the potential for future impacts to the species because of additional construction activities.

INHS staff and others recommended that IDOT enter into a Candidate Conservation Agreement with Assurances (CCAA) with the United States Fish & Wildlife Service for this project. IDOT has taken the suggestion under consideration. It has been determined that this suggestion is not feasible at this time. One prohibitive factor is that IDOT does not own the entire habitat.

5. Any measures required under Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 - 17 IL. Adm. Code Part 1080.40(b)], will be performed:

Additional measures are listed below under "Authorization(s)" [for the eastern massasauga rattlesnake - EMR]. This authorization is, by definition, subject to those terms and conditions and official IDOT signature(s) on this authorization indicates their commitment to performing those measures.

6. The public has received notice of the application and has had the opportunity to comment before the Department made any decision regarding the application:

IDOT (in conjunction with the Illinois Natural History Survey), prepared a conservation plan as described by the Illinois Endangered Species Protection Act (520 ILCS 10/5.5). That plan and IDOT's request for authorization for incidental take of the State endangered eastern massasauga rattlesnake (*Sistrurus catenatus catenatus*) in Piatt County, Illinois was received by the Department on 26 November 2007 and an addendum sent on 11 February 2008. Public notice of IDOT's request for authorization of incidental take of the State endangered eastern massasauga rattlesnake was published in the Edwardsville Intelligencer (Official State newspaper) and the Champaign News-Gazette on December 5, 2007, as well as on December 21, 2007. Public comments on IDOT's conservation plan were accepted by the Department until January 21, 2008. Comments from the following entities: USFWS - Chicago Ecological Services Field Office and the Illinois Chapter of the Sierra Club-Shawnee Group were received during the period of December 5, 2007 through January 21, 2008.

The only alternative that would not result in the take of the eastern massasauga (EMR) is the "do nothing" alternative, which means that the bridge and culverts would not be replaced. This alternative is unacceptable because in their current condition, the bridge and culverts have posted weight limits, which restricts the type of traffic that can travel the roadway. The current structures are deficient which creates a life safety issue. Also, the purpose and need of the project is not fulfilled by the "no build" alternative.

Authorization

It is the determination of the Department that the measures to be implemented by IDOT and the INHS will adequately minimize and mitigate for the potential taking of a small number of eastern massasauga rattlesnakes due to the removal and replacement of three (3) bridge structures along Cisco-Monticello Road at Wolf Run Creek and Wildcat Creek (FAS 1531), in Piatt County, Illinois. Further, it is our opinion that the take authorized herein would not diminish the likelihood of the survival of the eastern massasauga in the wild within the State of Illinois, the biotic community of which the species is a part or the habitat essential to the species' existence in Illinois.

Pursuant to Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 - 17 IL. Adm. Code Part 1080.40(b)], this authorization is issued subject to the following additional terms and conditions:

1. This authorization is effective upon signature of the Department and shall remain in effect for a minimum period of five (5) years after IDOT approval of the project punch list (otherwise referred to as the "project completion date") for the proposed bridge repair/replacement, unless terminated pursuant to Section 5.5. of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 - 17 IL. Adm. Code Part 1080.80].
2. This project is currently scheduled for a November letting in the year of funding. Construction shall have a start date of late spring or early summer. The construction shall take place under a road closure, which will allow for a tighter construction schedule.
3. A pre-construction meeting/training session for the construction crew shall occur. The wording for "no-kill" shall be stronger than "avoid intentional killing." A meeting will be held for all contractors and IDOT personnel involved in the project. A qualified member(s) of the INHS staff will conduct training on snake identification. An actual eastern massasauga will be displayed for identification purposes. A species that is similar in markings to the eastern massasauga will also be shown.
4. A contingency plan to deal with massasauga mortality caused by construction activities shall be in place prior to construction. Steps to be incorporated into the contingency/conservation plan shall include: a) construction will stop temporarily, b) INHS staff will be contacted, c) INHS will be prepared to respond immediately, d) a thorough analysis of all factors will take place in order to determine how the snake(s) entered the exclusion area and, e) the identified problem will be fixed before construction resumes.

5. A more thorough pre-construction survey, including post-burn surveys in late March to early April shall occur. These surveys shall include counts of crayfish burrows in the actual construction zones. Exclusion fences shall be checked on a regular basis for integrity and repaired as needed. Funnel traps along the outside of the exclusion fences are to be checked daily by a knowledgeable person. A late spring burn shall be planned/executed by INHS, weather permitting. A best effort shall be made for a burn each year until construction is funded, along with other survey methods as part of the ongoing study of the species at these locations. Post-burn surveys shall be conducted by INHS staff. A thorough survey shall also be done prior to the start of construction. Exclusion fences shall be inspected daily by trained INHS staff. Funnel traps placed along the fences shall be monitored daily.

6. Telemetry of any EMRs that are moved shall occur and be done by INHS staff. This is part of their ongoing study of the species and shall continue for the foreseeable future.

7. Follow-up surveys shall occur, up to two (2) years post-construction, with an emphasis on re-colonization of impacted areas by crayfish. The study of the crayfish burrows is part of the ongoing activities INHS conducts along this corridor. INHS shall continue to study the corridor after the completion of the IDOT project for a period deemed acceptable by INHS scientists.

8. As part of mitigation, continued funding of the research shall occur. The species has been studied by INHS since 2002 and will continue to be studied by INHS along this corridor and the adjacent habitat.

9. IDOT's Erosion and Sediment Control - Landscape Design Criteria Manual shall be used for this project where needed. This Manual utilizes the latest techniques in sediment and erosion control design and implementation.

For the IL. Department of Natural Resources

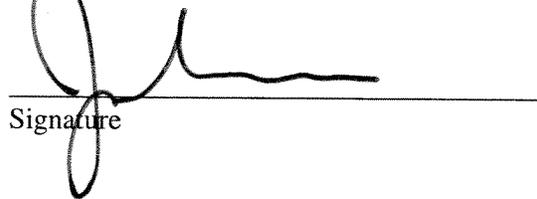


Mike Conlin, Acting Director
Office of Resource Conservation

4.3.08

Date Signed

For the IL. Department of Transportation



Signature

Joseph E. Crow - Deputy Director of
Please print name and official title *INHS*

04/25/08

Date Signed



Illinois Department of Transportation

Division of Highways / Region 3 / District 5
13473 IL Highway 133 / P.O. Box 610 / Paris, Illinois / 61944
Telephone 217/465-4181

August 4, 2008

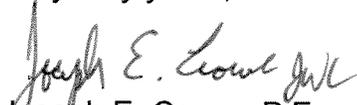
Mr. Joseph A. Kath
Endangered Species Project Manager
Illinois Department of Natural Resources
One Natural Resources Way
Springfield, Illinois 62702-1271

Dear Mr. Kath:

Enclosed is an executed copy of the Authorization for Incidental Take and Implementing Agreement for the removal and replacement of three (3) structures and pavement patching along the Cisco-Monticello Road in Piatt County.

If further assistance is needed, please contact Mrs. Kelly Fender, Environmental Coordinator, at phone number 217.466.7315.

Very truly yours,


Joseph E. Crowe, P.E.
Deputy Director of Highways,
Region Three Engineer

KSF:jv

Encl.

Received
AUG 06 2008
Wildlife Division

AUTHORIZATION FOR INCIDENTAL TAKE AND IMPLEMENTING AGREEMENT

***This is Official Amendment #1** to the original Authorization for Incidental Take and Implementing Agreement for the removal and replacement of three (3) bridge structures along Cisco-Monticello Road (FAS 1531) at Wolf Run Creek and Wildcat Creek, and pavement patching at various spot locations along Cisco-Monticello Road (FAS 1531), in Piatt County, Illinois. That document was sent to IDOT for final signature on 7 April 2008. The changes throughout the document are in bold and pursuant to the Illinois Endangered Species Protection Act (520 ILCS 10/5.5) the Illinois Department of Transportation's (IDOT) Amendment #1 authorization for the incidental take of the State endangered eastern massasauga rattlesnake (*Sistrurus catenatus catenatus*) in Piatt County, Illinois (as described/shown in the conservation plan received by the Department on 26 November 2007, and an addendum sent on 11 February 2008) is hereby granted, subject to the terms and conditions described in the attached Authorization and Implementing Agreement. The Illinois Department of Natural Resources has determined that this authorized take is incidental to the removal and replacement of three (3) bridge structures along Cisco-Monticello Road (FAS 1531) at Wolf Run Creek and Wildcat Creek, **and pavement patching at various spot locations along Cisco-Monticello Road (FAS 1531)**, in Piatt County, Illinois.

