Xcel Energy®

414 Nicollet Mall
Minneapolis, MN 55401

August 18, 2016

—Via Electronic Filing—

Daniel P. Wolf
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101

RE: **Application for a Route Permit for the Black Dog Natural Gas Pipeline Project Docket No. G002/GP-16-656**

Dear Mr. Wolf:

Northern States Power Company, a Minnesota corporation, doing business as Xcel Energy, respectfully submits this Application for a Route Permit for the Black Dog Natural Gas Pipeline Project (Project) pursuant to the partial exemption procedures pursuant to Minnesota Rules Chapter 7852.0600.

The proposed Project involves construction of an approximately 2.2 mile natural gas pipeline from the Northern Natural Gas Cedar Station in Eagan to the Black Dog Generating Plant in Burnsville, MN.

Xcel Energy has proposed the Project to meet the need of supplying natural gas to the Black Dog Generating Plant in order to convert the facility from coal-fired electrical generators to a gas-fired facility which is being permitted separately under the Black Dog Unit 6 Project (Docket No. E002/GS-15-834).

Please contact Ellen Heine at ellen.l.heine@xcelenergy.com or 612-330-6073 if you have questions or would like further information regarding this matter.

Sincerely,

Timothy Rogers
Manager, Siting and Land Rights

NORTHERN STATES POWER COMPANY

Application to the Minnesota Public Utilities Commission For a Gas Pipeline Routing Permit

Black Dog Natural Gas Pipeline Project

Partial Exemption Process

MPUC Docket No. G-002/GP-16-656

August 18, 2016

XCEL ENERGY
BLACK DOG NATURAL GAS PIPELINE PROJECT
APPLICATION TO THE MINNESOTA PUBLIC UTILITIES COMMISSION
FOR A ROUTING PERMIT: PARTIAL EXEMPTION PROCESS

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1.0 Introduction

Northern States Power Company, A Minnesota Corporation, (Xcel Energy) (Applicant) is proposing to construct an approximately 11,300 foot (2.2 mile) long, 16-inch outside-diameter, high pressure (650 psig) natural gas pipeline from the Northern Natural Gas Company's Cedar Station (NNG Cedar Station) in Eagan to Northern States Power Company's Black Dog Generating Plant in Burnsville, Minnesota. The project, referred to as the Black Dog Natural Gas Pipeline Project (Pipeline Project or Project) for the Black Dog Generating Plant, will allow for the replacement of a coal-fired turbine with a natural gas-fired simple cycle turbine at the Black Dog Generating Plant. This turbine conversion project, known as the Black Dog Unit 6 Project is being permitted under a separate site permit docket number E002/GS-15-834. Xcel Energy proposes to locate the Pipeline Project in T27N, R23W, Section 19 and T27N, R24W, Sections 23, 24, 25 in Dakota County, Minnesota (**Figure 1**).

The proposed pipeline traverses a suburban developed area with existing infrastructure, including road and electric transmission line rights-of-way. The pipeline is proposed to be placed immediately adjacent to existing transportation or electric transmission line corridors, which contain a number of other existing utilities, for the majority of its length. The pipeline will primarily be located within road right-of-way, on land owned by the City of Burnsville and on land owned by Northern States Power Company Minnesota (NSPM). The evaluation of the proposed Project route is discussed in this application.

1.1 Applicable Rules

Xcel Energy is filing this Application to the Minnesota Public Utilities Commission (MPUC or Commission) for a Gas Pipeline Route Permit under its partial exemption of pipeline route selection procedures (Minnesota Rules Chapter 7852.0700). The Application describes the Project in accordance with Minnesota Statutes Chapter 216G and Minnesota Rules Chapter 7852.

1.2 Completeness Checklist

Application submittal requirements are listed in the following completeness checklist and cites where information can be found within the Application.

