APPENDIX E

(Privileged and Confidential Information has been redacted from this application)

Phase Ia Literature Review for the Xcel Energy Proposed Rebuild of Transmission Lines 0844 and 0861 Project, Dakota County, Minnesota

March 18, 2011

Report Title: Phase Ia Literature Review for the Xcel Energy Proposed Rebuild of Transmission Lines 0844 and 0861 Project, Dakota County, Minnesota

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Report Date: March 18, 2011

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INTRODUCTION

Project Description

Northern States Power Company, a Minnesota corporation, d/b/a Xcel Energy, Inc. (Xcel Energy) proposes to rebuild a portion of its 115 kilovolt (kV) transmission line between the Black Dog Substation in Burnsville and the Savage Substation in Savage, Minnesota. The Project is referred to as the Rebuild of Transmission Lines 0844 and 0861 Project (Project). The Project consists of two parts: 1) installation of approximately 5.1 miles of two new 115 kV transmission lines to interconnect with existing 115 kV transmission lines; and 2) removal of approximately 4.4 miles of two parallel existing 115 kV line transmission lines and structures. The Project is needed to ensure reliable and efficient energy transmission between the two substations and when completed will reduce the overall transmission footprint in the Minnesota River Valley. Xcel Energy is in the process of evaluating siting/routing information and collecting information and input. The proposed Project location is preliminary and subject to minor changes through the siting process. The general location of the Project area in the southern suburbs of Minneapolis is depicted in Figure 1.

Ground disturbance associated with this Project will generally be limited to removal of existing piers and excavation of the new piers (up to 30 feet deep) to secure the new 115 kV Line structures. The construction corridor for the proposed transmission line removal and rebuild activities is approximately 400 feet wide, 200 feet on either side of the proposed centerlines. Xcel Energy typically requires a permanent right-of-way easement of 75 feet wide (37'6" from centerline of a structure) for new 115 kV transmission line as proposed in this Project. The height of the structures will range from 70 to 90 feet and the spans between structures typically range from 300 to 500 feet.

As part of the environmental review for the proposed Project, Merjent, Inc. (Merjent) is assessing the potential Project impacts on cultural resources. This report presents the methods and findings of a cultural resources literature review for the Project area. The primary goal of a literature review is to identify all known previously recorded archaeological sites and historic standing structures for a given location, as well as the previously completed site inventories. The additional goals are to define the cultural background and to determine the potential for the presence of unrecorded cultural sites at a location.

Dr. Peggy J. Boden of Merjent conducted the research and wrote the literature review report. Merjent's Geographic Information System department prepared the project maps and compiled the soils information.

Jurisdiction

The Project may require permitting under Section 404 of the Clean Water Act, issued by the U. S. Corps of Engineers. Because of this potential federal oversight, Merjent designed and conducted the Phase I literature review to comply with Section 106 of the National Historic Preservation Act (NHPA) of 1966 and its subsequent amendments. Further environmental review of the Project falls under the jurisdiction of the Minnesota Public Utility Commission (PUC). Specifically, the Minnesota PUC will

review the project under Minnesota Rules Chapter 7850.4800, subp. 3(d). Also, Minnesota state historic preservation laws protect burials of all types (Minnesota Private Cemeteries Act [Minn. Stat. § 307]), and archaeological and historic sites that are listed on the National Register of Historic Places (NRHP) or the Minnesota Register of Historic Sites (Minnesota Historic Sites Act [Minn. Stat. § 138.661-138.6691]).

