Dept. of Natural Resources
RECEIVED
JUL - 1 2003
OREP
Resource Review & Coord.

CH2MHILL TRANSMITTAL

To: Illinois Department of Natural Resources
524 South 2nd Street

Springfield, IL 62701

From: Corey Wilcox

Attn: Rick Pietruszka

Date: June 26, 2003

Re: Slippershell Mussel Survey Protocol

We Are Sending You:

[Attached]	Under separate cover via	
Shop Drawings	[Documents]	Tracings
Prints	Specifications	Catalogs
Copy of letter	Other:	

Quantity	Description
1	Copy of the proposed Slippershell mussel survey protocol for Nippersink Creek Tributary

If material received is not as listed, please notify us at once

Remarks:

Pursuant to the email correspondence we received, dated April 18, 2003, an Incidental Take Permit will be required for the proposed surveys. We propose that this scope of work serve as the Conservation Plan required for the Incidental Take Permit. If there are any questions or comments regarding this scope of work please contact me. Thank you.

Sincerely,

Jeff Keiser C.W.

Jeff Keiser-Project Manager/CH2M HILL

Copy To:

Robert Schanzle—Illinois Department of Natural Resources

John Nelson--Illinois Nature Preserves Commission

Ed Collins--McHenry County Conservation District

Karon Marzec--United States Army Corp of Engineers

Survey Protocol

Project Area: ANR WestLeg Project Nippersink Creek Tributary Mussel Survey

Site: Proposed crossing of Nippersink Creek Tributary, located at milepost 2.2 of alignment sheet 3 submitted to Rick Pietruszka, IDNR on December 15, 2002.
Approximately 1/2 mi NE of the Village of Alden, McHenry County, IL
USGS Quadrangle-Harvard, IL-Wis., Number 42088d5 – See Attached
Township Range and Section – R.46N.-R.6E Sec. 15. The portion of the Nippersink Creek Tributary proposed for survey has been heavily disturbed by rechanneling and construction of farm ponds.

Survey Dates: Surveys will be completed prior to October 15th, 2003 and while waters temperatures are at or above 50 degrees Fahrenheit, as outlined in the October 22, 2002 email from Rick Pietruszka of the Illinois Department of Natural Resources (IDNR), Natural Heritage Program (attached). Relocation of mussels will be conducted at the time of the survey. The substrate was observed to be heavily organic, with very little evidence of sand or fine gravel.

Target Species Biology: The Slippershell Mussel is typically small (approximately an inch), somewhat rectangular shell, high posterior ridge, wavy green rays on posterior half of the shell, poorly developed lateral teeth. The species is known to exist in creeks and the headwaters of large rivers in sand, mud, or fine gravel.

Purpose: The proposed ANR Pipeline WestLeg Pipeline Project will involve the crossing of Nippersink Creek in order to install a 30-inch natural gas pipeline. A survey will be conducted in Nippersink Creek Tributary within the proposed work areas in order to identify the presence or absence of the Illinois State Threatened Slippershell mussel (*Alasmidonta viridis*). All common mussel species observed will be identified to genus level only. If any state designated threatened or endangered mussels are observed this species will be relocated as outlined below.

According to the email correspondence from Rick Pietruszka (IDNR), dated April 18, 2003, an Incidental Take Permit will be required for the proposed surveys. It is proposed that this scope of work serve as the Conservation Plan required for the Incidental Take Permit.

Scope of Work

Field Element: A qualified biologist will be onsite during surveys to oversee/administer the mussel survey protocol as outlined below. Identification will be determined using The Field Guide to Freshwater Mussels of the Midwest – Manual 5 (Cummings and Mayer), and Ecology and Classification of North American Freshwater Invertebrates (Thorp).

Survey delineation. The search area shall be confined to the streambed and will not exceed the proposed 75 foot wide workspace as described in the Illinois State Permit Application submitted on January 31st, 2003.