Table 1—Completeness Checklist

Authority	Required Information	Where
852.2100 GENERAL INFORMATION		
Minn. R. 7852.2100, Subp. 1	**Cover Letter**	
	Cover letter: Each application must be accompanied by a cover letter signed by an authorized representative or agent of the applicant. The cover letter must specify the type, size, and general characteristics of the pipeline for which an application is submitted.	Attached
Minn. R. 7852.2100 Subp. 2	**Title Page and Table of Contents**	
	Each application must contain a title page and a complete table of contents.	Cover, Pages i-iii

Table 1—Completeness Checklist		
Authority	**Required Information**	**Where**
Minn. R. 7852.2100 Subp. 3	**Statement of Ownership**	
	Each application must include a statement of proposed ownership of the pipeline as of the day of filing and an affidavit authorizing the applicant to act on behalf of those planning to participate in the pipeline project.	Section 2.1
Minn. R. 7852.2100 Subp. 4	**Background Information**	
	Each application must contain the following information: A. the applicant's complete name, address, and telephone number; B. the complete name, title, address, and telephone number of the authorized representative or agent to be contacted concerning the applicant's filing; C. the signatures and titles of persons authorized to sign the application, and the signature of the preparer of the application if prepared by an outside representative or agent; and D. a brief description of the proposed project which includes: 1) general location; 2) planned use and purpose; 3) estimated cost; 4) planned in-service date; and 5) general design and operational specifications for the type of pipeline for which an application is submitted.	Section 2.2 Section 3.0 Section 4.0
7852.2200 PROPOSED PIPELINE AND ASSOCIATED FACILITIES DESCRIPTION		
Minn. R. 7852.2200 Subp. 1	**Pipeline Design Specifications**	
	The specifications for pipeline design and construction are assumed to be in compliance with all applicable state and federal rules or regulations unless determined otherwise by the state or federal agency having jurisdiction over the enforcement of such rules or regulations. For public information purposes, the anticipated pipeline design specifications must include but are not limited to: A. pipe size (outside diameter) in inches; B. pipe type; C. nominal wall thickness in inches; D. pipe design factor; E. longitudinal or seam joint factor; F. class location and requirements, where applicable; G. specified minimum yield strength in pounds per square inch; and H. tensile strength in pounds per square inch.	Section 4.2
Minn. R. 7852.2200 Subp. 2	**Operating Pressure**	

Table 1—Completeness Checklist		
Authority	**Required Information**	**Where**
	Operating pressure must include: A. operating pressure (psig); and B. maximum allowable operating pressure (psig).	Section 4.3
Minn. R. 7852.2200 Subp. 3	**Description of Associated Facilities**	
	For public information purposes, the applicant shall provide a general description of all pertinent associated facilities on the right-of-way.	Section 4.4
Minn. R. 7852.2200 Subp. 4	**Product Capacity Information**	
	The applicant shall provide information on planned minimum and maximum design capacity or throughput in the appropriate unit of measure for the types of products shipped as defined in part 7852.0100.	Section 4.5
Minn. R. 7852.2200 Subp. 5	**Product Description**	
	The applicant shall provide a complete listing of products the pipeline is intended to ship and a list of products the pipeline is designed to transport, if different from those intended for shipping.	Section 4.6
Minn. R. 7852.2200 Subp. 6	**Material Safety Data Sheet**	
	For each type of product that will be shipped through the pipeline, the applicant shall provide for public information purposes the material identification, ingredients, physical data, fire and explosive data, reactivity data, occupational exposure limits, health information, emergency and first aid procedures, transportation requirements, and other known regulatory controls.	Section 4.7, Appendix A
7852.2300 LAND REQUIREMENTS		
	For the proposed pipeline, the applicant shall provide the following information: A. permanent right-of-way length, average width, and estimated acreage; B. temporary right-of-way (workspace) length, estimated width, and estimated acreage; C. estimated range of minimum trench or ditch dimensions including bottom width, top width, depth, and cubic yards of dirt excavated; D. minimum depth of cover for state and federal requirements; and E. rights-of-way sharing or paralleling: type of facility in the right-of-way, and the estimated length, width, and acreage of the right-of-way.	Section 6.0 Section 6.1 Section 6.4 Section 6.5 Section 6.6
7852.2400 PROJECT EXPANSION		

