

## Authorization for Incidental Take and Implementing Agreement

Pursuant to the Illinois Endangered Species Protection Act (Act) (520 ILCS 10/5.5), authorization is hereby granted to the Kane County Division of Transportation (KCDOT) for the incidental take of the slippershell mussel (*Alasmidonta viridis*) at the crossing of Big Timber Road over Tyler Creek in Kane County, Illinois. The Illinois Department of Natural Resources (Department) has determined that this taking is incidental to the bridge replacement and channel realignment at this site.

### Procedural History

The Illinois Department of Transportation (IDOT) prepared a conservation plan as described by the Act on behalf of KCDOT. That plan and a request for incidental take of slippershell mussels were received by the Department on April 9, 2002. Public notice of the request for authorization of incidental take of slippershell mussels was published in the Edwardsville Intelligencer (official state newspaper) on May 16, 2002 and in The Courier News (Elgin) on May 16, May 23 and May 30, 2002. Public comments on the conservation plan were accepted by the Department until June 30, 2002. No comments were received by the public during the period of May 16 through June 30, 2002. Comments received before this period were forwarded to KCDOT's representative (Rice, Berry and Associates) for their consideration. Rice, Berry and Associates prepared an analysis of the public comments. That analysis was received by the Department on August 6, 2002. Department staff met with representatives of Rice, Berry and Associates and the KCDOT on August 13, 2002 to discuss the terms and conditions of this authorization.

### Compliance with the Illinois Endangered Species Protection Act

The Act includes six criteria which must be satisfied for the authorization of incidental take of an endangered or threatened species. These criteria and the Department's determination for each 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 stated and apparent purpose of this proposed action is the removal and replacement of the Big Timber Road bridge over Tyler Creek and the re-alignment of a reach of Tyler Creek. The project is being undertaken to improve safety in the area by replacing a deteriorating bridge and re-configuring the crossing over Tyler Creek to provide for improved line of sight and traffic flow. Approximately 300 feet of the Tyler Creek channel will be re-aligned to reduce scour near the bridge. Mussels found within the reach of Tyler Creek including the project site have been and will be relocated upstream to avoid direct harm to those mussels during construction. Relocation constitutes a "take" under the Act. This take is not the purpose of KCDOT's activities, but is incidental to the carrying out of an otherwise lawful activity.

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

KCDOT has selected the construction plan from among five alternatives that they have concluded will have the least adverse effect on aquatic resources associated with Tyler Creek. This alternative includes excavation of the new stream channel "in the dry" and allowing stabilization and re-vegetation of the new channel for at least one year before the flow of Tyler Creek is diverted into the excavated channel. Relocation of mussels found in the present channel will greatly reduce the likelihood that any endangered or threatened mussels will be adversely affected by construction activities or left stranded when the flow is re-directed.

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

KCDOT and IDOT will provide funding for the post-construction monitoring and evaluation period as detailed in the Conservation Plan. The full project funding for construction, construction engineering and monitoring will be secured by a Joint Agreement KCDOT and IDOT. The construction engineering contract shall include provisions for on-site inspections from an environmental consultant. All work shall be completed under the supervision and monitoring of qualified personnel.

4. Based on the best available scientific data, the Department has determined that the taking will not reduce the likelihood of 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:

Pre-project surveys showed the presence of good mussel habitat upstream of the existing Big Timber Road bridge. The substrate in that area consisted of gravel and sand with some cobble and mud. Downstream of the existing bridge, broken concrete and debris were abundant and the habitat was considered poor for mussels. One slippershell mussel was the only endangered or threatened species found in the project area. The slippershell is listed as threatened in Illinois because its range and abundance have declined in recent decades. It is possible that additional individuals of the slippershell are present in the project area. Any that are overlooked during the relocation effort could be at risk of injury or death as a result of construction activities or by dessication after stream flow is diverted to the new channel. The relocation will be conducted by experienced personnel under contract to KCDOT, making it unlikely that a significant number of individuals will be exposed to threats related to the bridge project.

Slippershells have been found in at least 36 locations in 11 counties in Illinois since 1990. Thirty-four of those 36 locations have been confirmed since 1997. With the precautions and mitigation measures that will be instituted as part of this project, potential losses of slippershells will be minimized and will not reduce the likelihood of survival or

recovery of the species in Illinois. A small area of habitat that is now suitable for slippershells will become unavailable when Tyler Creek is diverted into the re-aligned channel. The placement of cobble in the re-aligned channel should provide replacement habitat as sand and sediment is deposited among the cobbles.

