
10.0 CULTURAL RESOURCES

Cultural resources are the material remains of human activity and can include sites, buildings, districts, and landscapes. Cultural resources are finite and non-renewable; once destroyed they and the information they provide are lost. Federal laws and regulations provide the standards for cultural resources identification, evaluation, and mitigation of impacts. If a cultural resource meets the criteria for listing on the National Register of Historic Places (“NRHP”), it is considered significant and termed a “historic property.” NDPC prefers to avoid historic properties and the Project was designed in part to consider impacts to archaeological sites that may meet the criteria as historic properties.

NDPC has initiated consultations with federal, state, and local government agencies regarding the Project. During the course of agency consultation, NDPC has discussed possible impacts to cultural resources and the process of identifying, evaluating, and avoiding such impacts (see the Pipeline Routing Permit, Section 7852.3000, for a list of government agencies). NDPC contacted the Minnesota State Historic Preservation Office (“SHPO”) prior to initiating field surveys and will continue to consult with this office regarding the Project.

10.1 PREVIOUSLY RECORDED CULTURAL RESOURCES

Preliminary consultation and searches of agency databases confirmed there are no National Landmarks, NRHP-listed properties, historic districts, or cultural landscapes within the Project area. The Minnesota Historical Society maintains a list of over 30 historic sites around the state. NDPC checked this list, as well as the list of additional historic sites on the Preservation Alliance of Minnesota’s website. No historic site listed by either institution is located in the Project area.

NDPC reviewed existing file data maintained by the Minnesota SHPO to determine if any portion of the preferred route was surveyed previously for cultural resources. For the purposes of gathering information and reviewing previously recorded data, the Project area is defined as the environmental survey area, which is between 250- and 450-feet wide, plus known facilities off the mainline portion of the Project. The construction and permanent rights-of-way are located entirely within the Project’s environmental survey area. Pipeline construction will require a 120-foot-wide right-of-way in uplands and a 95-foot-wide right-of-way in wetlands.

At least 25 previous cultural resources surveys completed over the past 20 years or more have covered approximately one-third of areas adjacent to the environmental survey area plus facilities off the pipeline right-of-way. The remaining two-thirds of the environmental survey area have not been surveyed for cultural resources. The completed surveys incorporated various survey methods and the precise location of the surveyed areas is often difficult to discern based on the large-scale maps provided in the reported results.

Several large linear surveys were completed for pipeline projects that parallel the Project's environmental survey area; these surveys are the most relevant for the Project. These large surveys were completed by Enbridge; Great Lakes Gas Transmission Company, Limited Partnership; Lakehead Pipeline Company; and Minnesota Pipe Line Company. Table 10.1-1 lists the reports for some of these major survey efforts. Environmental survey area widths for these linear surveys varied widely. Some of the previous surveys' footprints partially overlap the environmental survey area in a number of locations but NDPC determined that the overlap was not sufficient to discount a comprehensive survey effort specific to the Project.

Principal Investigator/ Affiliation	Report Title	Date
D. Weir/ Commonwealth Associates, Inc.	A Cultural Resources Inventory – St. Vincent to St. Clair Gas and Sault Lateral Pipelines (Minnesota, Wisconsin, and Michigan)	1981
C. Dobbs / Institute for Minnesota Archaeology	1990 Great Lakes Gas Transmission Company Pipeline Expansion Project: Phase I Cultural Resource Inventory	1990
C. Dobbs / Institute for Minnesota Archaeology	1990 Great Lakes Gas Transmission Company Pipeline Expansion Project: Phase II Cultural Resource Inventory	1991
C. Dobbs / Institute for Minnesota Archaeology	A Phase I Archaeological Survey of the Great Lakes Gas Transmission Limited Partnership Pipeline Corridor	1996
Bielakowski/ The 106 Group	Phase I Cultural Resources Survey for the Enbridge Pipeline Southern Lights 20-inch Crude Line (LSr) and Alberta Clipper Pipeline Projects, Kittson, Marshall, Pennington, Red Lake, Polk, and Clearwater Counties, Minnesota	2007
Doperalski et al. / The 106 Group	2007 Phase I and II Cultural Resources Survey for the Minnesota Pipeline Company's MinnCan Project, Clearwater, Hubbard, Wadena, Todd, Morrison, Stearns, Meeker, Wright, McLeod, Carver, Sibley, Scott and Dakota Counties, Minnesota.	2007
Doperalski et al. / The 106 Group	Phase I Cultural Resources Survey for the Minnesota Pipeline Company's MinnCan Pipeline Project Access Roads and Extra temporary Work Spaces, Clearwater, Hubbard, Wadena, Todd, Morrison, Stearns, Meeker, Wright, McCloud, Carver, Sibley, Scott and Dakota Counties, Minnesota.	2008

Records on file at the SHPO and the Office of the State Archaeologist ("OSA") indicate that more than 380 archaeological sites were recorded within a 2-mile-wide study area

surrounding the environmental survey area. The known sites in the 2-mile-wide study area come from all cultural periods: Earthworks, burials, and numerous campsites and artifact scatters represent the Pre-contact period; homesteads, logging camps, and historic burials represent the Post-contact or historic period; and three sites in the region, a trading post, village, and burial, represent the Contact period.

Four previously recorded sites were located within the environmental survey area; two were revisited during the 2013 NDPC survey. Archaeological site 21CE0066 was recorded as the remains of a farmstead during the MinnCan Project survey. This site in Clearwater County was re-visited during the 2013 NDPC survey, and its current condition was documented. Previously recorded site 21HB0061 was the foundation remains of a schoolhouse in Hubbard County, also recorded during the MinnCan Project survey. This site could not be relocated in NDPC's 2013 survey. Site 21HB0071 was recorded as an isolated lithic flake during the MinnCan Project survey (Doperalski et al. 2007). Site 21CA0736 was recorded by Hamline University in 2011 and interpreted as a historic logging camp. A portion of the site was in the environmental survey area and revisited during the 2013 NDPC survey. None of the previously recorded sites has been recommended as eligible for listing on the NRHP. No inventoried standing structures located in the environmental survey area are on file at the state agencies. Information about previously recorded sites in the vicinity of facilities and off-right-of-way yards has not been compiled at this time.