Table 1—Completeness Checklist		
Authority	**Required Information**	**Where**
	If the pipeline and associated facilities are designed for expansion in the future, the applicant shall provide a description of how the proposed pipeline and associated facilities may be expanded by looping, by additional compressor and pump stations, or by other available methods.	Section 6.11
7852.2500 RIGHT-OF-WAY PREPARATION PROCEDURES AND CONSTRUCTION ACTIVITY SEQUENCE		
	Each applicant shall provide a description of the general right-of-way preparation procedures and construction activity sequence anticipated for the proposed pipeline and associated facilities.	Section 7.0
7852.2600 PREFERRED ROUTE LOCATION; ENVIRONMENT DESCRIPTION		
Minn. R. 7852.2600 Subp. 1	**Preferred Route Location**	
	The applicant must identify the preferred route for the proposed pipeline and associated facilities, on any of the following documents which must be submitted with the application: A. United States Geological Survey topographical maps to the scale of 1:24,000, if available; B. Minnesota Department of Transportation county highway maps; or C. aerial photos or other appropriate maps of equal or greater detail in items A and B. The maps or photos may be reduced for inclusion in the application. One full-sized set shall be provided to the Commission.	Section 5.0 and Figure 3 and Figures 4.1 – 4.4
Minn. R. 7852.2600 Subp. 2	**Other Route Locations**	
	All other route alternatives considered by the applicant must be identified on a separate map or aerial photos or set of maps and photos or identified in correspondence or other documents evidencing consideration of the route by the applicant.	Section 5.1 and Figure 3
Minn. R. 7852.2600 Subp. 3	**Description of Environment**	
	The applicant must provide a description of the existing environment along the preferred route.	Section 9.0
7852.2700 ENVIRONMENTAL IMPACT OF PREFERRED ROUTE		
	The applicant must also submit to the commission along with the application an analysis of the potential human and environmental impacts that may be expected from pipeline right-of-way preparation and construction practices and operation and maintenance procedures. These impacts include but are not limited to the impacts for which criteria are specified in part 7852.0700 or 7852.1900.	Section 9.0

Table 1—Completeness Checklist		
Authority	**Required Information**	**Where**
7852.2800 RIGHT-OF-WAY PROTECTION AND RESTORATION MEASURES		
Minn. R. 7852.2800 Subp. 1	**Protection**	
	The applicant must describe what measures will be taken to protect the right-of-way or mitigate the adverse impacts of right-of-way preparation, pipeline construction, and operation and maintenance on the human and natural environment.	Section 7.0
Minn. R. 7852.2800 Subp. 2	**Restoration**	
	The applicant must describe what measures will be taken to restore the right-of-way and other areas adversely affected by construction of the pipeline.	Section 7.12
7852.2900 OPERATION AND MAINTENANCE		
	Pipeline operations and maintenance are assumed to be in compliance with all applicable state and federal rules or regulations, unless determined otherwise by the state or federal agency having jurisdiction over the enforcement of such rules or regulations. For public information purposes, the applicant must provide a general description of the anticipated operation and maintenance practices planned for the proposed pipeline.	Section 8.0
7852.3000 LIST OF GOVERNMENT AGENCIES AND PERMITS		
	Each application must contain a list of all the known federal, state, and local agencies or authorities and titles of the permits they issue that are required for the proposed pipeline and associated facilities.	Section 10.0

2.0 Statement of Ownership and Regulatory Requirements

2.1 Statement of Ownership

Northern States Power Company Minnesota is a Minnesota corporation and a wholly-owned subsidiary of Xcel Energy Inc., a utility holding company with its headquarters based in Minneapolis. Xcel Energy provides electricity services to approximately 1.4 million customers and natural gas services to 500,000 residential, commercial and industrial customers in Minnesota. Xcel Energy Services Inc. is the service company for Xcel Energy and its personnel prepare, submit and administer regulatory applications to the Commission on behalf of Xcel Energy, including pipeline route permit applications.

2.2 Requested Action

This Application for a Pipeline Routing Permit by Xcel Energy is submitted for the proposed pipeline alignment between the NNG Cedar Station and Xcel Energy's Black Dog Generating Plant under Minnesota Rules 7852.0600.