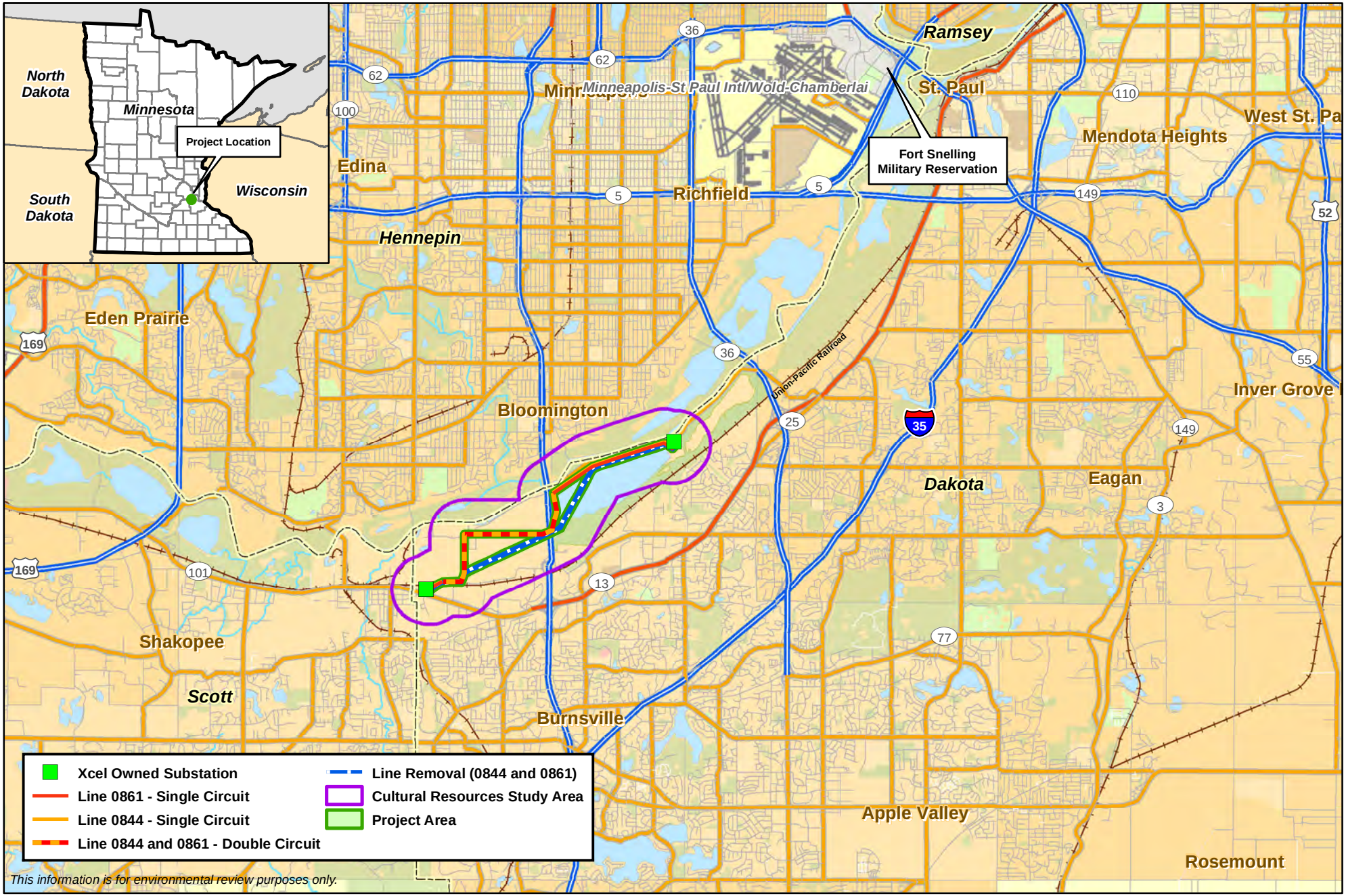

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Figure 1

Rebuild of Transmission Lines 0844 and 0861 Project

General Vicinity Map

Revised: 03/17/2011

Project Location

The Project consists of the installation of approximately 5.1 miles of two new 115 kV transmission lines to interconnect with existing 115 kV transmission lines, and the removal of approximately 4.4 miles of two parallel existing 115 kV line transmission lines and structures. The transmission lines are located between the Xcel Energy Black Dog Substation and the Savage Substation. The project is located in Township 27N, Range 24W, Sections 22, 23, 24, 27, 28, 32, 33, and 34 in Dakota County, Minnesota (Figure 2). The project lies entirely within the City of Burnsville.

Between Black Dog Substation and I-35, the Project area is located in primarily commercial/industrial, forested, and open lands, and includes a number of existing road and utility corridors. This area is surrounded by lands managed by the U.S. Fish and Wildlife Service as part of the Minnesota Valley National Wildlife Refuge and is dominated by wetlands and a waterbody (Black Dog Lake). Between I-35 and the Savage Substation, the Project area consists largely of commercial/industrial lands. Specifically, the Project will occur within and adjacent to an active sand and gravel mine and adjacent to an active landfill.