Mussel survey. Casual observations on substrate type, general visibility, and underwater conditions will be recorded by the surveyors and recorded in the field notes. Standard field information such as location, air temperature, stream width, water temperature, etc will also be noted. Any findings of mussels, live or identifiable dead shells, will be recorded. The survey techniques to be employed are as follows:

- **Visual Inspection-Viewing Boxes:** Viewing boxes, constructed of clear Plexiglass, approximately 12 inches square will be the primary method of surveying. The boxes have a clear plate over the end which is submersed in the water eliminating surface glare. This technique is most successful in areas exhibiting a sand or gravel substrate where the water is less than 2 feet in depth.

- **Tactile Search:** This technique involves manually manipulating, by hand, the sediments on the streambed, waiting for the water to clear and then visually inspecting for the presence of mussels. Sections of the creek which exhibit significant siltation will be surveyed by using this technique.

Method of Relocation: State Threatened and Endangered mussels will be relocated downstream of the proposed work area, dependent on property owner approval and access rights, to an area exhibiting habitat similar to the location they were discovered. Mussels will be stored in plastic bags filled with water and then placed in a cooler to prevent overheating. Through utilization of proper relocation techniques including monitoring of water temperatures and compatible substrate evaluation no adverse impacts on the species is anticipated.

The positions of relocated mussels will be marked and recorded. CH2M Hill will report to the IDNR the locations of all relocated specimens.

Management of Affected Area: ANR proposes a dry construction method for the crossing of the Tributary of Nippersink Creek. The dry crossing method will ensure that waterbody flow be maintained at all times. Continuous flow will be maintained by (a) fluming the waterbody or (b) pumping the flow from upstream to downstream.

If a flume is used, excavation equipment will work around the flume pipe during excavation. The pipe will be threaded under the flume pipe and the ditch will be backfilled while waterbody flows are maintained. If topographic conditions do not permit the pipe to be threaded under the flume, then the flow may be temporarily pumped while the flume is pulled to lower in the pipe. Flume pipes will be permanently removed as part of restoration.

If the dam and pump method is used, all discharges will be directed through energy dissipaters. If the time between any phase of the work becomes extensive or if it is determined that the pumps can not handle the flow within the waterbodies, the pumps will be discontinued and flumes will be installed to maintain the flow.

Following construction, all banks and shorelines will be properly restored and stabilized. A corridor centered on the pipelines will be routinely maintained in an herbaceous state up to 10 feet wide along the tributary.

No-Action Alternative: The No-Action Alternative implies that new construction of pipeline facilities or modification of existing facilities will not occur as part of the Project. While this alternative would not change existing environmental impacts, this Project, as currently proposed, is located within existing ROW. As a result, it is expected to have minimal environmental impact. ANR plans to provide natural gas to Calpine's Riverside Energy Center with the Project. If the Project is not built then Calpine could be prevented from constructing their proposed Plant unless they seek other sources of fuel. Other natural gas transmission companies could then propose to increase their capacity and to construct new facilities to meet the needs of the Riverside Energy

Center. Such actions likely would transfer impacts from one location to another but would not eliminate or reduce the current proposed impacts. This alternative was found to be not feasible because it does not satisfy the purpose of and need for the Project. FERC has reviewed the project proposal and finding it to be in the public's best interest, has issued ANR a certificate for construction.

Monitoring: It is assumed that all state threatened and endangered species within the proposed work area will be relocated to a suitable habitat downstream, therefore monitoring is not being proposed as part of this scope of work,

Proof of Financial: ANR will provide the funding necessary to implement the measures addressed in this document.

Reporting: Following the field investigation CH2M HILL will provide a summarization of the survey results that will include a mussel species list (limited to genus only), map locations, and standard field information previously described. A map of the study area will be included, noting the location of any Illinois Threatened or Endangered mussels observed and the relocation area. A copy of the draft report will be provided to IDNR within 3 weeks of completion of the proposed activities.

References:

Cummings, Kevin S., and Mayer, Christine A. 1992 Field Guide to Freshwater Mussels of the Midwest. Illinois Natural History Museum

Thorp, H and Covich, Alan P. Ecology and Classification of North American Freshwater Invertebrates.