Applicant:

Northern States Power Company, a Minnesota Corporation, doing business as:
Xcel Energy
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(612) 330-5500

Utility Employee Responsible for Filing:
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Minneapolis, MN 55401

Phone: (612) 330-1955
Email: timothy.g.rogers@xcelenergy.com

Applicant Signature: _____ Date: 8/18/16

Authorized Signature: _____ Date: August 18, 2016

2.3 Certificate of Need

A Certificate of Need is not required for the Project because it is not classified as a large energy facility under Minnesota Statutes Section 216B.2421, subd. 2 or a large pipeline under Minnesota Rules 7851.0010 Subp. 13. Therefore, the Project is exempt from the Certificate of Need requirements. However, information regarding the need for the Project is presented in Section 3.3.

2.4 Routing Permit and Partial Exemption

Minnesota Statutes Section 216G.02, subd. 4 requires that the Commission issue a pipeline Routing Permit for qualifying pipelines prior to construction, which applies to the Project. Xcel Energy is complying with the

2.0 Statement of Ownership and Regulatory Requirements

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Applicant:

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Xcel Energy
401 Nicollet Mall
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Timothy G. Rogers
Manager, Siting and Land Rights
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Phone: (612) 330-1955
Email: timothy.g.rogers@xcelenergy.com

Applicant Signature: _____ Date: _____

Authorized Signature: _____ Date: _____

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provisions of the permitting process outlined in Minnesota Rules Chapter 7852 for a natural gas pipeline routing permit under its partial exemption procedures (Minnesota Rules Chapter 7852.0600) for the Project.

3.0 Project Information

3.1 Project Location

The Project is located within the cities of Burnsville and Eagan in T27N, R23W, Section 19 and T27N, R24W, Sections 23, 24, 25 in Dakota County, Minnesota. The proposed pipeline will extend north from NNG Cedar Station in Eagan then crossing under Old Sibley Memorial Highway. The route parallels Old Sibley Memorial Highway within road right-of-way towards the south and west for approximately 1500 feet before turning west where it then extends approximately 450 feet crossing under to the west side of Minnesota State Highway 13 (Sibley Memorial Highway). The route then turns southwest and parallels the western edge of the southbound lane of Minnesota State Highway 13, again within road right-of-way, and traverses approximately 3,350 feet (0.64 miles), crossing under Cedar Bridge Avenue and River Hills Drive, before reaching an existing utility corridor. The route then turns to the northwest for approximately 1.0 mile to its terminus at the Black Dog Generating Plant. The route in this section is located entirely on land owned by the City of Burnsville or NSP. This route is illustrated on U.S. Geological Survey (USGS) topographical map and aerial photographic coverage on **Figures 1 and 2**, respectively.

3.2 Project Proposal

The proposed natural gas pipeline project will supply natural gas to the existing Black Dog Generating Plant. Xcel Energy recently applied to the Minnesota Public Utilities Commission (MPUC) for approval to construct a 215 MW simple-cycle natural gas fired generating facility at the existing facility. The Site Permit Xcel Energy is seeking approval for has been assigned Docket No. E002/GS-15-834.

3.3 Need for Project

Xcel Energy has proposed the project to meet the need of supplying natural gas to the Black Dog Generating Plant in order to convert the facility from coal-fired electrical generators to a gas-fired facility which is being permitted separately under the Black Dog Unit 6 Project, docket # E002/GS-15-834. The existing CenterPoint Energy pipeline, which currently supplies natural gas to the Black Dog Generating Plant, is only capable of providing up to 400 psig to the plant, which was adequate for the existing Unit 5 gas-fired turbine, but does not meet the minimum 550 psig needed to meet the needs of the new Unit 6 gas-fired turbine.

3.4 Project Schedule

Xcel Energy anticipates beginning construction of the Project in the spring of 2017 following its acquisition of all required regulatory permits and approvals. **Table 2** provides an estimated permitting and construction schedule summary.

Table 2—Estimated Project Schedule

Project Task	Date
File Routing Permit Application with the Commission	August 18, 2016
Anticipated Routing Permit Issuance	December 2016
Begin Pipeline Construction	Spring 2017
In-Service Date	October 1, 2017

The Project schedule has been compiled based on information known as of the filing date and planning assumptions that consider the timing of implementation with the availability of crews and materials and with other practical considerations. This schedule is subject to revision as Project details are further developed.

