

**Unanticipated Discovery Plan for  
Cultural Resources Identified During  
Construction of the Arrow 4 Bears CDP  
Connect Pipeline, McKenzie County,  
North Dakota**

Agency

**State Historical Society of North Dakota**

Prepared for

**Arrow Field Services, LLC**

Prepared by

**SWCA Environmental Consultants**

October 11, 2011

**Unanticipated Discovery Plan for Cultural Resources Identified During  
Construction of the Arrow 4 Bears CDP Connect Pipeline, McKenzie  
County, North Dakota**

Prepared for

**Arrow Field Services, LLC**  
6100 S. Yale Ave., #1700  
Tulsa, Oklahoma 74136

Prepared by

**Michael J. Cook and Carolyn Riordan**

Submitted by

**SWCA Environmental Consultants**  
116 North 4<sup>th</sup> Street, Suite 200  
Bismarck, North Dakota 58501

**Principal Investigator: Judith R. Cooper**

Agency

**State Historical Society of North Dakota**

**October 11, 2011**

*Unanticipated Discovery Plan for Cultural Resources Identified During Construction of the  
Arrow 4 Bears CDP Connect Pipeline, McKenzie County, North Dakota*

**TABLE OF CONTENTS**

	<b><u>Page</u></b>
INTRODUCTION .....	1
TRAINING .....	1
DISCOVERY DEFINITION .....	2
PROCEDURES FOR ADDRESSING DISCOVERIES IDENTIFIED BY CONSTRUCTION PERSONNEL.....	2
TREATMENT OF DISCOVERIES BY ARCHAEOLOGICAL PERSONNEL.....	3
AGENCY NOTIFICATION AND REPORTING.....	3
SPECIAL PROCEDURES FOR DISCOVERIES OF HUMAN REMAINS .....	3
REFERENCES CITED.....	5

**LIST OF TABLES**

<b><u>Table</u></b>	<b><u>Page</u></b>
1 Contact Information.....	4

## INTRODUCTION

This Unanticipated Discovery Plan (plan) documents the procedures to be implemented in the event that cultural resources are inadvertently discovered during construction of the Arrow 4 Bears CDP Connect Pipeline (proposed project). Arrow Field Services, LLC (Arrow) proposes to construct an approximately 7,818.47-foot-long crude oil pipeline in McKenzie County, North Dakota. The proposed pipeline will be constructed within a 120-foot-wide temporary construction right-of-way (ROW) (hereafter, the project route), and a 50-foot-wide permanent ROW will be maintained after construction is complete. The project falls under the jurisdiction of the North Dakota Public Service Commission.

A Class I and Class III cultural resource inventory was performed by SWCA Environmental Consultants for the proposed project, during which one previously recorded cultural resource (32MZ782) was revisited and one resource (32MZX1119) was newly recorded (Lechert 2011). 32MZ782 is a prehistoric cultural material scatter consisting of Knife River flint flakes. 32MZX1119 is an isolated chipped stone find. Both 32MZ782 and 32MZX1119 are recommended not eligible for the National Register of Historic Places. On May 13, 2011, the State Historical Society of North Dakota (SHSND) concurred with SWCA's findings of "*No Historic Properties Affected*" and "*No Significant Sites Affected*" (NDSHPO Ref. 11-1376). This plan has been prepared because the potential for exposure of previously unidentified or buried cultural material within the project route during mechanical excavation exists.

Significant historical or archaeological artifacts or sites located on lands under the jurisdiction of the State of North Dakota or its political subdivisions are protected under Section 55-02-07 of the North Dakota Century Code (NDCC). Furthermore, NDCC Section 23-06-27 and North Dakota Administrative Code (NDAC) Section 40-02-03 provide special protection of human burial sites, human remains, and burial goods. In accordance with applicable North Dakota laws and regulations, this plan contains procedures for addressing cultural resource discoveries identified by construction personnel during construction of the proposed pipeline, including procedures for the initial treatment of discoveries, the evaluation and treatment of discoveries, and the treatment of human remains.