Procedural History

IDOT (in conjunction with the Illinois Natural History Survey), prepared a conservation plan as described by the Illinois Endangered Species Protection Act (520 ILCS 10/5.5). That plan and IDOT's request for authorization for incidental take of the State endangered eastern massasauga rattlesnake (*Sistrurus catenatus catenatus*) in Piatt County, Illinois, was received by the Department on 26 November 2007, and an addendum sent on 11 February 2008. Public notice of IDOT's request for authorization of incidental take of the State endangered eastern massasauga rattlesnake was published in the Edwardsville Intelligencer (Official State newspaper) and the Champaign News-Gazette on December 5, 2007, as well as on December 21, 2007. Public comments on IDOT's conservation plan were accepted by the Department until January 21, 2008. Comments from the following entities: USFWS-Chicago Ecological Services Field Office and the Illinois Chapter of the Sierra Club-Shawnee Group were received during the period of December 5, 2007 through January 21, 2008. These comments were addressed and taken into consideration when preparing this Authorization for Incidental Take and Implementing Agreement.

State Endangered Eastern Massasauga Rattlesnake (*Sistrurus catenatus catenatus*) – EMR

Compliance with the Endangered Species Protection Act

The Illinois Endangered Species Protection Act includes six (6) criteria which must be met for the authorization of incidental take of an endangered or threatened species. These criteria and the Department's determination for each criteria are listed below:

1. The taking will not be the purpose of, but will only be incidental to, the carrying out of an otherwise lawful activity:

The eastern massasauga (EMR) inhabits old fields, savannas, floodplain forest, marshland, and bogs. They are attracted to the prairie to feast on the small rodents found there, particularly the prairie vole. Eastern massasaugas shift their habitat with the seasons. They inhabit low-lying areas from October through May for hibernation. During the rest of the year, they utilize a variety of habitat types for foraging. These habitats are dominated by sedges or grasses and have at least a partially open tree and shrub canopy, which offers excellent areas for basking.

This project is located at the 3rd Principal Meridian, Township 18 North, Range 4 East, Sections 13 and 17 and Township 18 North, Range 5 East, Section 15. The project consists of replacing two culverts and one bridge on FAS 1531 (Cisco-Monticello Road) at Wolf Run Creek (Structure Number 074-0017), at a stream 3.5 miles east of Cisco (Structure Number 074-0049) and at Wildcat Creek (Structure Number 074-0018) **and pavement patching at various locations within the project corridor**, in Piatt County.

IDOT proposes to replace three (3) structures on FAS Route 1531 between Cisco and Monticello, Illinois. Structure Number (SN) 074-0017 is a concrete girder bridge over Wolf Run Ditch located approximately two miles east of Cisco, Illinois. The bridge span is approximately 40.0 feet. The proposed structure consists of three box culverts each 12 ft. in width by 10 ft. in height by 44 ft. in length. SN 074-0049 consists of two box culverts 10 ft. in width by 9 ft. in height located at an unnamed stream crossing approximately 3.5 miles east of Cisco, Illinois. The proposed structure consists of one box culvert 12 ft. in width by 9 ft. in height. SN 074-0018 is a concrete girder bridge over Wildcat Creek located approximately 5.5 miles east of Cisco, Illinois. The bridge span is approximately 40.0 feet. The proposed structure consists of two precast concrete box culverts 12 ft. in width by 10 ft. in height. Those activities necessary for the removal or demolition of existing structures and the placement of new ones could result in the taking of massasauga(s). Minor earthwork would be necessary to tie new structures in with the existing road embankment and stream beds. Heavy machinery would be used to accomplish these activities.

IDOT also proposes to patch the existing pavement at intermittent locations within the project corridor. The work activities under this contract involve removing the existing pavement, preparing the area to be patched, and pouring and finishing the patch. Heavy equipment will be used to accomplish these activities and could result in the taking of massasauga(s).

Explanation of the Anticipated Adverse Effects on the Listed Species

Work activities along this section of roadway could result in incidental taking of the eastern massasauga. Earth excavation and fill could result in snakes or crayfish burrows being buried or crushed. The exact number of snakes inhabiting the existing right of way is unknown; although Illinois Natural History Survey (INHS) personnel have detected 18 live individual snakes along the pathway corridor.

2. The parties to the conservation plan will, to the maximum extent practicable, minimize and mitigate the impact caused by the taking.

Plans are to minimize the area affected by the proposed action, the number of individuals of an endangered or threatened species that will be taken, and the amount of habitat affected.

The bridge project is anticipated to be constructed under a 30 day road closure with construction starting in late spring/early summer of the year of funding. This will minimize the construction time frame and will limit the time that the habitat could be impacted. Contractor staging areas will be limited to the existing roadway, possible because of the road closure. All construction activities will occur within the existing right of way. The amount of excavation and fill within the right of way will be kept to a minimum, but in quantities necessary to meet design standards. The number of individual eastern massasauga snakes that might be taken is undetermined. The amount of possible habitat, within the impact zone footprint, affected is estimated to be 1.0 acres, comprised of various amounts at each of the three (3) structures.

The patching contract is anticipated to be constructed under a 15 working day contract and FAS Route 1531 shall be kept open to traffic at all times during construction with the use of applicable IDOT traffic control standards.

The estimated affect to the probable hibernacula **from the structure replacements** is estimated to be 0.221 acres, also comprised of various amounts at each of the three structures. **No affect to hibernacula is anticipated under the patching contract.**

The respective right-of-ways will be reseeded with a mix suitable to the area. IDOT personnel will notify INHS of proposed moving time frames and the mowing will occur infrequently in an effort to minimize mowing mortality. The grass heights of these areas will not be cut below six to nine (6-9) inches to further reduce mortality.

A best effort will be made to perform a burn of the three impact zone footprints and as much surrounding area as possible during the winter months prior to construction. The burn will be coordinated with IDNR staff. The three impact zone footprints will be surrounded by silt fencing after the burn and prior to construction activities. Funnel traps will also be placed along the fences in the impact areas. INHS personnel will inspect the exclusion fence daily. The burned areas will then be thoroughly surveyed for eastern massasauga rattlesnakes. The burn will not just occur during the year of construction. INHS staff is continually studying this site and plan to continue the studies, including controlled burning and surveys at least until construction activities are started. In addition, at least one day, but no more than 10 days before construction begins, there will be a walk through inspection of the entire job-site by personnel trained in snake surveys to determine if any snakes are present. Any snakes found will be relocated by qualified personnel to areas beyond the project boundaries. INHS will conduct telemetry on any and all snakes that are moved out of the impact zone.

For both contracts, construction activity will be limited to the existing right of way. These areas are shown on the design plans (not attached), and the contractor will be required to stay within these limits. INHS personnel will also conduct training for the Project Foreman, Resident Engineer/Technician, equipment operators, truck drivers, and all other workers on snake identification. Workers will be required to report any and all sightings of massasaugas. They will be instructed not to intentionally kill or harm any snakes and to report sightings to INHS. If an accidental fatality occurs, a contingency plan will be in place. The plan shall include: a) construction will stop temporarily; b) INHS staff will be contacted; c) INHS will be prepared to respond immediately; d) a thorough analysis of all factors will take place in order to determine how the snake(s) entered the exclusion area; and e) the identified problem will be fixed before construction resumes.