3.5 Project Cost

Applicants estimate the overall cost of the proposed improvements fall within a range of $5.0 and $5.4 million. This range of costs accounts for considerations related to labor, materials, and varying construction conditions. Estimated costs are shown in **Table 3** below.

Operation and maintenance costs for the Project will be nominal for several years, since the line will be new and vegetation maintenance within the route corridor will occur prior to construction. The principal operation and maintenance cost will include inspections on a regular basis (typically quarterly and annually). The annual operating and maintenance cost for the Black Dog natural gas pipeline is expected to be $10,000 per year.

Table 3 Project Costs

Project Component	Estimated Cost
Planning / Permitting / Design	$775,000
Procurement	$1,000,000
Construction	$3,600,000
Close Out	Included Above
Total	**$5,375,000**

4.0 Facility Description

4.1 General Design and Operational Specifications

The proposed Project will include the installation of approximately 11,300 feet (2.2 miles) of 16 inch nominal diameter pipeline from the NNG Cedar Station in Eagan to Xcel Energy's Black Dog Generating Plant in Burnsville (**Figures 1 and 2**). The Maximum Allowable Operating Pressure (MAOP) for the proposed pipeline will be 740 pounds per square inch gauge (psig) and an operating pressure of 650 psig will be established by the company metering the natural gas (Northern Natural Gas). The wall thickness and pipe grade will be established in part by pipe availability with a minimum nominal wall thickness of 0.375 inch. The pipeline will be buried to a depth of at least four feet to the top of the pipe.

4.2 Pipeline Design Specifications

The United States Department of Transportation (U.S. DOT), Title 49 Code of Federal Regulations (CFR), Part 192, defines minimum federal safety standards for construction, operation and maintenance of natural gas pipelines. Xcel Energy will comply with these standards while constructing, operating and maintaining the proposed pipeline. Enforcement of pipeline safety regulations is under the jurisdiction of the Minnesota Office of Pipeline Safety (MNOPS). Anticipated design specifications are:

A. Pipe size (outside diameter): 16.000 inches.
B. Pipe type: The pipe installed will meet the most recent edition of API 5L PSL 2 Specifications for Line Pipe and is proposed to be seamless and/or Electrical Resistance Welded (ERW).
C. Nominal wall thickness (in inches): A minimum of 0.375-inch wall thickness will be used for line pipe.
D. Pipe Design Factor: The pipe will meet or exceed a design factor of 0.5.
E. Longitudinal or Seam Joint Factor: 1.0 pipe will be seamless or electric resistance welded.
F. Class location and requirements (where applicable): pursuant to 49 CFR 192.5, the pipeline will be designed to a minimum of a Class 3 location.[1]
G. Specified minimum yield strength (SMYS): A minimum SMYS of 52,000 psig is anticipated to be used, based on current pipeline design.
H. Anticipated tensile strength: 66,000 psig minimum.

4.3 Operating Pressure

A. Proposed operating pressure: 650 psig.
B. MAOP: 740 psig in accordance with 49 CFR Part 192.105.

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[1] Class locations are designated by the number of buildings intended for human occupancy within 660 feet of either side of the pipeline centerline. The following criteria apply to classifications under 49 CFR 192.5:

1) Class 1: 0-10 buildings
2) Class 2: 10-45 buildings
3) Class 3: 46 or more buildings or an area where the pipeline lies within 100 yards (300 feet) of either a building or a small, well-defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period.
4) Class 4: Any class location unit where buildings with four or more stories above ground are prevalent.

4.4 Description of Associated Facilities

Xcel Energy will also install associated facilities as part of the proposed Project (valves and flanges, an in-line inspection tool launcher and receiver, cathodic protection, alternating current mitigation, and gas delivery station.). Pipeline markers will be installed at various locations (e.g., road crossings) in accordance with applicable federal and state regulations. The following briefly describes each associated facility.