The 400-foot-wide construction footprint along the transmission line corridors is considered the area of potential effect (APE) for potential direct impacts on cultural resources. The proposed Project location and APE are shown on Figure 2. In order to study the cultural background and better understand the potential for impacts to recorded and unrecorded cultural resources for the project footprint, a 1-mile buffer around the APE was used to gather information. The APE plus the 1-mile buffer is called the cultural resources study area (or study area). The cultural resources study area extends into the City of Bloomington in Hennepin County, and the City of Savage, which is in Scott County.

Cultural Resources Study Area Background

The proposed Project is located in southern Minnesota in the City of Burnsville. Archaeologically, this is within the Central Lake Deciduous Archaeological Region (Anfinson 1990). The topography of this region was formed by the retreat of the Wisconsin glaciers and is characterized by patchwork hilly moraines, flat outwash plains, and shallow to very deep lakes. The soils were formed by glacial retreat and subsequent forest vegetation, resulting in medium to course texture loams. Prior to Euro-American settlement, the vegetation was predominantly oak forests, with deciduous-coniferous forests more common in the north. The Project study area is further defined by its location within the Minnesota River Valley. The Project location is about seven miles south and west of the junction of the Minnesota and Mississippi Rivers. This eastern-most portion of the Minnesota River is a broad lowland averaging one mile wide, with intermittent bedrock outcrops and higher river bluffs on both the north and south sides of the river. It was formed by flooding events and alluvial action, and includes lakes and wetlands on both sides of the river. The study area also lies within the Minnesota Valley National Wildlife Refuge.

The climate of the study area is characteristic of the North American mid-continent, that is, subject to temperature extremes in winter and summer, and turbulent precipitation events. The abundant resources in the Minnesota River lowlands, such as waterfowl and fish, were exploited by both Native American and Euro-American groups. Native Americans occupied villages on the higher ridges above the river and are relatively well known from early historic accounts. Today, the transmission lines run

parallel to the river and stand nearly alone along the river bottoms. The exception is a significant mining operation in Section 33, just east of the Savage substation and some industrial development on the south and west end of the existing transmission lines, on higher ground near Highway 13.

To provide the briefest cultural background, the earliest occupants of the region were Paleo-Indians (9,000-7,500 B.C.), known mostly through chance discovery of their large lithic tools and weapons. Occupation by Archaic period groups followed (7,500-500 B.C.), known by their technically improved lithic tools and exploitation of more diverse resources. By the Woodland period (500 B.C.-1000 A.D.), the bow and arrow and pottery were widely used. The Plains Village groups (1000-1650 A.D.), such as the Oneota, developed distinctive tribal customs and practices, expressing their beliefs through decorative material culture. Prehistorically, the Central Lakes Deciduous Archaeological Region was a favored location for the Woodland period groups. They lived near lakes and utilized the many associated resources such as lake rushes and water lilies, wild rice, fish, and waterfowl.

When the first Europeans came to the region to trade for animal pelts (Early Contact period, 1640-1840), they encountered the Dakota Indians. In preparation for Euro-American entry into the northern frontier, and to monitor disputes between the Dakota and Ojibwe Indians, Fort Snelling was built in 1825. At the time the Fort was constructed, several bands of Dakota lived in villages along the terraces of the Minnesota River Valley west of the Fort. These are known from narratives and artwork of the period, from place names, and also from archaeological sites. The leader of one band of Dakota was Black Dog, the namesake for the large lake in the study area, as well as the power plant and nearby road.

Today, the Project area lies in the midst of the metropolitan area of Minneapolis and St. Paul, Minnesota, in the south suburban City of Burnsville. Known mainly as a residential community, the city has a diverse economic base in addition to retail, including manufacturing, publishing, recreation, and service industry businesses such as educational support, software development, and telecommunications. Land use within the study area is for the most part limited to industrial and transportation infrastructure, including the Xcel Energy transmission lines, the Highway 35W bridge over the Minnesota River, the Union Pacific Railroad, and the quarrying operation in Section 33 just east of Savage.

METHODS

The main objective in reviewing the cultural resources literature is to identify the recorded cultural sites, and assess the potential for unrecorded sites within the project area. The standard for considering a cultural site significant and requiring protection is whether it meets the criteria for listing on the NRHP. The initial criterion for such listing is an age of 50 or more years. Beyond age, a property must retain integrity and be associated with significant historic trends, historic persons, building styles and craftsmanship, or the property must have the potential to provide significant information about the past (National Park Service 1995).

