

Heskett Station Natural Gas Pipeline Project: A Class III Cultural Resource Inventory, Morton County, North Dakota (PSC Version)

Prepared for: ProSource Technologies, Inc.

On behalf of: Montana-Dakota Utilities Co.

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Abstract

ProSource Technologies, Inc. on behalf of Montana-Dakota Utilities Co. (MDU) contracted Beaver Creek Archaeology, Inc. (BCA) to complete a Class III Cultural Resource Inventory for a proposed ten inch diameter natural gas pipeline in Morton County, North Dakota. The project is approximately 24 miles in length with a corridor width of 400 feet (1,135 acres). Approximately 195 acres of the project corridor has been inventoried for other projects. In July, August, and October 2012, BCA conducted the Class III Inventories in the sections for the proposed project location. During the inventory, six cultural resource locations were discovered in addition to four isolated finds. After the potentially eligible sites were recorded, a reroute of the project was conducted around these sites. All potentially eligible sites will be avoided by the proposed project.

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Introduction

ProSource Technologies, Inc. contracted Beaver Creek Archaeology, Inc. (BCA) on behalf of Montana-Dakota Utilities Co. to perform a Class III Cultural Resource Inventory of the Heskett Station Natural Gas Pipeline Project in Morton County, North Dakota. The Area of Potential Effect (APE) is approximately 24 miles in length with a corridor width of 400 feet (1,135 acres). One hundred and ninety-five acres had previously been surveyed, leaving 940 acres to be surveyed for the Class III Inventory (see map in Appendix B). There is no Federal Undertaking associated with this project. The North Dakota Public Service Commission will review the MDU application for a pipeline permit.

Previous inventories have been performed within the proposed APE that affected the determination of Class III areas to be inventoried. Segments where these inventories had taken place were not re-inventoried during this project. Sites located within the previously inventoried corridors were revisited, and reroutes were adjusted as needed.

Table 1. Legal Location of APE

Twp	R	Sec	Quadrangle Map
136	82	3-5	Fallon NE, Lynwood
137	82	1, 2, 11-14, 23-26, 34-36	Lynwood
138	82	1, 2, 11, 13, 14, 23-26, 35, 36	Mandan, Lynwood
139	81	7, 8, 10, 15-17	Mandan, Harmon
139	82	12, 13, 24, 25, 35, 36	Mandan, Harmon

Quadrangle Map Sections: Mandan, Harmon, Lynwood and Fallon NE.

On July 27, 2012 Philip Bauschard of Beaver Creek Archaeology, Inc. conducted the Class I file search at the State Historical Society of North Dakota (SHSND). Between July 30 to August 1, and October 18 to 19, 2012, Wade Burns (P.I.), Kim Fariello, Philip Bauschard, Mary Mortensen, Brittany Brooks, Raina Hanley and Lindsey Reiners of Beaver Creek Archaeology, Inc. conducted the Class III Inventory of the APE. This report will detail the result of that inventory.

Project Background and Inventory Methodology

The project consists of a proposed ten inch diameter natural gas pipeline route. The entire area where ground disturbing activities may take place defines the APE. The APE, which encompasses the entire project area, consists of 1,135 acres. One Hundred and ninety-five acres had previously been inventoried. Nine hundred and forty acres were inventoried to Class III Cultural Inventory standards (see map Appendix B).

BCA cultural resource staff conducted the Class III Cultural Resource Inventory within the APE in July, August, and October 2012. The field crew consisted of Wade Burns (P.I.), Kim Fariello, Philip Bauschard, Mary Mortensen, Brittany Brooks, Raina Hanley and Lindsey Reiners (staff archaeologist). Navin Thapa and Jay Ell created the project maps.

The pedestrian survey was performed by lining crew members 10-15 meter apart walking in parallel transects across the APE. In areas with 30 percent or more ground surface visibility, pedestrian survey is deemed sufficient. During the project, no area fell below 30 percent ground surface visibility.