Following construction, all disturbed areas will be re-seeded. The cost of seeding is included in the project cost. Mitigation of the impacts from construction of the culverts includes continued funding of the massasauga research at the site and surrounding habitats. From 2002 to 2007, INHS has conducted studies to determine the distribution and habitat of this snake within the project area. Identification tags have been injected into several of the species found within the roadway corridor. INHS continues to monitor the activity of the species. IDOT provides partial funding for this research and funding that allows INHS to leverage Federal Section 6 (endangered species/candidate species) dollars for continued research of the eastern massasauga at locations in Piatt County, Illinois, including this location.

3. The parties to the conservation plan will ensure that adequate funding for the conservation plan will be provided:

In an official correspondence to the Department dated 26 November 2006 and an addendum sent on 11 February 2008, IDOT verified that adequate funding exists to support and implement all (mitigation) activities described in the official Conservation Plan (for the eastern massasauga rattlesnake). This correspondence states that the FAS 1531 project is authorized by the Illinois Department of Transportation, which receives its funding from the Illinois General Assembly and the Federal Government in carrying out its programs. IDOT has committed to budget and authorize adequate funding to provide for project construction activities and implementation of all mitigation activities (via INHS staff) required and described in the official conservation plan.

4. Based on the best available scientific data, the Department has determined that the taking will not reduce the likelihood of the survival or recovery of the endangered species or threatened species in the wild in Illinois, the biotic community of which the species is a part, or the habitat essential to the species' existence in Illinois:

All parties to this incidental take authorization agree that any impact to the eastern massasauga (EMR) is not minor. The conservation plan is the best effort of all parties to insure that the species is not impacted.

The minimization and mitigation proposed in the Conservation Plan will render the least impact to this population. The eastern massasauga is known to occur in a section of the corridor that will not be directly impacted by the proposed construction activities. The species is also known from a second site in Piatt County, the Allerton Park Restoration Area. INHS personnel have been conducting surveys and monitoring of this site. This site will not be impacted by the proposed construction activities. Information from the Natural Heritage Database shows known occurrences of the species within the project corridor. All known occurrences have been between Wildcat Creek and the unnamed stream. No occurrences of an eastern massasauga rattlesnake have been documented at the structure over Wolf Run Ditch.

The estimated cost of construction of the **bridge and culvert replacement** project alternative is \$1,003,000.00. **The estimated cost of the patching contract is \$170,000.00.** The estimated cost of continued monitoring and study by INHS is a minimum of \$5,000 up to \$20,000 per year. This estimate includes supplies, travel, wages, and other expenses.

Any knowledge gained from this study will counteract any impact resulting from construction of this bridge and culverts. Due to the nature of the project, IDOT does not anticipate any changed or unforeseen circumstances. The bridge and culvert replacements will be completed in one construction season. The replacement structures are designed for a 75-100 year life, which decreases the potential for future impacts to the species because of additional construction activities. **The patching contract will also be completed in one construction season. The patching will significantly increase the life cycle of the pavement, which will in turn decrease the need for additional future construction activities, and the potential for future impacts to the species.**

INHS staff and others recommended that IDOT enter into a Candidate Conservation Agreement with Assurances (CCAA) with the United States Fish and Wildlife Service for this project. IDOT has taken the suggestion under consideration. It has been determined that this suggestion is not feasible at this time. One prohibitive factor is that IDOT does not own the entire habitat.

5. Any measures required under Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 – 17 IL. Adm. Code Part 1080.40(b)] will be performed:

Additional measures are listed below under “Authorization(s)” [for the eastern massasauga rattlesnake – EMR]. This authorization is, by definition, subject to those terms and conditions and official IDOT signature(s) on this authorization indicates their commitment to performing those measures.

6. The public has received notice of the application and has had the opportunity to comment before the Department made any decision regarding the application:

IDOT (in conjunction with the Illinois Natural History Survey), prepared a conservation plan as described by the Illinois Endangered Species Protection Act (520 ILCS 10/5.5). That plan and IDOT’s request for authorization for incidental take of the State endangered eastern massasauga rattlesnake (*Sistrurus catenatus catenatus*) in Piatt County, Illinois was received by the Department on 26 November 2007 and an addendum sent on 11 February 2008. Public notice of IDOT’s request for authorization of incidental take of the State endangered eastern massasauga rattlesnake was published in the Edwardsville Intelligencer (Official State newspaper) and the Champaign New-Gazette on December 5, 2007, as well as on December 21, 2007. Public comments on IDOT’s conservation plan were accepted by the Department until January 21, 2008. Comments from the following entities: USFWS – Chicago Ecological Services Field Office and the Illinois Chapter of the Sierra Club-Shawnee Group were received during the period of December 5, 2007 through January 21, 2008.

The only alternative that would not result in the take of the eastern massasauga (EMR) is the “do nothing” alternative, which means that the bridge and culverts would not be replaced **and the pavement would not be patched.** This alternative is unacceptable because in their current condition the bridge and culverts have posted weight limits, which restricts the type of traffic that can travel the roadway. The current structures are deficient which creates a life safety issue. **This alternative is also unacceptable in regard to the pavement patching. Patching the necessary joints will improve the condition of the roadway, resulting in a smoother ride and longer life cycle.** Also, the purpose and need of **either** project is not fulfilled by the “no build” alternative.

Authorization - Official Amendment #1

It is the determination of the Department that the measure to be implemented by IDOT and the INHS will adequately minimize and mitigate for the potential taking of a small number of eastern massasauga rattlesnakes due to the removal and replacement of three (3) bridge structures along Cisco-Monticello Road (FAS 1531) at Wolf Run Creek and Wildcat Creek, **and pavement patching along this same route**, in Piatt County, Illinois. Further, it is our opinion that the take authorized herein would not diminish the likelihood of the survival of the eastern massasauga in the wild within the State of Illinois, the biotic community of which the species is a part or the habitat essential to the species' existence in Illinois.

Pursuant to Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 – 17 IL. Adm. Code Part 1080.40(b)], this authorization is issued subject to the following additional terms and conditions:

1. This authorization is effective upon signature of the Department and shall remain in effect for a minimum period of five (5) years after IDOT approval of the project punch list (otherwise referred to as the "project completion date") for the proposed bridge repair/replacement, unless terminated pursuant to Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 -17 IL. Adm. Code Part 1080.80].
2. **The bridge replacement** project is currently scheduled for a November letting in the year of funding. Construction shall have a start date of late spring or early summer. The construction shall take place under a road closure, which will allow for a tighter construction schedule.
3. **The patching contract is currently scheduled to be let for bid in November 2008. Construction is anticipated to begin in early 2009. This project will be constructed under applicable traffic control standards, which will keep the roadway open during construction.**
4. A pre-construction meeting/training session for the construction crew **of both projects** shall occur. The wording for "no-kill" shall be stronger than "avoid intentional killing." A meeting will be held for all contractors and IDOT personnel involved in the project. A qualified member(s) of the INHS staff will conduct training on snake identification. An actual eastern massasauga will be displayed for identification purposes. A species that is similar in markings to the eastern massasauga will also be shown.
5. A contingency plan to deal with massasauga mortality caused by construction activities shall be in place prior to construction. Steps to be incorporated into the contingency/conservation plan shall include: a) construction will stop temporarily; b) INHS staff will be contacted; c) INHS will be prepared to respond immediately; d) a thorough analysis of all factors will take place in order to determine how the snake(s) entered the exclusion area; and e) the identified problem will be fixed before construction resumes.