4.4.1 Gas Delivery Station

Xcel Energy will install a gas delivery station within the existing fence at the NNG Cedar Station. The gas delivery station will contain all required valves, odorization equipment, an in-line inspection tool launcher/receiver, and necessary equipment required for custody transfer of gas.

4.4.2 Launcher and Receiver

Xcel Energy will design and construct the new pipeline to accommodate the passage of in-line inspection tools as required by 49 CFR Part 192.150. Above-ground appurtenances, called a launcher and receiver, will be installed to facilitate the passage of the in-line inspection tools. One launcher/receiver will be installed at the NNG Cedar Station and one will be installed at the Black Dog Generating Plant.

4.4.3 Valves and Flanges

Ball and/or plug valves (ANSI 300) and flanges will be installed at the metering facility of the NNG Cedar Station (gas delivery station) and at the Black Dog Generating Plant. The design, construction, testing and marking of the valves will comply with the requirements of 49 CFR Part 192.145 and Part 192.147.

4.4.4 Cathodic Protection

A cathodic protection system will be installed to prevent corrosion on the pipeline. The cathodic protection system will consist of a distributed sacrificial anode system or an impressed current system. The exact location of facilities will be determined at the time of final design by a cathodic protection specialist. The cathodic protection system will be designed in accordance with 49 CFR Part 192, Subpart I.

4.4.5 Alternating Current Mitigation

Along some portions of the proposed pipeline it is in close proximity to high voltage electric transmission lines that could potentially result in Alternating Current (AC) interference effects. Xcel Energy will contract with a firm that specializes in the evaluation and mitigation of AC interference to minimize the risk of hazardous touch and step potentials, as well as risks associated with power line fault conditions and AC corrosion. AC mitigation procedures will be implemented during construction, and measures will be permanently installed, as required, following appropriate evaluations in accordance with 49 CFR Part 192, Subpart G, and NACE Standard Practice 0177: Mitigation of Alternating Current and Lightning Effects on Metallic Structures and Corrosion Control Systems. Following construction, these measures will be appropriately tested and a monitoring program will be implemented to ensure continued proper function.

4.5 Product Capacity Information

The planned minimum design capacity of the Project is 55,584 decatherms (Dth) per day. The maximum design requirement of this system is approximately 168,864 Dth per day.

4.6 Product Description

The proposed pipeline will carry natural gas (methane) from the Northern Natural Gas system to the Black Dog Generating Plant. Natural gas is a non-hazardous, but highly flammable substance.

4.7 Material Safety Data Sheets

Material Safety Data Sheets for natural gas are enclosed in **Appendix A**.

5.0 Proposed Route and Selection Process

Minnesota Rules, Chapter 7852.0100, Subpart 31, defines "route" as the proposed location of a pipeline between two end points. A route may have a variable width from the minimum required for the pipeline right-of-way up to 1.25 miles. In developing the proposed pipeline route, Xcel Energy evaluated the statutory and rule criteria (Minnesota Statutes Chapter 216G and Minnesota Rules Chapter 7852).

The general vicinity of the Project was initially studied during the planning process by a team of siting, right-of-way, planning, environmental, ecological, and engineering personnel. Xcel Energy also reviewed the adjacent neighborhoods, public and commercial areas to help identify anticipated and significant routing issues that might arise.

As demonstrated in this Application, Xcel Energy has also performed an analysis of environmental resources in the vicinity of the Project by conducting field reconnaissance, and using Geographical Information Systems (GIS) data and aerial photographs and topographic maps. The proposed pipeline route is designed to best minimize overall impacts of the Project while still fulfilling the needs of Xcel Energy.

The proposed pipeline route was developed with the following primary objectives:

- minimize land use impacts by routing along existing roads and utility rights-of-way;
- minimize use of new rights-of-way; and
- minimize impacts on human, environmental, and sensitive resources.

5.1 Route Considerations

Potential routes are evaluated in an attempt to reduce the creation of new impacts by locating the pipeline adjacent to existing rights-of-way. Paralleling or sharing existing utility and transportation rights-of-way is a method for minimizing impacts to humans and the environment, which is a standard for route selection (MN Rules 7852.1900 Subp. 2).