## TRAINING

Training is necessary in order to recognize potential archaeological resources. The Construction Manager and construction supervisors will meet with Arrow representatives for basic training prior to participating in construction. This training will provide orientation regarding recognition of cultural resources as well as a general overview of the culture history of the region so that construction personnel are familiar with the types of archaeological resources that may be encountered during construction. The training will also outline the steps to be followed in the event of a significant archaeological discovery during construction (e.g., the discovery of human remains). The following items will be reviewed within the program:

- definition of a discovery and examples of discoveries;
- steps towards discovery protection until such time as they can be properly evaluated by a qualified archaeologist;

- proper notification of the appropriate Arrow personnel;
- the necessity of reporting discoveries in a timely manner and complying with the other stipulations provided in this plan;
- the need to treat any human skeletal remains that are encountered with dignity and respect; and
- penalties for failure to report discoveries or to comply with the procedures outlined in this plan.

### **DISCOVERY DEFINITION**

Archaeological discoveries consist of evidence of human activity that is more than 50 years old with potential to yield data pertinent to regional history and prehistory. Prehistoric discoveries include, but are not limited to, features (small hearth features, housepit features, storage features, etc.), artifact concentrations, and activity areas. Historic discoveries include, but are not limited to, features (historic hearths, trash deposits, structures, old canals, roads, etc.), artifact concentrations, and activity areas. Isolated historic artifacts or small concentrations of non-human bone will not be considered discoveries.

### **PROCEDURES FOR ADDRESSING DISCOVERIES IDENTIFIED BY CONSTRUCTION PERSONNEL**

The following procedures will be initiated in the event unanticipated cultural resources are discovered. When a discovery is encountered, the construction activity that resulted in the exposure of the discovery will be immediately halted and the construction manager will be notified. In turn the construction manager will notify the Arrow project manager.

Arrow's Construction Manager will order construction contractors to suspend ground-disturbing activities adjacent to discovery. Cessation of ground-disturbing activity will encompass a sufficient area to protect the discovery and provide a buffer zone for adequate and safe investigation of the discovery and any associated features or artifacts. A recommended guideline for the buffer zone is at least 100 feet (30 meters [m]) around the discovery, but its size can be adjusted to protect the discovery adequately without unnecessary hindrance to construction. Visual barriers such as temporary fencing will be placed around the discovery area to protect it from further disturbance. Vehicle traffic within the vicinity may need to be limited or halted until the discovery is inspected.

Arrow's responsible party will then notify and consult an archaeologist qualified under NDAC Section 40-02-02 to review the discovery. In the event a qualified archaeologist is not immediately available, photographs of the discovery may be transmitted to the archaeologist for review, at which time the archaeologist will determine if a field visit is needed. During the review phase, suspension of all work and vehicle traffic in the buffered area is required. If the archaeologist determines that the discovery is non-cultural, Arrow will be notified and the halted construction activity can resume.

If the discovery is deemed cultural and a field visit is required, the archaeologist will be scheduled for an on-site visit as soon as possible. In the meantime, Arrow's responsible party will notify the construction manager to suspend work within the buffered discovery area until the field visit by the archaeologist occurs. During the field visit, the archaeologist will determine whether the discovery is potentially significant.

#### **TREATMENT OF DISCOVERIES BY ARCHAEOLOGICAL PERSONNEL**

When a discovery is reviewed by an archaeologist, the discovery will be fully recorded according to approved standards. The initial treatment of any discovery will consist of recording the location of the discovery; recording summary data concerning feature(s) (including dimensions, qualitative characteristics, and associated material); photographing the discovery and the overall context of the exposed material; and profiling trench walls containing cultural features or strata (where safe and prudent). The feature(s) will then be excavated and a sample or all feature fill will be collected for laboratory analysis including pollen studies, flotation, and carbon dating as appropriate. Feature plans and profiles will be drawn and features will be photographed. Uncollected feature fill will be screened using 0.25-inch mesh. If necessary, additional horizontal exposure of sediments/deposits around the feature may be investigated to evaluate the feature context.