6. A more thorough pre-construction survey, including post-burn surveys in late March to early April shall occur. These surveys shall include counts of crayfish burrows in the actual construction zones. Exclusion fences shall be checked on a regular basis for integrity and repaired as needed. Funnel traps along the outside of the exclusion fences are to be checked daily by a knowledgeable person. A late spring burn shall be planned/executed by INHS, weather permitting. A best effort shall be made for a burn each year until construction is funded, along with other survey methods as part of the ongoing study of the species at these locations. Post-burn surveys shall be conducted by INHS staff. A thorough survey shall also be done prior to the start of construction. Exclusion fences shall be inspected daily by trained INHS staff. Funnel traps placed along the fences shall be monitored daily.
7. Telemetry of any EMRs that are moved shall occur and be done by INHS staff. This is part of their ongoing study of the species and shall continue for the foreseeable future.
8. Follow up surveys shall occur, up to two (2) years post-construction, with an emphasis on re-colonization of impacted areas by crayfish. The study of the crayfish burrows is part of the ongoing activities INHS conducts along this corridor. INHS shall continue to study the corridor after the completion of the IDOT project for a period deemed acceptable by INHS scientists.
9. As part of mitigation, continued funding of the research shall occur. The species has been studied by INHS since 2002 and will continue to be studied by INHS along this corridor and the adjacent habitat.
10. IDOT's Erosion and Sediment Control – Landscape Design Criteria Manual shall be used for this project where needed. This Manual utilizes the latest techniques in sediment and erosion control design and implementation.

For the IL Department of Natural Resources

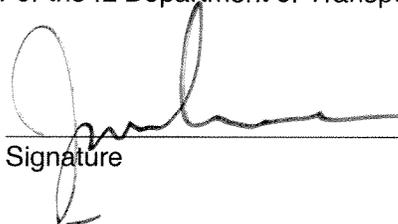


Mike Conlin, Acting Director
Office of Resource Conservation

7.18.08

Date signed

For the IL Department of Transportation



Signature

JOSEPH E. CRAVE

Please print name and official title

DEPUTY DIRECTOR OF HIGHWAYS

07-31-08

Date signed

AUTHORIZATION FOR INCIDENTAL TAKE AND IMPLEMENTING AGREEMENT

***This is Official Amendment #2** to the original Authorization for Incidental Take and Implementing Agreement for the removal and replacement of three (3) bridge structures along Cisco-Monticello Road (FAS 1531) at Wolf Run Creek and Wildcat Creek, and pavement patching at various spot locations along Cisco-Monticello Road (FAS 1531), in Piatt County, Illinois. That document was sent to IDOT for final signature on 7 April 2008. The changes throughout the document are in bold and pursuant to the Illinois Endangered Species Protection Act (520 ILCS 10/5.5) the Illinois Department of Transportation's (IDOT) Amendment #2 authorization for the incidental take of the State endangered eastern massasauga rattlesnake (*Sistrurus catenatus catenatus*) in Piatt County, Illinois (as described/shown in the conservation plan received by the Department on 26 November 2007, and an addendum sent on 11 February 2008) is hereby granted, subject to the terms and conditions described in the attached Authorization and Implementing Agreement. The Illinois Department of Natural Resources has determined that this authorized take is incidental to the removal and replacement of three (3) bridge structures along Cisco-Monticello Road (FAS 1531) at Wolf Run Creek and Wildcat Creek, and pavement patching at various spot locations along Cisco-Monticello Road (FAS 1531), in Piatt County, Illinois.

Procedural History

IDOT (in conjunction with the Illinois Natural History Survey), prepared a conservation plan as described by the Illinois Endangered Species Protection Act (520 ILCS 10/5.5). That plan and IDOT's request for authorization for incidental take of the State endangered eastern massasauga rattlesnake (*Sistrurus catenatus catenatus*) in Piatt County, Illinois, was received by the Department on 26 November 2007, and an addendum sent on 11 February 2008. Public notice of IDOT's request for authorization of incidental take of the State endangered eastern massasauga rattlesnake was published in the Edwardsville Intelligencer (Official State newspaper) and the Champaign News-Gazette on December 5, 2007, as well as on December 21, 2007. Public comments on IDOT's conservation plan were accepted by the Department until January 21, 2008. Comments from the following entities: USFWS-Chicago Ecological Services Field Office and the Illinois Chapter of the Sierra Club-Shawnee Group were received during the period of December 5, 2007 through January 21, 2008. These comments were addressed and taken into consideration when preparing this Authorization for Incidental Take and Implementing Agreement.

State Endangered Eastern Massasauga Rattlesnake (*Sistrurus catenatus catenatus*) – EMR

Compliance with the Endangered Species Protection Act

The Illinois Endangered Species Protection Act includes six (6) criteria which must be met for the authorization of incidental take of an endangered or threatened species. These criteria and the Department's determination for each criteria are listed below:

1. The taking will not be the purpose of, but will only be incidental to, the carrying out of an otherwise lawful activity:

Received
JUN 21 2008
Wildlife Division

The eastern massasauga (EMR) inhabits old fields, savannas, floodplain forest, marshland, and bogs. They are attracted to the prairie to feast on the small rodents found there, particularly the prairie vole. Eastern massasaugas shift their habitat with the seasons. They inhabit low-lying areas from October through May for hibernation. During the rest of the year, they utilize a variety of habitat types for foraging. These habitats are dominated by sedges or grasses and have at least a partially open tree and shrub canopy, which offers excellent areas for basking.

This project is located at the 3rd Principal Meridian, Township 18 North, Range 4 East, Sections 13 and 17 and Township 18 North, Range 5 East, Section 15. The project consists of replacing two culverts and one bridge on FAS 1531 (Cisco-Monticello Road) at Wolf Run Creek (Structure Number 074-0017), at a stream 3.5 miles east of Cisco (Structure Number 074-0049) and at Wildcat Creek (Structure Number 074-0018) and pavement patching at various locations within the project corridor, in Piatt County.

IDOT proposes to replace three (3) structures on FAS Route 1531 between Cisco and Monticello, Illinois. Structure Number (SN) 074-0017 is a concrete girder bridge over Wolf Run Ditch located approximately two miles east of Cisco, Illinois. The bridge span is approximately 40.0 feet. The proposed structure consists of three box culverts each 12 ft. in width by 10 ft. in height by 44 ft. in length. SN 074-0049 consists of two box culverts 10 ft. in width by 9 ft. in height located at an unnamed stream crossing approximately 3.5 miles east of Cisco, Illinois. The proposed structure consists of one box culvert 12 ft. in width by 9 ft. in height. SN 074-0018 is a concrete girder bridge over Wildcat Creek located approximately 5.5 miles east of Cisco, Illinois. The bridge span is approximately 40.0 feet. The proposed structure consists of two precast concrete box culverts 12 ft. in width by 10 ft. in height. Those activities necessary for the removal or demolition of existing structures and the placement of new ones could result in the taking of massasauga(s). Minor earthwork would be necessary to tie new structures in with the existing road embankment and stream beds. Heavy machinery would be used to accomplish these activities.

IDOT also proposes to patch the existing pavement at intermittent locations within the project corridor. The work activities under this contract involve removing the existing pavement, preparing the area to be patched, and pouring and finishing the patch. Heavy equipment will be used to accomplish these activities and could result in the taking of massasauga(s).

Explanation of the Anticipated Adverse Effects on the Listed Species

Work activities along this section of roadway could result in incidental taking of the eastern massasauga. Earth excavation and fill could result in snakes or crayfish burrows being buried or crushed. The exact number of snakes inhabiting the existing right of way is unknown; although Illinois Natural History Survey (INHS) personnel have detected 18 live individual snakes along the pathway corridor.

2. The parties to the conservation plan will, to the maximum extent practicable, minimize and mitigate the impact caused by the taking.

Plans are to minimize the area affected by the proposed action, the number of individuals of an endangered or threatened species that will be taken, and the amount of habitat affected.

The bridge project is anticipated to be constructed under a **54 day lane closure** with construction starting in late spring/early summer of the year of funding. **Contractor staging areas will be limited to the existing roadway.** All construction activities will occur within the existing right of way. The amount of excavation and fill within the right of way will be kept to a minimum, but in quantities necessary to meet design standards. The number of individual eastern massasauga snakes that might be taken is undetermined. The amount of possible habitat, within the impact zone footprint, affected is estimated to be 1.0 acres, comprised of various amounts at each of the three (3) structures.