Merjent reviewed and followed the published guidelines for conducting cultural resources literature reviews in Minnesota (Anfinson 2005). The Minnesota State Historic Preservation Office (SHPO), located in the Minnesota History Center building in St. Paul, is the record keeper for the state's prehistoric and historic archaeological site files, historic standing structure inventory files, and field survey reports. Dr. Boden made a trip to Minnesota SHPO on December 2, 2010 and searched the files for information on the Project area.

In addition to examining the Minnesota SHPO files, Dr. Boden examined the current topographic and aerial maps to understand the modern land use of the study area and to provide a baseline for examining the historic maps and documents. Several online resources were used to gather information. Dr. Boden looked up general information online about Dakota County and the cities of Burnsville and Savage. She also examined primary sources that have been digitized and made available online, such as the original land survey maps, the original land patent records, and historic aerial photos. Many of these same resources are available at the Minnesota History Center library; however, it is preferable to view digitized images that can be enlarged rather than the microfiche copies available in the history library.

Many cities in Minnesota have established a Heritage Preservation Commission (HPC) that is charged with creating policies that promote historic preservation. HPCs may have policies regarding historic preservation for construction on new or existing structures. The cities of Burnsville, Bloomington, and Savage do not have an HPC. Dakota County has an active historic society and museum located in South St. Paul. The organization's website was viewed for general information about the county (Dakota County Historical Society 2003). The historical society's museum provides displays with historical themes important to the County, and maintains documents on file to assist in family research, such as census records and newspapers. The local historical society does not keep a list of important locations or historic sites.

And, finally, Merjent examined the county soil surveys, prepared by the Natural Resource Conservation Service, in order to assess the potential for buried archaeological sites in the project APE, and the likelihood that field survey would discover unrecorded archaeological sites.

LITERATURE REVIEW RESULTS

National Register of Historic Places/Minnesota Historic Sites

A search of the NRHP website and the records on file at the Minnesota SHPO revealed that there are 37 properties in Dakota County listed on the NRHP. The listed properties range from individual dwellings or commercial buildings to the historic districts of Mendota and Hastings, and the Mendota Bridge. None of the NRHP properties are located in the Project APE or study area. The closest listed property to the Project study area is Fort Snelling.

The Union Pacific Railroad, which parallels the Minnesota River and intersects the western end of the study area, is included in the Multiple Property Nomination to the NRHP for Railroads in Minnesota, 1862-1956 (Schmidt, et al. 2002). This nomination describes the significance of the many railroads of Minnesota, and establishes the criteria for considering a rail line and associated railroad features as eligible for listing on the NRHP. The rail line that runs through the study area was first built by the Minnesota Valley Railroad Company in 1864, and is one of the early railroads in the state. The line changed hands over the decades and is currently part of the Union Pacific network of railroads. This railroad line certainly meets the initial criteria of being more than 50 years old; only a field survey would determine if the line maintains its historic integrity and setting sufficiently to be eligible for listing on the NRHP, although it almost certainly does. Because the proposed Project will not alter the surrounding landscape in any substantial way - removing some transmission lines and adding others – there will be no notable change to the existing setting of the Union Pacific Railroad through the Minnesota River Valley.

In addition to the NRHP, the Minnesota Historical Society maintains a list of properties that are regarded as significant to the history of Minnesota. Some of the Minnesota Historic Sites are also NRHP-listed properties, such as Fort Snelling. However, no Minnesota Historic Sites are located within the Project study area.

Minnesota State Site Files

Previously Recorded Archaeological Sites

No archaeological sites have been recorded in the Project APE, that is, the 400-foot-wide construction footprint along the existing and proposed transmission lines. Within the broader cultural resources study area, three archaeological sites have been recorded (see Figure 2 and Table 1). When Fort Snelling was built, and until their removal in the 1850s, bands of Mdewankanton Dakota lived in villages along the terraces overlooking the Minnesota River Valley west of Fort Snelling. Two of the sites, both on the northern side of the Minnesota River in Hennepin County, are most likely associated with the Dakota occupation of the area. Site 21HE0016 was first recorded by historian and surveyor Theodore Lewis in the 1890s as two small mounds lying on the east side of a village. The Minnesota Archaeological Society excavated at the site in 1946; photos show early historic artifacts with the burials, but provide no further information (Arzigian and Stevenson 2003, 293). When construction for a housing development was underway in 1968, a burial was discovered and salvaged at this location.