Survey Team

The individuals participating in the relocation of mussels at the proposed Nippersink Creek Tributary crossing are listed below and agree to implement the measures set forth in this Scope of Work (Conservation Plan). Each individual certifies that he will comply with all other federal, state and local regulations pertinent to the proposed actions and the execution of the Scope of Work (Conservation Plan)

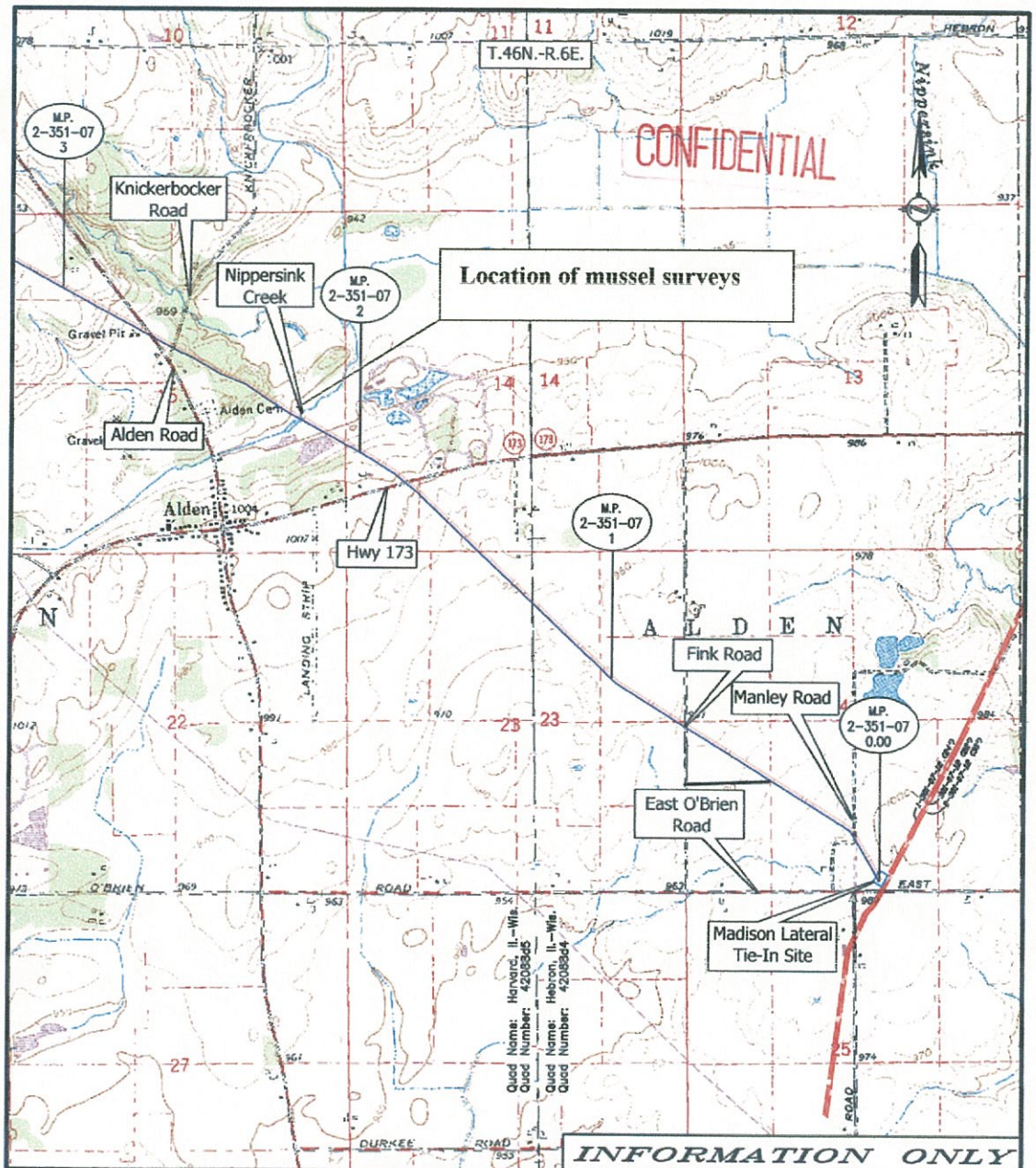
Participant	Role	Signature	Date
Mike Mischuk	Senior Field Team Leader		
Corey Wilcox	Field Team Member		
Stuart Jennings	Reserve Field Team Member		