When a cultural resource was encountered, the location was marked with pin-flags and the surrounding area was intensely scrutinized to determine the nature and extent of the resource. The resource was then plotted on a USGS 7.5' Quadrangle map and sketch-map with a Trimble GPS unit. Cultural Resources usually consists of any historic or prehistoric district, site, building, structure, or object over 50 years of age.

Throughout the survey, field notes and overview pictures of the APE were taken (see photos in Appendix A). Copies of maps, field notes, and photographs are located at the BCA main office in Bismarck, North Dakota.

Environmental Setting

The APE is located in the Missouri River Trench and the Coteau Slope physiographic zone of the Great Plains physiographic province. This area consists of only a thin glacial deposit as the glacial processes only slightly modified the preglacial topography (Bluemle 2000:5). The rolling terrain of the Coteau Slope is abundant with potholes and sloughs. The Missouri River and Heart River are the main water sources running through the Project Area.

This area of North Dakota is situated in a Mixed-grass Prairie as well as Riparian Woodland found along the Missouri River (Sedivec and Barker 1998). Green ash, cottonwood, bur oak, and grasses are found on riparian areas where chokecherries, plum rose, currants, wild plums, and prairie turnips would have been found seasonally (SHSND 2008).

This is a fit habitat for a number of animals, such as white-tailed deer, mule deer, coyote, muskrat, beaver, fox, and other fur-bearing animals. Bison, elk, antelope, bear, and wolf were once present. There is also an abundance of eagles, hawks, and owls, as well as waterfowl along wetland marshes and prairie potholes. Many of these creatures were resources for food, furs, and feathers for native groups.

Today the area contains an agricultural-based economy. Small grain, corn, grasslands and pasture comprise the Project area. Tree cover in the Project area is limited to wind blocks surrounding farmsteads and along riparian areas.

Cultural Background

There are several different time periods in which the area has been occupied by people. Evidence of Paleo-Indian hunting and gathering adaptation is very sparse in this area, with only a few Paleo-Indian points found. Other periods include the Plains Archaic Period, where hunting and gathering involved modern flora and fauna; Plains Woodland Period, where routine ceramic processing, burial mound mortuary practices, and possibly some gardening first is evident; Plains Village Period, where the Plains Village lifeways with horticulture and subsequent storage of surplus foods is developed, with diagnostic artifacts such as styles and designs of ceramic vessels and the thin, lightweight axe; Equestrian Period, where hunting and foraging modern fauna and flora took place with the introduction of the horse and Euro-American trade goods (SHSND 2008:5.63-5.89).

Most sites in Southern Missouri River Study Unit are located on terraces, ridges, and hills/knolls/bluffs. Apart from Cultural Material (CM) Scatter, most of the feature types on terraces are earthlodge villages, hearths, and pits. On ridges and hills/knolls/bluffs, the most abundant features (apart from CM scatters) are Stone Circles and Other Rock Features such as cairns and effigies (SHSND 2008:5.13). According to State Historical Society of North Dakota, the Southern Missouri River Study Unit, in which the Project area is located, has a relatively low site density, one site per 8.1 mi². This is due to sporadic survey work conducted here, rather than actual site density (2008:5.11).

Research Goals

There is no Federal Undertaking associated with the proposed project. The North Dakota Public Service Commission will review the MDU application for a pipeline permit, as mandated by the North Dakota Administrative Code, Article 69-06. The goal of the Class III Cultural Resource Inventory is to identify and assess project impacts to potential cultural resources located within the APE, and to provide National Register of Historic Places (NRHP) eligibility recommendations for historic properties encountered within the APE. This knowledge would allow MDU to plan construction to avoid such resources and thereby complying with any State regulations which may be a part of this project.

Results

To be eligible for inclusion on the NRHP, a site must usually be more than fifty years old, retain its integrity of location, design, setting, materials, workmanship, feeling, and association and it must meet one of the following criteria:

- (a) Associated with events that have made a significant contribution to the broad patterns of our history; or
- (b) Associated with the lives of persons significant in our past; or
- (c) Embody distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinctions; or
- (d) Have yielded, or may be likely to yield, information important in prehistory or history.