The second site dating to the Dakota period was recorded during a recent (2006) survey of a recreation trail; artifacts that date to the Dakota occupation of the river valley were recorded between 21HE0016 and the river bluffs edge. This find was assigned site number 21HE0228.

The third archaeological site that lies within the cultural resources study area is on the southern side of the river. This site (21DK0041), called the Pemtom or River Hills Site, was discovered during housing construction in 1963. Seven burial pits were excavated, containing a minimum of 56 individual secondary burials (Arzigian and Stevenson 2003, 371). This site was unique in Minnesota archaeology because it represents the Arvilla Complex, best known from several sites in the Red River Valley (Johnson 1973). The Arvilla Complex is known only through burial sites in the region, and is characterized by secondary bundle burials, as well as bone and decorated shell grave goods. This site, like 21HE0016, was completely destroyed by modern development.

Table 1

Previously Recorded Archaeological Sites within the Project's Cultural Resources Study Area

Site number	Site type	Cultural Affiliation	Relevant Findings
21HE0016	Mound Site (Hopkins Mounds) destroyed	Prehistoric or Contact Period	Two mounds recorded by Lewis ca. 1890; single burial excavated in 1968 before housing construction.
21HE0228	Artifact Scatter	Prehistoric or Contact Period	Recorded in 2006 during trail assessment.
21DK0041	Mound Site (River Hills Mounds) destroyed	Prehistoric Arvilla Complex (AD 500-900)	Discovered in 1963 during housing construction; seven burial pits were excavated.

Previously Recorded Standing Structures

Within the study area, several buildings more than 50 years old have been inventoried within the City of Savage. However, these are not in the Project APE and will not be affected by the proposed Project. The only other structure that is more than 50 years old is the Union Pacific railroad line that runs along the southern edge of Black Dog Lake and the Minnesota River Valley, and intersects the Project on its western end. The Project is situated in a relatively newly developed part of the Twin Cities metro area; however, buildings are scarce in the lowlands where the transmission lines are located, and residential development, as well as public and commercial buildings on the higher ground, were built well after the Second World War (see Figure 2).

Previously Conducted Cultural Resources Surveys

The reports of cultural resources inventory surveys in the study area were examined, but only two previously conducted inventory reports were on file (See Table 2). The City of Burnsville proposed traffic changes at the intersection of Interstate 35W and 113th Street in 1990. BRW conducted a cultural resources study, including a field inventory, at that time and discovered no cultural materials. The second inventory report documents the 2006 assessment completed prior to proposed trail improvements along the extensive trail system in the City of Bloomington (Harrison 2006).

The early efforts of surveyor Theodore Lewis should also be mentioned as a source of information about the study area. Lewis was a surveyor by training, and took an interest in the Native American earthworks of the Upper Midwest. He recorded the mounds through most of Minnesota, including those in this portion of the Minnesota River Valley (Winchell 1911). In most cases, Lewis's records of the mounds in the Minnesota River Valley are the only remaining evidence we have of these sites.

Table 2

Reports of Previously Conducted Cultural Resources Studies for the Study Area

Year	Report Title	Author	Relevant Findings
1990	Archaeological Reconnaissance Survey of the 113th Street Interchange, Burnsville, Dakota County, Minnesota	BRW, Inc.	No cultural resources findings; terrain significantly disturbed; wetland mucky soils.
2006	Report on Archaeological Assessment of Proposed Trail Improvement, City of Bloomington, Hennepin County, Minnesota	Christina Harrison	Recording of 21HE0228, probable remnant of Dakota occupation.

Other Resources

Historical documents relevant to the study area were reviewed in order to identify possible unrecorded historic sites that might be affected by the Project.

General Land Office Survey Maps

The General Land Office (GLO) Survey maps, representing the original township surveying of the Minnesota Territory in 1853, were viewed online through the Minnesota Historical Society's library website. The GLO map of Burnsville Township (T27N, R24W) does not show any cultural features in the Project study area.