Xcel Energy initially considered two possible routes between the NNG Cedar Station and the Black Dog Generating Plant: a northern route which went generally northwest from the NNG Cedar station until crossing under the railroad tracks then paralleling the tracks and the Met Council sewer pipeline to the southwest (see Other Evaluated Route on **Figure 3**), and a southern route which generally followed Old Sibley Memorial Highway and Highway 13 before turning northwest at the transmission line corridor toward the Black Dog Generating Plant. The northern route would have crossed lands owned by the Minnesota Department of Natural Resources (DNR) and the US Fish and Wildlife Service (USFWS) before reaching the railroad at which point it would be located on land owned by NSP Minnesota and managed as part of the Minnesota Valley National Wildlife Refuge. However after meeting with USFWS staff it was determined that it would not be possible to acquire the necessary rights to cross National Wildlife Refuge land to reach NSPM land. The USFWS does not consider a new pipeline to be an appropriate use within the National Wildlife Refuge system and therefore would not be able to approve a new right-of-way crossing. Therefore, this route was eliminated from consideration. In addition to the issue with crossing USFWS land, this route had the disadvantages of crossing a significant amount of wetland area, involving above ground work within the 100 year floodplain and having a significant segment of the total length which did not parallel existing utility or transportation rights-of-way.

5.1.1 Proposed Route between NNG Cedar Station and Black Dog Generating Plant

Based on evaluation of existing infrastructure, discussions with the Cities of Eagan and Burnsville, the MN DNR, the USFWS and the Minnesota Department of Transportation as well as feedback from landowners Xcel Energy has developed the proposed route and anticipated alignment. The anticipated alignment minimizes impacts to private properties by placing the pipeline primarily within road right-of-way or on land owned by the City of Burnsville and NSP. Approximately 88% of this proposed alignment parallels existing rights-of-way. Xcel Energy is requesting a variable route width as described below, and shown in **Figure 3**, which accommodates this alignment while allowing for minor changes based on detailed engineering, geotechnical analysis and survey results for existing infrastructure.

- **NNG Cedar Station to Highway 13, Approximately 2,500 feet**: The route includes the Cedar Station footprint then extends northwest to Old Sibley Memorial Highway. The anticipated alignment follows the north side of Old Sibley Memorial Highway within road right-of-way, however, the proposed route width is extended further to the northwest in this area to accommodate a possible alignment paralleling an existing natural gas pipeline owned by CenterPoint Energy which runs along the property lines on the north side of the road (**Figure 4.1**).

- **Highway 13 to Electric Transmission Line Corridor, Approximately 3,200 fee**t: The proposed route includes the Highway 13 road right-of-way. The width of the proposed route is approximately 225 feet for the majority of this segment, but becomes wider at the northeast end where the highway curves to the north and expands to approximately 550 feet in width. The anticipated alignment will be on the northwest side of the highway (**Figure 4.1 and 4.2**).

- **Electric Transmission Corridor from Highway 13 to Union Pacific Railroad, Approximately 4,000 feet**: The proposed route in this segment is located entirely on land owned by the City of Burnsville. The anticipated alignment runs generally down the center of the proposed route through this portion, however, the precise location will be determined based on proximity to existing storm sewer and electric transmission lines and more detailed engineering (**Figure 4.2 – 4.4**).

- **Union Pacific Railroad to Black Dog Generating Plant, Approximately 1,600 feet**: The proposed route angles slightly more to the north as it heads to the end point at the Black Dog Generating Plant. This segment of the pipeline will be directionally drilled beneath the railroad and Black Dog Lake (beginning at the top of the bluff southeast of the RR, see **Figure 5** Construction Corridor) before resurfacing and connecting to the regulation facility at the plant (**Figure 4.4**).

Detail on temporary and permanent right-of-way is included in section 6.0 Land Requirements.

6.0 Land Requirements

Pursuant to Minnesota Rules Chapter 7852.2300, the following provides a brief description of:

1) Permanent right-of-way length, estimated width, and estimated acreage;
2) Temporary right-of-way length, estimated width, and estimated acreage;
3) Estimated trench dimensions including bottom width, top width, depth, and cubic yards of soil excavated;
4) Minimum depth of cover for state and federal requirements; and
5) Rights-of-way sharing or paralleling.