The patching contract is anticipated to be constructed under a 15 working day contract and FAS Route 1531 shall be kept open to traffic at all times during construction with the use of applicable IDOT traffic control standards.

The estimated affect to the probable hibernacula from the structure replacements is estimated to be 0.221 acres, also comprised of various amounts at each of the three structures. No affect to hibernacula is anticipated under the patching contract.

The respective right-of-ways will be reseeded with a mix suitable to the area. IDOT personnel will notify INHS of proposed moving time frames and the mowing will occur infrequently in an effort to minimize mowing mortality. The grass heights of these areas will not be cut below six to nine (6-9) inches to further reduce mortality.

A best effort will be made to perform a burn of the three impact zone footprints and as much surrounding area as possible during the winter months prior to construction. The burn will be coordinated with IDNR staff. The three impact zone footprints will be surrounded by silt fencing after the burn and prior to construction activities. Funnel traps will also be placed along the fences in the impact areas. INHS personnel will inspect the exclusion fence daily. The burned areas will then be thoroughly surveyed for eastern massasauga rattlesnakes. The burn will not just occur during the year of construction. INHS staff is continually studying this site and plan to continue the studies, including controlled burning and surveys at least until construction activities are started. In addition, at least one day, but no more than 10 days before construction begins, there will be a walk through inspection of the entire job-site by personnel trained in snake surveys to determine if any snakes are present. Any snakes found will be relocated by qualified personnel to areas beyond the project boundaries. INHS will conduct telemetry on any and all snakes that are moved out of the impact zone.

For both contracts, construction activity will be limited to the existing right of way. These areas are shown on the design plans (not attached), and the contractor will be required to stay within these limits. INHS personnel will also conduct training for the Project Foreman, Resident Engineer/Technician, equipment operators, truck drivers, and all other workers on snake identification. Workers will be required to report any and all sightings of massasaugas. They will be instructed not to intentionally kill or harm any snakes and to report sightings to INHS. If an accidental fatality occurs, a contingency plan will be in place. The plan shall include: a) construction will stop temporarily; b) INHS staff will be contacted; c) INHS will be prepared to respond immediately; d) a thorough analysis of all factors will take place in order to determine how the snake(s) entered the exclusion area; and e) the identified problem will be fixed before construction resumes.

Following construction, all disturbed areas will be re-seeded. The cost of seeding is included in the project cost. Mitigation of the impacts from construction of the culverts

includes continued funding of the massasauga research at the site and surrounding habitats.

From 2002 to 2007, INHS has conducted studies to determine the distribution and habitat of this snake within the project area. Identification tags have been injected into several of the species found within the roadway corridor. INHS continues to monitor the activity of the species. IDOT provides partial funding for this research and funding that allows INHS to leverage Federal Section 6 (endangered species/candidate species) dollars for continued research of the eastern massasauga at locations in Piatt County, Illinois, including this location.

3. The parties to the conservation plan will ensure that adequate funding for the conservation plan will be provided:

In an official correspondence to the Department dated 26 November 2006 and an addendum sent on 11 February 2008, IDOT verified that adequate funding exists to support and implement all (mitigation) activities described in the official Conservation Plan (for the eastern massasauga rattlesnake). This correspondence states that the FAS 1531 project is authorized by the Illinois Department of Transportation, which receives its funding from the Illinois General Assembly and the Federal Government in carrying out its programs. IDOT has committed to budget and authorize adequate funding to provide for project construction activities and implementation of all mitigation activities (via INHS staff) required and described in the official conservation plan.

4. Based on the best available scientific data, the Department has determined that the taking will not reduce the likelihood of the survival or recovery of the endangered species or threatened species in the wild in Illinois, the biotic community of which the species is a part, or the habitat essential to the species' existence in Illinois:

All parties to this incidental take authorization agree that any impact to the eastern massasauga (EMR) is not minor. The conservation plan is the best effort of all parties to insure that the species is not impacted.

The minimization and mitigation proposed in the Conservation Plan will render the least impact to this population. The eastern massasauga is known to occur in a section of the corridor that will not be directly impacted by the proposed construction activities. The species is also known from a second site in Piatt County, the Allerton Park Restoration Area. INHS personnel have been conducting surveys and monitoring of this site. This site will not be impacted by the proposed construction activities. Information from the Natural Heritage Database shows known occurrences of the species within the project corridor. All known occurrences have been between Wildcat Creek and the unnamed stream. No occurrences of an eastern massasauga rattlesnake have been documented at the structure over Wolf Run Ditch.

The estimated cost of construction of the bridge and culvert replacement project alternative is \$1,003,000.00. The estimated cost of the patching contract is \$170,000.00. The estimated cost of continued monitoring and study by INHS is a minimum of \$5,000 up to \$20,000 per year. This estimate includes supplies, travel, wages, and other expenses.

Any knowledge gained from this study will counteract any impact resulting from construction of this bridge and culverts. Due to the nature of the project, IDOT does not anticipate any changed or unforeseen circumstances. The bridge and culvert replacements will be

completed in one construction season. The replacement structures are designed for a 75-100 year life, which decreases the potential for future impacts to the species because of additional construction activities. The patching contract will also be completed in one construction season. The patching will significantly increase the life cycle of the pavement, which will in turn decrease the need for additional future construction activities, and the potential for future impacts to the species.

INHS staff and others recommended that IDOT enter into a Candidate Conservation Agreement with Assurances (CCAA) with the United States Fish and Wildlife Service for this project. IDOT has taken the suggestion under consideration. It has been determined that this suggestion is not feasible at this time. One prohibitive factor is that IDOT does not own the entire habitat.

5. Any measures required under Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 – 17 IL. Adm. Code Part 1080.40(b)] will be performed:

Additional measures are listed below under “Authorization(s)” [for the eastern massasauga rattlesnake – EMR]. This authorization is, by definition, subject to those terms and conditions and official IDOT signature(s) on this authorization indicates their commitment to performing those measures.

6. The public has received notice of the application and has had the opportunity to comment before the Department made any decision regarding the application:

IDOT (in conjunction with the Illinois Natural History Survey), prepared a conservation plan as described by the Illinois Endangered Species Protection Act (520 ILCS 10/5.5). That plan and IDOT’s request for authorization for incidental take of the State endangered eastern massasauga rattlesnake (*Sistrurus catenatus catenatus*) in Piatt County, Illinois was received by the Department on 26 November 2007 and an addendum sent on 11 February 2008. Public notice of IDOT’s request for authorization of incidental take of the State endangered eastern massasauga rattlesnake was published in the Edwardsville Intelligencer (Official State newspaper) and the Champaign New-Gazette on December 5, 2007, as well as on December 21, 2007. Public comments on IDOT’s conservation plan were accepted by the Department until January 21, 2008. Comments from the following entities: USFWS – Chicago Ecological Services Field Office and the Illinois Chapter of the Sierra Club-Shawnee Group were received during the period of December 5, 2007 through January 21, 2008.

The only alternative that would not result in the take of the eastern massasauga (EMR) is the “do nothing” alternative, which means that the bridge and culverts would not be replaced and the pavement would not be patched. This alternative is unacceptable because in their current condition the bridge and culverts have posted weight limits, which restricts the type of traffic that can travel the roadway. The current structures are deficient which creates a life safety issue. This alternative is also unacceptable in regard to the pavement patching. Patching the necessary joints will improve the condition of the roadway, resulting in a smoother ride and longer life cycle. Also, the purpose and need of either project is not fulfilled by the “no build” alternative.