Historic Plat Maps

Several historic plat maps were viewed online to determine if any historic features such as pioneer trails or early homesteads were recorded in the APE or study area (John R. Borchert Map Library). Early activity or buildings can become lost to history, although buried remnants may be left behind. Viewing

of the early plat maps for Dakota, Hennepin, and Scott Counties did not reveal any additional cultural information about the study area. On most of the early maps viewed, the legal plats are shown with landowners' names, and little or no depiction of the surrounding terrain or cultural landscape.

The earliest maps do show the Union Pacific Railroad at its present location along the southern edge of Black Dog Lake and the Minnesota River Valley. This structure is no doubt the oldest historical property in the study area. No additional cultural information can be gleaned from the early plat maps.

Historic Aerial Photographs

Merjent reviewed aerial photographs of the cultural resources study area that are available online from the Minnesota Department of Natural Resources' website. The 1947 aerial photograph shows that the bottom land of the Minnesota River Valley is sparsely occupied or developed, containing mostly urban infrastructure such as the 35W highway and bridge that cross the river, and the Union Pacific Railroad that parallels the river to the south. Port Cargill, a series of roads and river canals on the Minnesota River just north of Savage, is present on the 1947 aerial photo. According to the *Railroads in Minnesota, 1862-1956* nomination form, Port Cargill was built in 1942 (Schmidt et al., Section E, pg. 49). The river bluffs in Bloomington and Burnsville, however, are not developed at the time of this photograph. Agricultural fields and farmsteads are present a few hundred feet away from the bluff edges. Other than the built environment mentioned, there does not appear to be any standing structures on the 1947 aerial that correspond with current buildings or structures.

County Soil Survey

In order to further assess the likelihood of past occupation within the APE or the potential for buried archaeological sites there, the soils of the project study area were examined (Soil Survey Staff, no date). Figure 3 shows the soils of the project study area as they were inventoried by the county soil surveys of the Natural Resource Conservation Service. Table 3 below provides the soil names and hydric status for the soils of the project study area. Soils are considered "hydric" when they were formed under conditions of saturation, flooding or ponding. Hydric soils commonly make up wetlands, and as locations that are saturated permanently or periodically, they are poor candidates for human settlement, and poor candidates for preserving archaeological information.

As the soils map in Figure 3 illustrates, the project study area is dominated by hydric soils, and the 400-foot transmission line corridors, the project APE, lies almost entirely in hydric soils, and in some cases lies in the water of the river and Black Dog Lake.

Table 3

Figure 3 Soils, from NRCS County Soil Surveys

County	MUSYM	Soil Name	Hydric Status
Dakota	98	Colo silt loam, occasionally flooded	All hydric
Dakota	317	Oshawa silty clay loam	All hydric
Dakota	408	Faxon silty clay loam	All hydric
Dakota	463	Minneiska loam, occasionally flooded	Not hydric
Dakota	465	Kalmarville sandy loam, frequently flooded	All hydric
Dakota	539	Palms muck	All hydric
Dakota	540	Seelyeville muck	All hydric
Dakota	545	Rondeau muck	All hydric
Dakota	1013	Pits, quarry	Unknown
Dakota	1027	Udorthents, wet	Unknown
Dakota	1039	Urban land	Unknown
Dakota	1055	Aquolls and Histosols, ponded	All hydric
Dakota	1072	Udorthents, moderately shallow	Unknown
Dakota	1821	Algansee sandy loam, occasionally flooded	Not hydric
Dakota	1824	Quam silt loam, ponded	All hydric
Dakota	1825C	Seelyeville muck, sloping	All hydric
Dakota	454E	Mahtomedi loamy sand, 15 to 25 percent slopes	Not hydric
Dakota	611F	Hawick loamy sand, 25 to 50 percent slopes	Not hydric
Dakota	857B	Urban land-Waukegan complex, 1 to 8 percent slopes	Not hydric
Dakota	861E	Urban land-Kingsley complex, 15 to 25 percent slopes	Not hydric
Dakota	896F	Kingsley-Mahtomedi complex, 25 to 40 percent slopes	Not hydric
Dakota	94C	Terril loam, 4 to 12 percent slopes	Not hydric
Dakota	W	Water	Unknown
Hennepin	L12A	Muskego, Blue Earth, and Houghton soils, ponded, 0 to 1 percent slopes, frequently flooded	All hydric
Hennepin	L32F	Hawick loamy sand, 18 to 40 percent slopes	Not hydric
Hennepin	L38A	Rushriver very fine sandy loam, 0 to 2 percent slopes, occasionally flooded	Partially hydric
Hennepin	L39A	Minneiska fine sandy loam, 0 to 2 percent slopes, occasionally flooded	Partially hydric
Hennepin	L43A	Brouillett loam, 0 to 2 percent slopes, occasionally flooded	Partially hydric
Hennepin	L55B	Urban land-Malardi complex, 0 to 8 percent slopes	Unknown
Hennepin	U3B	Udorthents (cut and fill land), 0 to 6 percent slopes	Unknown
Hennepin	W	Water	Unknown
Scott	CdA	Copaston silt loam, 0 to 2 percent slopes	Not hydric
Scott	Fa	Faxon silty clay loam, 0 to 2 percent slopes	All hydric