10.2 CULTURAL RESOURCES PHASE I RECONNAISSANCE SURVEY AND GIS PREDICTIVE MODEL

Given the general lack of previous survey coverage of the Project area and lower than expected identified archaeological site and historic structure density, NDPC initiated Phase I reconnaissance, or inventory, surveys along the entire environmental survey area in 2013.

NDPC contracted with Commonwealth Cultural Resource Group ("CCRG") to conduct field surveys in Minnesota. NDPC directed CCRG to apply standard methodologies and utilize the guidelines provided by the SHPO and the OSA. The primary focus of the 2013 Phase I reconnaissance survey was the identification of resources and an initial assessment of their boundaries and research potential. NDPC directed CCRG to classify resources according to the criteria utilized by federal agencies when evaluating eligibility for listing on the NRHP. Standard survey methods of note include pedestrian walkover along the entire environmental survey area and subsurface shovel testing at specific locations determined by ground surface visibility and other factors.

In addition, NDPC is using statistically-based GIS predictive models during the Phase I reconnaissance survey. NDPC contracted with Foth Companies ("Foth") to develop the Archaeological and Historic Structures Sensitivity Model using a minimum of 14 datasets. Foth compiled the datasets and projected the predictive models in three distinct zones of low, moderate, or high sensitivity. NDPC determined survey targets for each of the three

zones, namely 100 percent coverage of the moderate and high sensitivity zones and at least 10 percent coverage of the low sensitivity zones. Periodically, Foth reviewed CCRG's completed survey data and provided additional model runs to reflect the supplemented and most recent datasets. NDPC will use the Archaeological and Historic Structures Sensitivity Model to define the most effective survey methods for the remaining Phase I reconnaissance survey.

Beginning with datasets gathered for the Sensitivity Model, sub-consultant Strata Morph Geoexploration, Inc. (Strata Morph), conducted a desktop assessment of the Project area looking for possible deeply buried living surfaces that might contain buried archaeological resources. Deeply buried living surfaces are the result of rapid soil formation, generally alluvial deposits in Minnesota, which cover and preserve a ground surface. After the desktop analysis Strata Morph conducted a windshield survey of potential locations across the environmental survey area, and identified nine locations with the potential to contain deeply buried surfaces, and possibly archaeological material. These nine locations will be tested by deep coring methods such as mechanical augering or backhoe trenching in 2014.

Phase I reconnaissance inventories of approximately 79 percent of the Project environmental survey area were completed in Minnesota in 2013. During the inventory CCRG identified 35 archaeological sites and revisited 2 previously recorded sites. Of the 37 sites recorded in the environmental survey area, 29 date to Pre-contact period occupations and consist of various assemblages of stone tools and tool-making debris, faunal (animal) remains, pottery, and pit features. Seven sites date to historic period occupations from the 19th and 20th centuries, and one site was occupied during both Pre-contact and historic periods. One of the historic period sites is a previously unrecorded family cemetery plot. This small cemetery will be protected from unauthorized disturbance in accordance with Minnesota Statute 307.08. The remaining 21 percent of the environmental survey area in Minnesota will be surveyed in 2014. If additional Project facilities or yards are identified, Phase I reconnaissance surveys will be designed and implemented following the Sensitivity Model.

NDPC prefers to avoid inventoried sites that may meet the criteria for listing on the NRHP. NDPC will conduct Phase II site evaluations if more information is needed to make a recommendation regarding National Register eligibility. If avoidance of a NRHP-eligible property is not possible, or places an undue burden on the Project, NDPC will consult with interested parties.

10.3 CULTURAL RESOURCES PHASE II EVALUATION STUDIES

CCRG conducted Phase II evaluation studies at four Pre-contact sites during the 2013 field season (21PL0102, 21PL0096/21PL0097, and 21PL0098). Testing included intensive surface collection and excavation of 1 meter x 1 meter test units. Test units were excavated until two levels of sterile soil were reached. Features identified in the soil matrix were

excavated in cross-sections, and one-half of the feature soil was removed for additional testing. Analysis is underway for data collected during the Phase II studies.

10.4 GENERAL CONSTRUCTION AND OPERATION IMPACTS AND MITIGATION

NDPC has completed Phase I reconnaissance surveys of approximately 79 percent of the environmental survey area and will conduct the remaining surveys in 2014. NDPC will continue to consult with government agencies, including the Minnesota SHPO, regarding identification and evaluation of historic properties. The preferred method of mitigating impacts to historic properties, or sites treated as historic properties, is avoidance, which may include routing the pipeline around historic properties, installing the pipeline beneath historic properties using conventional bore or HDD technology, and/or fencing all or portions of historic properties to ensure that they are avoided during construction. If avoidance is not possible, mitigation measures, such as data recovery in the case of archaeological sites, may be used.

NDPC has developed a Draft Unanticipated Discoveries Plan (see Appendix D) for use during all Project construction activities. The Unanticipated Discoveries Plan prescribes actions to be taken in the event that a previously unrecorded archaeological site or human remains are discovered during construction activities. The Unanticipated Discoveries Plan directs the Construction Contractor and the Lead EI to stop activity and protect the find, then contact the appropriate expert or authority. In the event of such a discovery, construction activities in the immediate vicinity of the discovery will not resume until the find is fully investigated and cleared.