5. Any measures required under Section 5.5 of the Illinois Endangered Species Protection Act will be performed:

Additional measures are listed below under "Authorization." This authorization is, by definition, subject to those terms and conditions and KCDOT's signature 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:

Public notice was printed in the Edwardsville Intelligencer (official state newspaper) on May 16, 2002 and in The Courier News (Elgin) on May 16, May 23 and May 30, 2002. Public comments on the conservation plan were accepted by the Department until June 30, 2002. No comments were received by the public during the period of May 16 through June 30, 2002. Comments received before this period were forwarded to KCDOT's representative (Rice, Berry and Associates) for their consideration. Rice, Berry and Associates prepared an analysis of the public comments. That analysis was received by the Department on August 6, 2002.

#### Authorization

It is the determination of the Department that the measures that would be implemented by KCDOT at the project site will adequately minimize and mitigate the anticipated taking (relocation) of slippershell mussels associated with the removal and replacement of the Big Timber Road bridge over Tyler Creek and the re-alignment of a reach of Tyler Creek. Further, it is our opinion that the take authorized herein will not diminish the likelihood of the survival of the slippershell mussel 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, 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 period of six years after KCDOT approval of the project punch list (otherwise referred to as the "project completion date") for the proposed bridge replacement and channel re-alignment, unless terminated pursuant to Section 5.5. of the Illinois Endangered Species Protection Act.

2. Prior to diversion of the flow of Tyler Creek into the re-aligned channel, KCDOT shall conduct, or cause to be conducted, a thorough survey of the reach of Tyler Creek that will no longer serve as the primary channel of the stream and shall relocate any freshwater mussels found within the area that will be directly affected by the bridge replacement and channel re-alignment to suitable habitat upstream of the project site. Handling of mussels shall be in compliance with any and all conditions and/or protocols included in the state and/or federal authorizations for this work. Relocated mussels shall be identified to species and enumerated. A report on the species and numbers of mussels relocated and the location(s) at which they were released shall be provided to the Department within 60 days of completion of the relocation.

3. As shown in the project plans (sheet 11 of 36, dated 2-9-01, copy attached), KCDOT shall utilize or cause to be utilized, stone cobble as a bottom substrate in the re-aligned channel.

4. As described in a letter dated 2-7-01 from Jeffrey S. Dailey to Steve Pescitelli (copy attached), KCDOT shall limit the use of stone rip-rap for bank stabilization to those areas beneath the limits of the Big Timber Road bridge over the re-aligned channel of Tyler Creek.

5. KCDOT shall conduct, or cause to be conducted, a thorough survey of the re-aligned channel of Tyler Creek for freshwater mussels in the second and fifth year following diversion of the flow of Tyler Creek into the re-aligned channel. For example, if the diversion of Tyler Creek is completed in 2003, these surveys shall be conducted in 2005 and 2008. Freshwater mussels located within the re-aligned channel shall be identified to species and enumerated and the length of each mussel shall be measured to the nearest millimeter. Handling of mussels shall be in compliance with any and all conditions and/or protocols included in the state and/or federal authorizations for this work. A report on the species, numbers and sizes of mussels found shall be provided to the Department within 60 days of the completion of each survey. Each report shall also include a qualitative evaluation of the habitat for freshwater mussels being provided by the re-aligned channel and the manner in which that habitat has changed since the previous survey.

6. The effective period of this authorization may be altered by mutual agreement between KCDOT and the Department.

7. This authorization may be revoked pursuant to Section 5.5 of the Act if the Department finds that KCDOT has failed to comply with any of these terms and conditions or has been responsible for the take of any slippershell mussels beyond that which is incidental to the removal and replacement of the Big Timber Road bridge over Tyler Creek and the re-alignment of a reach of Tyler Creek in Kane County, Illinois.

8. The KCDOT official identified below is authorized to execute this agreement. Execution by KCDOT indicates acceptance of all terms and conditions described in this document.

For the Illinois Department of  
Natural Resources

For the Kane County Division  
of Transportation

*Kirby Cottrell*

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Kirby Cottrell, Director  
Office of Resource Conservation

*[Signature]*

\_\_\_\_\_  
Signature

*9-25-02*

\_\_\_\_\_  
Date Signed

*JEFF PAILEY DIRECTOR*

\_\_\_\_\_  
Printed Name and Title

*9-12-02*

\_\_\_\_\_  
Date Signed