Table 3 Figure 3 Soils, from NRCS County Soil Surveys			
Scott	INT	Water, intermittent	Unknown
Scott	Ma	Marsh	All hydric
Scott	PaA	Palms muck, 0 to 2 percent slopes	All hydric
Scott	PbA	Houghton muck, 0 to 2 percent slopes	All hydric
Scott	Ra	Oshawa silty clay loam	All hydric
Scott	Sc	Stony land	Not hydric

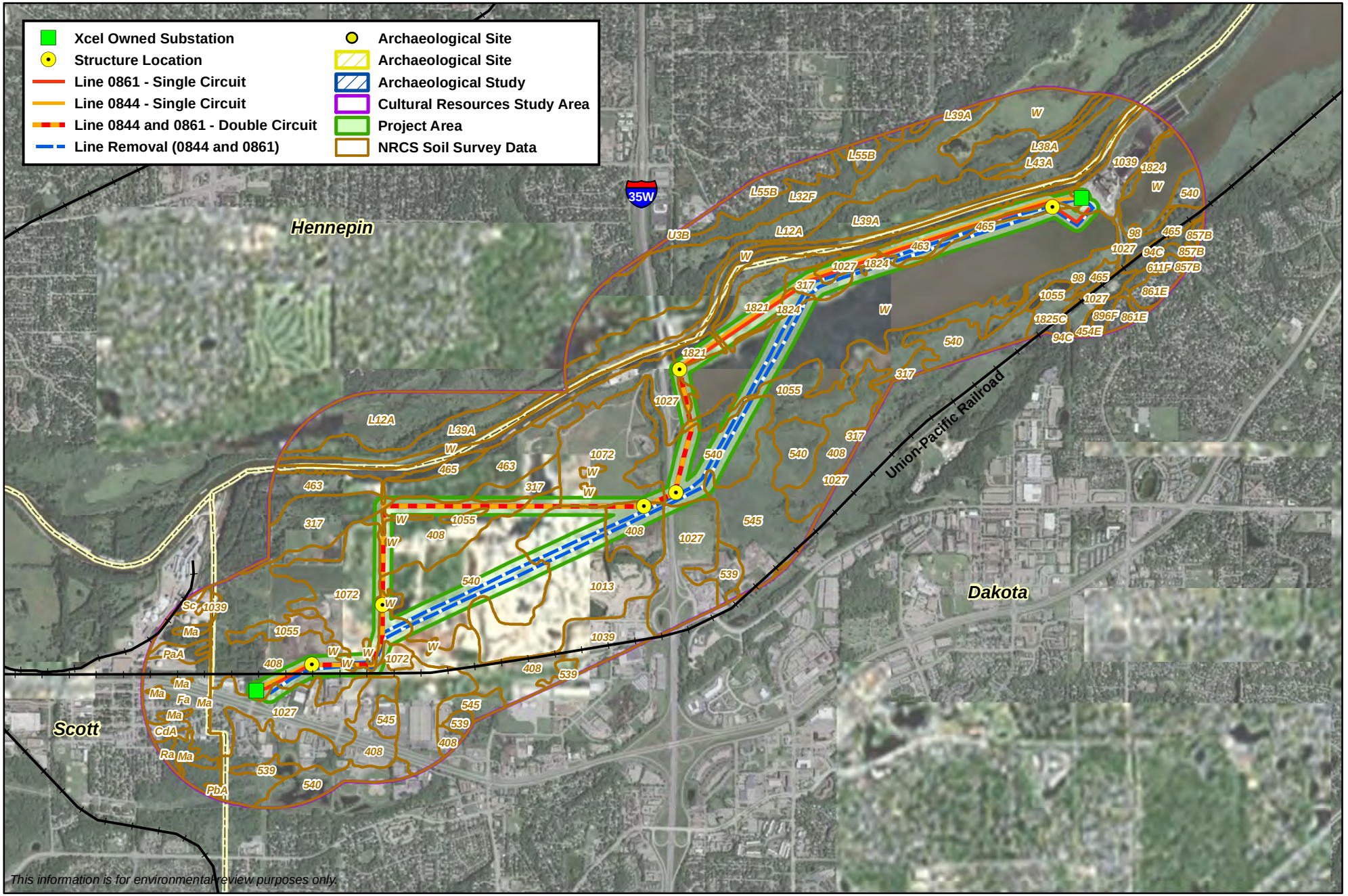

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Figure 3

Rebuild of Transmission Lines 0844 and 0861 Project

NRCS Soil Survey Data

Revised: 03/17/2011

RECOMMENDATIONS

There are no historic landmarks, historic properties, districts, or landscapes within the study area that are listed on the NRHP or the list of Minnesota Historic Sites. There are no recorded archaeological sites or historic standing structures within the APE. A segment of the Union Pacific Railroad, the only recorded property potentially eligible for listing on the NRHP, skirts the Project area to the south, and intersects it on the western end. Merjent recommends that the Project will not adversely affect the historic integrity or setting of the railroad at this location. The Project involves removal of the southern transmission lines and installation of transmission lines to the north. The construction will expand the existing infrastructure area and the resulting landscape will not be substantially changed. It is our recommendation that no recorded archaeological or historic sites will be adversely affected by the proposed removal and subsequent construction of the 115 kV transmission lines from the Black Dog Substation to the Savage Substation.

Within the cultural resources study area (one-mile buffer around the APE), three archaeological sites have been recorded, none of which are recommended as eligible for listing on the NRHP or the list of Minnesota Historic Sites. Two of these (21HE0016 and 21DK0041) are burial sites that have been destroyed. Site 21HE0228 is a relatively recent discovery representing the Dakota occupation of the area during the Early Contact period. The documentation of the study area demonstrates that the nearest archaeological sites are those associated with the Mdewankanton Dakota occupation of the region during the early to mid-nineteenth century. These sites are located along the river bluffs above the Project APE. However, the archaeological sites considered to be associated with Black Dog's band are located closer to Fort Snelling, north and east of the study area (Roberts 1993, 170).