It is the determination of the Department that the measure to be implemented by IDOT and the INHS will adequately minimize and mitigate for the potential taking of a small number of eastern massasauga rattlesnakes due to the removal and replacement of three (3) bridge structures along Cisco-Monticello Road (FAS 1531) at Wolf Run Creek and Wildcat Creek, and pavement patching along this same route, in Piatt County, Illinois. Further, it is our opinion that the take authorized herein would not diminish the likelihood of the survival of the eastern massasauga in the wild within the State of Illinois, the biotic community of which the species is a part or the habitat essential to the species' existence in Illinois.

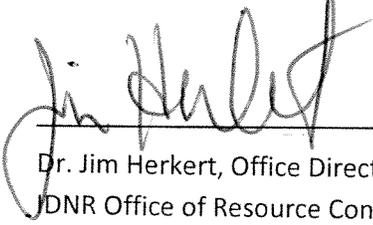
Pursuant to Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 – 17 IL. Adm. Code Part 1080.40(b)], this authorization is issued subject to the following additional terms and conditions:

1. This authorization is effective upon signature of the Department and shall remain in effect for a minimum period of five (5) years after IDOT approval of the project punch list (otherwise referred to as the "project completion date") for the proposed bridge repair/replacement, unless terminated pursuant to Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 -17 IL. Adm. Code Part 1080.80].
2. The bridge replacement project is currently scheduled for a November letting in the year of funding. Construction shall have a start date of late spring or early summer. The construction shall take place under a road closure, which will allow for a tighter construction schedule.
3. The patching contract is currently scheduled to be let for bid in November 2008. Construction is anticipated to begin in early 2009. This project will be constructed under applicable traffic control standards, which will keep the roadway open during construction.
4. A pre-construction meeting/training session for the construction crew of both projects shall occur. The wording for "no-kill" shall be stronger than "avoid intentional killing." A meeting will be held for all contractors and IDOT personnel involved in the project. A qualified member(s) of the INHS staff will conduct training on snake identification. An actual eastern massasauga will be displayed for identification purposes. A species that is similar in markings to the eastern massasauga will also be shown.
5. A contingency plan to deal with massasauga mortality caused by construction activities shall be in place prior to construction. Steps to be incorporated into the contingency/conservation plan shall include: a) construction will stop temporarily; b) INHS staff will be contacted; c) INHS will be prepared to respond immediately; d) a thorough analysis of all factors will take place in order to determine how the snake(s) entered the exclusion area; and e) the identified problem will be fixed before construction resumes.
6. A more thorough pre-construction survey, including post-burn surveys in late March to early April shall occur. These surveys shall include counts of crayfish burrows in the

actual construction zones. Exclusion fences shall be checked on a regular basis for integrity and repaired as needed. Funnel traps along the outside of the exclusion fences are to be checked daily by a knowledgeable person. A late spring burn shall be planned/executed by INHS, weather permitting. A best effort shall be made for a burn each year until construction is funded, along with other survey methods as part of the ongoing study of the species at these locations. Post-burn surveys shall be conducted by INHS staff. A thorough survey shall also be done prior to the start of construction. Exclusion fences shall be inspected daily by trained INHS staff. Funnel traps placed along the fences shall be monitored daily.

7. Telemetry of any EMRs that are moved shall occur and be done by INHS staff. This is part of their ongoing study of the species and shall continue for the foreseeable future.
8. Follow up surveys shall occur, up to two (2) years post-construction, with an emphasis on re-colonization of impacted areas by crayfish. The study of the crayfish burrows is part of the ongoing activities INHS conducts along this corridor. INHS shall continue to study the corridor after the completion of the IDOT project for a period deemed acceptable by INHS scientists.
9. As part of mitigation, continued funding of the research shall occur. The species has been studied by INHS since 2002 and will continue to be studied by INHS along this corridor and the adjacent habitat.
10. IDOT's Erosion and Sediment Control – Landscape Design Criteria Manual shall be used for this project where needed. This Manual utilizes the latest techniques in sediment and erosion control design and implementation.

For the IL Department of Natural Resources

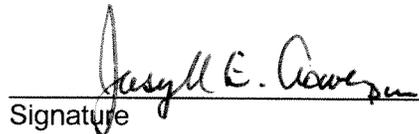


Dr. Jim Herkert, Office Director
DNR Office of Resource Conservation

7-6-10

Date signed

For the IL Department of Transportation



Signature

Joseph E. Cawley / Deputy Director

Please print name and official title

7/13/10

Date signed

AUTHORIZATION FOR INCIDENTAL TAKE AND IMPLEMENTING AGREEMENT

***This is Official Amendment #3** to the original Authorization for Incidental Take and Implementing Agreement for the removal and replacement of three (3) bridge structures along Cisco-Monticello Road (FAS 1531) at Wolf Run Creek and Wildcat Creek, pavement patching at various spot locations along Cisco-Monticello Road (FAS 1531) and resurfacing of the roadway from 600 East to Bridge Street in Monticello, all in Piatt County, Illinois. That document was sent to IDOT for final signature on 7 April 2008. Pursuant to the Illinois Endangered Species Protection Act (520 ILCS 10/5.5) the Illinois Department of Transportation's (IDOT) authorization for the incidental take of the State endangered eastern massasauga rattlesnake (*Sistrurus catenatus catenatus*) in Piatt County, Illinois (as described/shown in the conservation plan received by the Department on 26 November 2007, and addendums dated 11 February 2008, 6 July 2010 and 5 January 2011) is hereby granted, subject to the terms and conditions described in the attached Authorization and Implementing Agreement. The Illinois Department of Natural Resources has determined that this authorized take is incidental to the removal and replacement of three (3) bridge structures along Cisco-Monticello Road (FAS 1531) at Wolf Run Creek and Wildcat Creek, pavement patching at various spot locations along Cisco-Monticello Road (FAS 1531) and resurfacing of the roadway from 600 East to Bridge Street in Monticello, all in Piatt County, Illinois.

Procedural History

IDOT (in conjunction with the Illinois Natural History Survey), prepared a conservation plan as described by the Illinois Endangered Species Protection Act (520 ILCS 10/5.5). That plan and IDOT's request for authorization for incidental take of the State endangered eastern massasauga rattlesnake (*Sistrurus catenatus catenatus*) in Piatt County, Illinois, was received by the Department on 26 November 2007, and addendums sent on 11 February 2008, 6 July 2010 and 5 January 2011. Public notice of IDOT's request for authorization of incidental take of the State endangered eastern massasauga rattlesnake was published in the Edwardsville Intelligencer (Official State newspaper) and the Champaign News-Gazette on December 5, 2007, as well as on December 21, 2007. Public comments on IDOT's conservation plan were accepted by the Department until January 21, 2008. Comments from the following entities: USFWS-Chicago Ecological Services Field Office and the Illinois Chapter of the Sierra Club-Shawnee Group were received during the period of December 5, 2007 through January 21, 2008. These comments were addressed and taken into consideration when preparing this Authorization for Incidental Take and Implementing Agreement.

State Endangered Eastern Massasauga Rattlesnake (*Sistrurus catenatus catenatus*) – EMR

Compliance with the Endangered Species Protection Act

The Illinois Endangered Species Protection Act includes six (6) criteria which must be met for the authorization of incidental take of an endangered or threatened species. These criteria and the Department's determination for each criteria are listed below:

1. The taking will not be the purpose of, but will only be incidental to, the carrying out of an otherwise lawful activity:

The eastern massasauga (EMR) inhabits old fields, savannas, floodplain forest, marshland, and bogs. They are attracted to the prairie to feast on the small rodents found there, particularly the prairie vole. Eastern massasaugas shift their habitat with the seasons. They inhabit low-lying areas from October through May for hibernation. During the rest of the year, they utilize a variety of habitat types for foraging. These habitats are dominated by sedges or grasses and have at least a partially open tree and shrub canopy, which offers excellent areas for basking.