When appropriate, the location around the discovered cultural material will be tested to determine the extent of the cultural material. Testing may include excavation of controlled units over and around the feature area or placement of test units and/or augur probes. Testing will be designed to identify the nature and extent of the discovery and any associated activity area(s) or other features, if present.

#### **AGENCY NOTIFICATION AND REPORTING**

If the discovery is deemed potentially significant, Arrow and the archaeologist will consult and coordinate with the SHSND to propose procedures for further treatment of the discovery, while minimizing impacts to the construction schedule to the extent possible. Suspended construction activities in the discovery area may not proceed until approval has been obtained from the SHSND and other involved agencies and parties.

A report detailing all cultural resources identified, recorded, tested, and/or excavated during the construction phase of the proposed project, regardless of significance, will be prepared by the archaeologist and submitted to the SHSND for review within six months of project completion.

#### **SPECIAL PROCEDURES FOR DISCOVERIES OF HUMAN REMAINS**

Should human remains be encountered during construction of the proposed project, per the protocol outlined above, all work will be immediately halted at the general location of the discovery. This location will be immediately secured, including a buffer zone of 100 feet (30 m) surrounding the discovery. Construction personnel and vehicles will promptly vacate the buffer zone. Vehicle traffic within the buffer zone will be limited to that necessary to remove vehicles and equipment from the buffer zone. Care will be taken to prevent any disturbance of

*Unanticipated Discovery Plan for Cultural Resources Identified During Construction of the  
Arrow 4 Bears CDP Connect Pipeline, McKenzie County, North Dakota*

---

the potential human remains during removal of vehicles and equipment. Until appropriate consultation has occurred, the discovery shall remain protected from any disturbance through temporary fencing and/or temporary covering, such that no remains or associated artifacts are touched, moved, or collected.

Following notification of the construction manager and project manager, Arrow will immediately notify local law enforcement, the county coroner, and the SHSND. Contact information for relevant parties is listed in Table 1.

**Table 1. Contact Information.**

<b>Contact/Agency</b>	<b>Phone</b>	<b>Address</b>
County Sherriff's Office, McKenzie County, North Dakota	701-444-3654	201 5 <sup>th</sup> ST NW, Watford City, North Dakota 58854
Coroner (Calvin Parrish), McKenzie County, North Dakota	701-770-4522	2493 Beaver Creek Road, Watford City, North Dakota 58854
Chief Archaeologist (Paul Picha), Archaeology and Historic Preservation Division, North Dakota State Historical Society	701-328-3574	North Dakota State Historical Society 612 East Boulevard Ave. Bismarck, North Dakota 58505

The coroner and local law enforcement will make the official ruling on the nature of the remains, being either forensic or archaeological. The subsequent treatment of the discovery, including custody of the remains, will follow guidelines set forth in the NDCC Chapter 23-06 and NDAC Section 40-02-03, as follows.

- If the remains are deemed forensic (non-archaeological), the county coroner will retain custody of the remains and determine the plan of action.
- If the remains are deemed to be archaeological (historic or prehistoric) in nature, within 24 hours of notification, the SHSND will send a staff member to evaluate the remains and determine the race and age of the remains, if possible. The subsequent plan of action will depend on the race of the burial.
  - If human remains are determined to be non-Native American, the SHSND will retain custody of the burial and, following consultation with appropriate parties, determine a plan of action.
  - If the human remains are determined to be Native American or of unknown race, the remains will be left in place and protected from any form of disturbance by placing temporary fencing and/or temporary covering until a plan for their protection or removal can be generated. The SHSND will contact and consult with the North Dakota Intertribal Reinterment Committee to determine the subsequent plan of action.

*Unanticipated Discovery Plan for Cultural Resources Identified During Construction of the  
Arrow 4 Bears CDP Connect Pipeline, McKenzie County, North Dakota*

---

**REFERENCES CITED**

Lechert, Stephanie

2011 *A Class I and Class III Cultural Resource Inventory of the Arrow Four Bears CDP Connect Pipeline, McKenzie County, North Dakota*. An unpublished report prepared by SWCA Environmental Consultants on behalf of Arrow Field Services, LLC and submitted to the State Historical Society of North Dakota.