File Search

On July 27, 2012 Philip Bauschard of Beaver Creek Archaeology, Inc. conducted the file search at the State Historical Society of North Dakota (SHSND). The purpose of the file search is primarily to identify previously recorded archaeological and historical sites, and also to identify previous inventories in the area. A total of forty-three previous inventories within the sections the APE is located had been conducted. A variety of cultural resources were on file for a one mile radius of the APE. All previously recorded unevaluated or eligible sites were avoided by this project.

Intensive Pedestrian Survey

The Class III inventory covered approximately 940 acres of the 1,135 acres (195 acres has been previously inventoried) of the approximate 24 mile long, 400ft wide project corridor. The vast majority of the APE has been plowed in the past or is currently under production.

During the field survey cultural resources were found. Reroutes were conducted for all unevaluated or eligible sites. No unevaluated or eligible sites previously recorded or currently recorded for this project will be impacted as they have all been avoided by the current route.

Conclusions and Recommendations

In July, August, and October 2012, BCA conducted a Class III Cultural Resource Inventory of the proposed project area. The Area of Potential Effect (APE) covers approximately 24 miles (1,135 acres). A total of 195 acres were previously surveyed, leaving 940 acres to be surveyed for the Class III Inventory. The location of the APE can be seen on the map located in Appendix B and Figures 1 & 2 (removed).

During the Class III Cultural Resource Inventory cultural resources were found and recorded. However after discovery, a new route was selected to avoid these sites which places them outside the current APE. One site has an existing fence which separates it

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from the construction area and as long as this fence is not crossed, no damage will come to the site. Two additional sites are recommended to be temporarily fenced off for avoidance measures during construction.

Provided that the sites mentioned above are avoided and recommendations of site buffer and fencing is followed, Beaver Creek Archaeology, Inc. recommends that the project proceed under a ***Finding of No Adverse Effect*** as surveyed, mapped and described herein.

If any archaeological material or human remains are encountered during project implementation, all work should be halted within 100 feet in all directions from the discovery and the consulting archaeologist notified. The discovery will be investigated by the Chief Archaeologist at the North Dakota State Historic Preservation Office (NDSHPO) who will be notified. If human remains are discovered, NDSHPO will notify the North Dakota State Health Department, law enforcement, and Tribal representatives. The remains should not be touched, moved, or further disturbed.

References Cited

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2000 The Face of North Dakota. 3rd ed. Educational Series No. 26. North Dakota Geological Survey, Bismarck.