This project is located at the 3rd Principal Meridian, Township 18 North, Range 4 East, Sections 13 and 17 and Township 18 North, Range 5 East, Section 15. The project consists of replacing two culverts and one bridge on FAS 1531 (Cisco-Monticello Road) at Wolf Run Creek (Structure Number 074-0017), at a stream 3.5 miles east of Cisco (Structure Number 074-0049) and at Wildcat Creek (Structure Number 074-0018), pavement patching at various locations within the project corridor and resurfacing of the roadway from 600 East to Bridge Street in Monticello, all in Piatt County.

IDOT proposes to replace three (3) structures on FAS Route 1531 between Cisco and Monticello, Illinois. Structure Number (SN) 074-0017 is a concrete girder bridge over Wolf Run Ditch located approximately two miles east of Cisco, Illinois. The bridge span is approximately 40.0 feet. The proposed structure consists of three box culverts each 12 ft. in width by 10 ft. in height by 44 ft. in length. SN 074-0049 consists of two box culverts 10 ft. in width by 9 ft. in height located at an unnamed stream crossing approximately 3.5 miles east of Cisco, Illinois. The proposed structure consists of one box culvert 12 ft. in width by 9 ft. in height. SN 074-0018 is a concrete girder bridge over Wildcat Creek located approximately 5.5 miles east of Cisco, Illinois. The bridge span is approximately 40.0 feet. The proposed structure consists of two precast concrete box culverts 12 ft. in width by 10 ft. in height. Those activities necessary for the removal or demolition of existing structures and the placement of new ones could result in the taking of massasauga(s). Minor earthwork would be necessary to tie new structures in with the existing road embankment and stream beds. Heavy machinery would be used to accomplish these activities.

IDOT also proposes to patch the existing pavement at intermittent locations within the project corridor. The work activities under this contract involve removing the existing pavement, preparing the area to be patched, and pouring and finishing the patch. Heavy equipment will be used to accomplish these activities and could result in the taking of massasauga(s).

IDOT also proposes to overlay the existing pavement of FAS 1531 beginning near 600 East and ending at the intersection with Bridge Street in Monticello. The work activities under this contract involve the laying of new binder course and asphalt throughout the project limits. Heavy equipment will be used to accomplish these activities and could result in the taking of massasauga(s).

Explanation of the Anticipated Adverse Effects on the Listed Species

Work activities along this section of roadway could result in incidental taking of the eastern massasauga. Earth excavation and fill could result in snakes or crayfish burrows being buried or crushed. The exact number of snakes inhabiting the existing right of way is unknown; although Illinois Natural History Survey (INHS) personnel have detected 18 live individual snakes along the pathway corridor.

2. The parties to the conservation plan will, to the maximum extent practicable, minimize and mitigate the impact caused by the taking.

Plans are to minimize the area affected by the proposed action, the number of individuals of an endangered or threatened species that will be taken, and the amount of habitat affected.

The bridge project is anticipated to be constructed under a 54 day lane closure with construction starting in late spring/early summer of the year of funding. Contractor staging areas will be limited to the existing roadway. All construction activities will occur within the existing right of way. The amount of excavation and fill within the right of way will be kept to a minimum, but in quantities necessary to meet design standards. The number of individual eastern massasauga snakes that might be taken is undetermined. The amount of possible habitat, within the impact zone footprint, affected is estimated to be 1.0 acres, comprised of various amounts at each of the three (3) structures.

The patching contracts are anticipated to be constructed under a 15 working day contract and FAS Route 1531 shall be kept open to traffic at all times during construction with the use of applicable IDOT traffic control standards.

The resurfacing contract is anticipated to be constructed under a 20 working day contract and FAS 1531 shall be kept open to traffic at all times during construction with the use of applicable IDOT traffic control standards. All construction activities will occur within existing right of way. A special provision will be inserted into the plans prohibiting off road staging and parking of contractor equipment and personnel.

The estimated affect to the probable hibernacula from the structure replacements is estimated to be 0.221 acres, also comprised of various amounts at each of the three structures. No affect to hibernacula is anticipated under the patching contracts or the resurfacing contract.

The respective right-of-ways will be reseeded with a mix suitable to the area. IDOT personnel will notify INHS of proposed moving time frames and the mowing will occur infrequently in an effort to minimize mowing mortality. The grass heights of these areas will not be cut below six to nine (6-9) inches to further reduce mortality.

A best effort will be made to perform a burn of the three impact zone footprints and as much surrounding area as possible during the winter months prior to construction. The burn will be coordinated with IDNR staff. The three impact zone footprints will be surrounded by silt fencing after the burn and prior to construction activities. Funnel traps will also be placed along the fences in the impact areas. INHS personnel will inspect the exclusion fence daily. The burned areas will then be thoroughly surveyed for eastern massasauga rattlesnakes. The burn will not just occur during the year of construction. INHS staff is continually studying this site and plan to continue the studies, including controlled burning and surveys at least until construction activities are started. In addition, at least one day, but no more than 10 days before construction begins, there will be a walk through inspection of the entire job-site by personnel trained in snake surveys to determine if any snakes are present. Any snakes found will be relocated by qualified personnel to areas beyond the project boundaries. INHS will conduct telemetry on any and all snakes that are moved out of the impact zone.

For all contracts, construction activity will be limited to the existing right of way. These areas are shown on the design plans (not attached), and the contractor will be required to stay within these limits. INHS personnel will also conduct training for the Project Foreman, Resident Engineer/Technician, equipment operators, truck drivers, and all other workers on snake identification. Workers will be required to report any and all sightings of massasaugas. They will be instructed not to intentionally kill or harm any snakes and to report sightings to INHS. If an accidental fatality occurs, a contingency plan will be in place. The plan shall include: a) construction will stop temporarily; b) INHS staff will be contacted; c) INHS will be prepared to respond immediately; d) a thorough analysis of all factors will take place in order to determine how the snake(s) entered the exclusion area; and e) the identified problem will be fixed before construction resumes.

Following construction, all disturbed areas will be re-seeded. The cost of seeding is included in the project cost. Mitigation of the impacts from construction of the culverts includes continued funding of the massasauga research at the site and surrounding habitats. From 2002 to 2010, INHS has conducted studies to determine the distribution and habitat of this snake within the project area. Identification tags have been injected into several of the species found within the roadway corridor. INHS continues to monitor the activity of the species. IDOT provides partial funding for this research and funding that allows INHS to leverage Federal Section 6 (endangered species/candidate species) dollars for continued research of the eastern massasauga at locations in Piatt County, Illinois, including this location.

3. The parties to the conservation plan will ensure that adequate funding for the conservation plan will be provided:

In an official correspondence to the Department dated 26 November 2006 and addendums dated 11 February 2008, 6 July 2010 and 5 January 2011, IDOT verified that adequate funding exists to support and implement all (mitigation) activities described in the official Conservation Plan (for the eastern massasauga rattlesnake). This correspondence states that the FAS 1531 project is authorized by the Illinois Department of Transportation, which receives its funding from the Illinois General Assembly and the Federal Government in carrying out its programs. IDOT has committed to budget and authorize adequate funding to provide for project construction activities and implementation of all mitigation activities (via INHS staff) required and described in the official conservation plan.

4. Based on the best available scientific data, the Department has determined that the taking will not reduce the likelihood of the survival or recovery of the endangered species or threatened species in the wild in Illinois, the biotic community of which the species is a part, or the habitat essential to the species' existence in Illinois:

All parties to this incidental take authorization agree that any impact to the eastern massasauga (EMR) is not minor. The conservation plan is the best effort of all parties to insure that the species is not impacted.

The minimization and mitigation proposed in the Conservation Plan will render the least impact to this population. The eastern massasauga is known to occur in a section of the corridor that will not be directly impacted by the proposed construction activities. The species is also known from a second site in Piatt County, the Allerton Park Restoration Area. INHS personnel have been conducting surveys and monitoring of this site. This site will not be impacted by the proposed construction activities. Information from the Natural Heritage Database shows known occurrences of the species within the project corridor. All known occurrences have been between Wildcat Creek and the unnamed stream. No occurrences of an eastern massasauga rattlesnake have been documented at the structure over Wolf Run Ditch.