Attachment

From: RICK PIETRUSZKA [RPIETRUSZKA@dnrmail.state.il.us]
Sent: April 18, 2003 12:22 PM
To: DeCaro, David/PHL
Cc: BOB SCHANZLE; GLEN KRUSE; JOHN NELSON; David.Swearingen@ferc.gov
Subject: West Leg Project - Nippersink Creek Crossing - Mussel Survey

Dave: I discussed a concurrent survey and relocation protocol with the Department's mussel authority. He advises that such a concurrent effort must be preceeded by the issuance of an Incidental Take Authorization for the Slippershell and/or other listed species that may be encountered. Provided an application for ITauthorization is made yet this spring and is approved, the proposed project construction schedule is not likely to be "adversely affected." Once again, IDNR requests that a dry type stream crossing method be used at this location rather than an open cut. Let me know what the company intends to do. Thanks.

Rick Pietruszka, Program Manager
IDNR, Impact Assessment Section
Division of Natural Resource Review & Coordination



INFORMATION ONLY

Legend

- Existing ANR Pipeline(s)
- Proposed WestLeg Pipeline
- Existing Foreign Pipeline

NO	DATE	BY	DESCRIPTION	PROJ. ID	APPR.

REVISIONS

ENG. RECORD		DATE
DRAWN BY:	GAH	3/02
DRAWING APPROVAL		
PROJECT APPROVAL		
SURVEY DATE:		
SCALE: 1"=2000'		
PROJECT ID: 059046		
FILE NAME: 03686605		

ANR Pipeline
an El Paso company

PROPOSED WESTLEG PROJECT MADISON LATERAL

McHENRY COUNTY, ILLINOIS

DWG. NO. QX-2-351-07-1

ANRLETTERPORTRAIT (Rev. 2/01)

From: RICK PIETRUSZKA
To: KATH, JOE
Date: 7/8/03 4:08PM
Subject: Re: ANR Pipeline ITA

Joe, Believe it. The address for David R. DeCaro, my principle contact and project lead, with CH2M Hill is 1700 Market Street, Suite 1600, Philadelphia, PA 19103, 215-563-4244 ext. 441, email-ddecaro@ch2m.com. I'm not sure which office Jeff Keiser works from. Hope this helps.

Rick Pietruszka, Program Manager
IDNR, Impact Assessment Section
Division of Natural Resource Review & Coordination

>>> JOE KATH 07/08/03 03:59PM >>>

Hello, Rick - I am writing a letter to CH2MHILL regarding the ITA for the Nippersink creek ANR crossing. I need a mailing address for CH2 - the lead engineer who submitted the conservation plan is Jeff Keiser. I can't believe that they do not include their mailing address on their company letterhead. Thanks for your help!

Joseph A. Kath
Endangered Species Project Manager
IDNR-Division of Resource Protection & Stewardship
One Natural Resources Way
Springfield, IL 62702-1271
Phone: (217)785-8774
Fax: (217)785-2438
email: jkath@dnrmail.state.il.us

From: RICK PIETRUSZKA
To: KRUSE, GLEN
Date: 07/02/2003 4:04PM
Subject: ANR Pipeline IT Application-CH2M Hill

Glen, The principle contact for the project I have is Dave DeCaro at CH2M Hill's Philadelphia office. His number is 215-563-4244 ext 441, email ddecaro@ch2m.com.

Rick Pietruszka, Program Manager
IDNR, Impact Assessment Section
Division of Natural Resource Review & Coordination