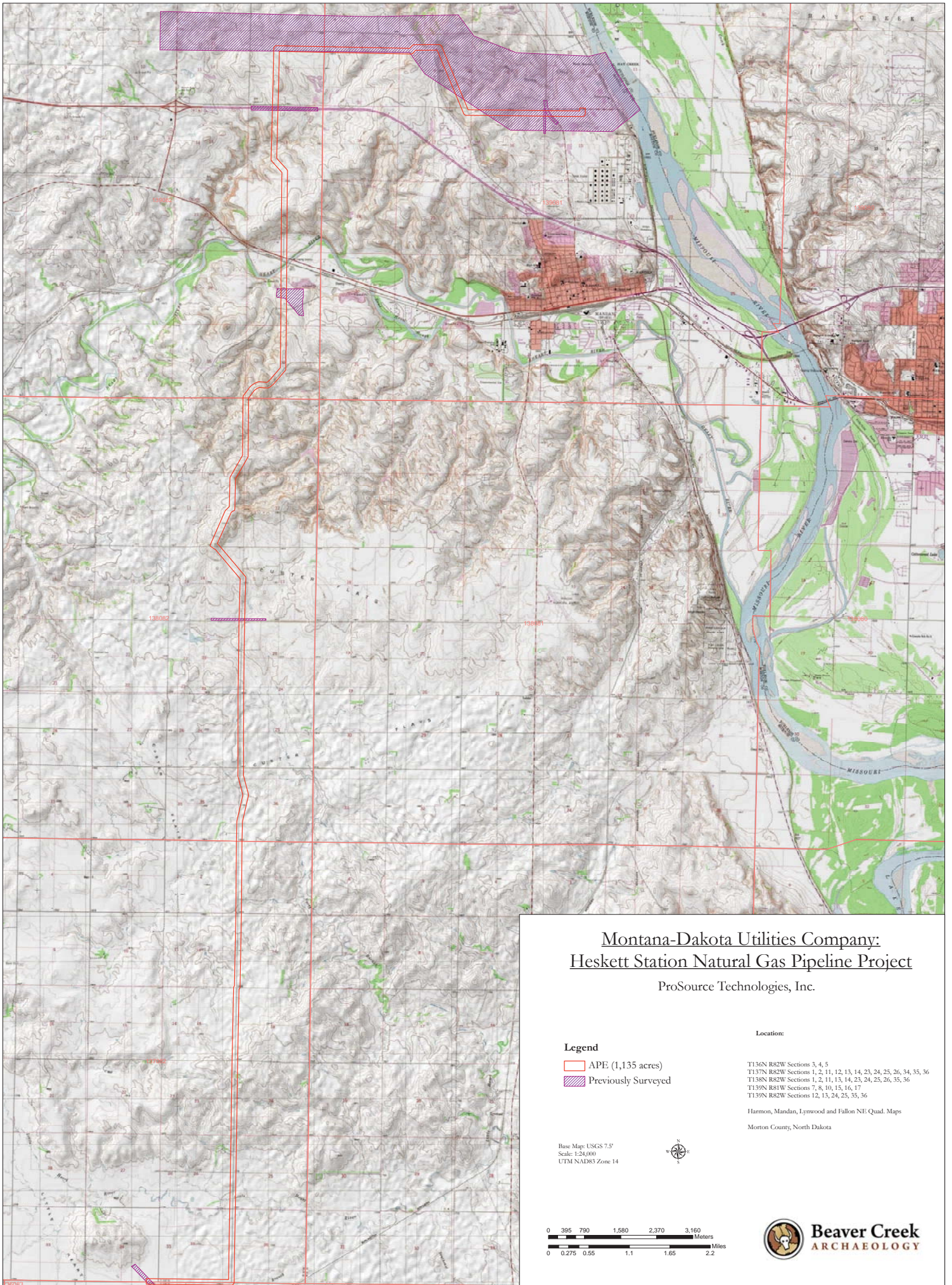
Sedivec, Kevin K., and William T. Barker

1998 Selected North Dakota and Minnesota Range Plants. NDSU Extension Service, North Dakota State University, Fargo, North Dakota.

State Historical Society of North Dakota (SHSND)

2008 North Dakota Comprehensive Plan for Historic Preservation: Archaeological Component. Archaeology and Historic Preservation Division, State Historical Society of North Dakota, Bismarck, North Dakota.

Appendix A: Map



**Montana-Dakota Utilities Company:
Heskett Station Natural Gas Pipeline Project**

ProSource Technologies, Inc.

Legend

- APE (1,135 acres)
- Previously Surveyed

Location:

T136N R82W Sections 3, 4, 5
 T137N R82W Sections 1, 2, 11, 12, 13, 14, 23, 24, 25, 26, 34, 35, 36
 T138N R82W Sections 1, 2, 11, 13, 14, 23, 24, 25, 26, 35, 36
 T139N R81W Sections 7, 8, 10, 15, 16, 17
 T139N R82W Sections 12, 13, 24, 25, 35, 36

Harmon, Mandan, Lynnwood and Fallon NE Quad. Maps
 Morton County, North Dakota

Base Map: USGS 7.5'
 Scale: 1:24,000
 UTM NAD83 Zone 14