The potential for impacting unrecorded archaeological resources within the Project APE is low to very low. This statement holds true even if the proposed project area for the rebuild of two 115 kV transmission lines is changed slightly, as long as the transmission lines remain within the Minnesota Valley bottomlands between the Black Dog and Savage substations, the current plan of the project. The primary reason is because of the Project's location in the flood-prone Minnesota River bottoms. There is limited development in the river bottoms and as in prehistoric and the early historic periods, the bluffs above the river are the preferred location for settlement. Even today, the built environment of the river bottoms of the study area is almost entirely limited to industrial infrastructure. As the soil survey shows (see Figure 3), the Project APE is dominated by hydric soils, including wetlands and the muck soils that BRW noted in their 1990 study. Human groups have utilized the resources in the bottomlands and wetlands, but they did not spend significant time there and evidence of past activity in wetlands is poorly preserved or not preserved at all. For all these reasons, Merjent recommends that a cultural resources field inventory of the Project APE is not necessary.

Merjent anticipates there may be federal oversight of the Project through the U.S. Army Corps of Engineer's Section 404 permitting process and conducted the background literature review in order to comply with federal historic preservation laws, specifically Section 106 of the NHPA. The Project is also subject to Minnesota PUC oversight and applicable state and local laws. Merjent is making recommendations according to standard predictability models for discovery of archaeological resources in the Upper Midwest, and in accordance with the relevant federal and PUC guidelines and regulations,

the Minnesota Historic Sites Act, the Minnesota Field Archaeology Act, and the Minnesota Private Cemeteries Act.

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