The estimated cost of construction of the bridge and culvert replacement project alternative is \$1,003,000.00. The estimated cost of the patching contracts are \$370,000.00. The estimated cost of the resurfacing contract is \$500,000.00. The estimated cost of continued monitoring and study by INHS is a minimum of \$5,000 up to \$20,000 per year. This estimate includes supplies, travel, wages, and other expenses.

Any knowledge gained from this study will counteract any impact resulting from construction of this bridge and culverts. Due to the nature of the project, IDOT does not anticipate any changed or unforeseen circumstances. The bridge and culvert replacements will be completed in one construction season. The replacement structures are designed for a 75-100 year life, which decreases the potential for future impacts to the species because of additional construction activities. The patching contracts will each be completed in one construction season. Patching will significantly increase the life cycle of the pavement, which will in turn decrease the need for additional future construction activities, and the potential for future impacts to the species.

The resurfacing contract will also be completed in one construction season. Resurfacing will significantly increase the life cycle of the pavement within the project limits and make the roadway safer for the traveling public.

INHS staff and others recommended that IDOT enter into a Candidate Conservation Agreement with Assurances (CCAA) with the United States Fish and Wildlife Service for this project. IDOT has taken the suggestion under consideration. It has been determined that this suggestion is not feasible at this time. One prohibitive factor is that IDOT does not own the entire habitat.

5. Any measures required under Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 – 17 IL. Adm. Code Part 1080.40(b)] will be performed:

Additional measures are listed below under “Authorization(s)” [for the eastern massasauga rattlesnake – EMR]. This authorization is, by definition, subject to those terms and conditions and official IDOT signature(s) on this authorization indicates their commitment to performing those measures.

6. The public has received notice of the application and has had the opportunity to comment before the Department made any decision regarding the application:

IDOT (in conjunction with the Illinois Natural History Survey), prepared a conservation plan as described by the Illinois Endangered Species Protection Act (520 ILCS 10/5.5). That plan and IDOT's request for authorization for incidental take of the State endangered eastern massasauga rattlesnake (*Sistrurus catenatus catenatus*) in Piatt County, Illinois was received by the Department on 26 November 2007 and addendums dated 11 February 2008, 6 July 2010 and 5 January 2011. Public notice of IDOT's request for authorization of incidental take of the State endangered eastern massasauga rattlesnake was published in the Edwardsville Intelligencer (Official State newspaper) and the Champaign New-Gazette on December 5, 2007, as well as on December 21, 2007. Public comments on IDOT's conservation plan were accepted by the Department until January 21, 2008. Comments from the following entities: USFWS – Chicago Ecological Services Field Office and the Illinois Chapter of the Sierra Club-Shawnee Group were received during the period of December 5, 2007 through January 21, 2008.

The only alternative that would not result in the take of the eastern massasauga (EMR) is the "do nothing" alternative, which means that the bridge and culverts would not be replaced and the pavement would not be patched. This alternative is unacceptable because in their current condition the bridge and culverts have posted weight limits, which restricts the type of traffic that can travel the roadway. The current structures are deficient which creates a life safety issue. This alternative is also unacceptable in regard to the pavement patching and resurfacing projects. Patching the necessary joints and resurfacing the pavement will improve the condition of the roadway, resulting in a smoother ride and longer life cycle. Also, the purpose and need of any of these projects is not fulfilled by the "no build" alternative.

Authorization- Official Amendment #1

It is the determination of the Department that the measure to be implemented by IDOT and the INHS will adequately minimize and mitigate for the potential taking of a small number of eastern massasauga rattlesnakes due to the removal and replacement of three (3) bridge structures along Cisco-Monticello Road (FAS 1531) at Wolf Run Creek and Wildcat Creek, pavement patching along this same route and resurfacing the existing pavement from 600 East to Bridge Street in Monticello, all in Piatt County, Illinois. Further, it is our opinion that the take authorized herein would not diminish the likelihood of the survival of the eastern massasauga in the wild within the State of Illinois, the biotic community of which the species is a part or the habitat essential to the species' existence in Illinois.

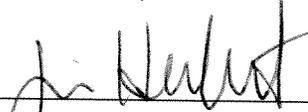
Pursuant to Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 – 17 IL. Adm. Code Part 1080.40(b)], this authorization is issued subject to the following additional terms and conditions:

1. This authorization is effective upon signature of the Department and shall remain in effect for a minimum period of five (5) years after IDOT approval of the project punch list (otherwise referred to as the "project completion date") for the proposed bridge repair/replacement, unless terminated pursuant to Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 -17 IL. Adm. Code Part 1080.80].
2. The bridge replacement project is currently scheduled for a January letting in the year of funding. Construction shall have a start date of late spring or early summer. The construction shall take place under lane closure, which will allow for a tighter construction schedule.

3. The patching contract is currently scheduled to be let for bid in November 2008. Construction is anticipated to begin in early 2009. This project will be constructed under applicable traffic control standards, which will keep the roadway open during construction.
4. A second patching project is scheduled for an April 2011 letting, with an anticipated start date in early Summer 2011. This project will be constructed under applicable traffic control standards, which will keep the roadway open during construction.
5. The resurfacing project is scheduled for a June 2011 letting with construction anticipated to begin at the conclusion of the second patching contract and the completion of the culvert replacement over Wildcat Creek. This project will be constructed under applicable traffic control standards, which will keep the roadway open during construction.
6. A pre-construction meeting/training session for the construction crew of all projects shall occur. The wording for "no-kill" shall be stronger than "avoid intentional killing." A meeting will be held for all contractors and IDOT personnel involved in the project. A qualified member(s) of the INHS staff will conduct training on snake identification. An actual eastern massasauga will be displayed for identification purposes. A species that is similar in markings to the eastern massasauga will also be shown.
7. A contingency plan to deal with massasauga mortality caused by construction activities shall be in place prior to construction. Steps to be incorporated into the contingency/conservation plan shall include: a) construction will stop temporarily; b) INHS staff will be contacted; c) INHS will be prepared to respond immediately; d) a thorough analysis of all factors will take place in order to determine how the snake(s) entered the exclusion area; and e) the identified problem will be fixed before construction resumes.
8. A more thorough pre-construction survey, including post-burn surveys in late March to early April shall occur. These surveys shall include counts of crayfish burrows in the actual construction zones. Exclusion fences shall be checked on a regular basis for integrity and repaired as needed. Funnel traps along the outside of the exclusion fences are to be checked daily by a knowledgeable person. A late spring burn shall be planned/executed by INHS, weather permitting. A best effort shall be made for a burn each year until construction is funded, along with other survey methods as part of the ongoing study of the species at these locations. Post-burn surveys shall be conducted by INHS staff. A thorough survey shall also be done prior to the start of construction. Exclusion fences shall be inspected daily by trained INHS staff. Funnel traps placed along the fences shall be monitored daily.
9. Telemetry of any EMRs that are moved shall occur and be done by INHS staff. This is part of their ongoing study of the species and shall continue for the foreseeable future.

10. Follow up surveys shall occur, up to two (2) years post-construction, with an emphasis on re-colonization of impacted areas by crayfish. The study of the crayfish burrows is part of the ongoing activities INHS conducts along this corridor. INHS shall continue to study the corridor after the completion of the IDOT project for a period deemed acceptable by INHS scientists.
11. As part of mitigation, continued funding of the research shall occur. The species has been studied by INHS since 2002 and will continue to be studied by INHS along this corridor and the adjacent habitat.
12. IDOT's Erosion and Sediment Control – Landscape Design Criteria Manual shall be used for this project where needed. This Manual utilizes the latest techniques in sediment and erosion control design and implementation.

For the IL Department of Natural Resources



Dr. Jim Herkert, Office Director
IDNR Office of Resource Conservation

1/21/11
Date signed

For the IL Department of Transportation



Joseph K. Coughlin R3 Deputy Director
Please print name and official title

1/5/11
Date signed