The land requirements for the Project include permanent rights-of-way, which are the permanent rights needed for accommodation of the pipeline and ongoing operation and maintenance, and temporary rights-of-way, which are those rights needed temporarily during construction of the Project. These temporary rights-of-way, often also referred to as the construction corridors, are typically wider than permanent rights and allow for construction vehicle access and staging of pipe prior to installation. Xcel Energy will coordinate closely with landowners and agencies to obtain all necessary land rights. **Table 4** lists the land requirements for the proposed Project.

6.1 Permanent Rights-of-Way

On private and city owned lands permanent rights-of-way will be acquired in the form of permanent easements. On these lands Xcel Energy will seek to acquire easements approximately 40 feet in width for ongoing operation and maintenance of the pipeline. In the electric transmission line corridor on Burnsville land there are currently transmission line easements which will overlap with the new pipeline easement. Because those existing easements do not currently allow for adding a natural gas pipeline Xcel Energy will work with the city to acquire a new easement for the pipeline or modify the existing easements to add the pipeline. For those portions of the pipeline to be located within road rights-of-way the pipeline will be permitted under a Utility Accommodation Permit for placing, constructing and reconstructing utilities within trunk highway right-of-way. The DOT does not allow easements within road right-of-way and the Utility Accommodation Permit does not define a width of "right-of-way", as an easement does. However, for the purposes of quantifying land requirements in this section we have used 40 feet as the width of permanent right-of-way for the full 11,300 feet of the pipeline length (on DOT right-of-way in addition to on private and city-owned lands).

Permanent associated aboveground facilities will be installed at the beginning and end of the proposed pipeline within existing facilities at the Black Dog Generating Plant and the NNG Cedar Station. Assuming a 40 foot wide right-of-way for the entire 11,300 feet of pipeline results in a maximum of 10.37 acres of new permanent right-of-way for the proposed Project.

6.2 Temporary Rights-of-Way

The Project will also require a wider temporary right-of-way, or construction corridor, during construction of the pipeline to allow for equipment access and laying out the pipe. This temporary right-of-way may extend up to 100 feet wide along approximately 3,321 linear feet of the existing electric transmission line corridor on the land owned by the City Burnsville to facilitate safe construction. Where space allows an approximately 40 foot-wide temporary right-of-way will be sought along roadways, however along Old Sibley Memorial Highway the distance between the road and the edge of road right-of-way is not adequate to accommodate the full 40 feet and a narrower temporary right-of-way will be necessary. As described above for permanent rights-of-way all temporary space for construction within road right of way will be approved under the Utility Accommodation Permit rather than through temporary easements.

Over a length of 11,300 feet, the temporary construction right-of-way will impact approximately 14.92 acres. This figure includes an approximately 3,450 linear feet of right-of-way that will be directionally drilled under Black Dog Lake.

Table 4 - Land Requirements

Facility Type	Length (feet)	Width (feet)	Land Requirements (acres)
PIPELINE FACILITIES			
Permanent Right-of-Way	11,300	40	10.37
Temporary Right-of-Way (includes permanent right-of-way)	3,321	100	7.60
Temporary Right-of-Way (includes permanent right-of-way and directional drill)	7,979	40	7.32
ABOVEGROUND FACILITIES[2]			
Gas Delivery/Meter Station			0.11
Regulation Facility			0.10

6.3 Additional Temporary Workspace

Xcel Energy does not anticipate that the Project will require additional temporary workspaces.

6.4 Associated Aboveground Facilities

In addition to installing the pipeline, associated aboveground facilities will be installed at the NNG Cedar Station, where the proposed pipeline will be receiving the natural gas and at the Black Dog Generating Plant at the terminus of the proposed pipeline (see Section 4.4). Because these facilities are located within existing fenced and graveled areas, they will not change existing land uses.

6.5 Pipe Trench Dimensions

The depth of the trench will generally be five to six feet deep. Allowing for a nominal 16-inch-outside-diameter pipe, the top of the pipe will be approximately four feet below the ground surface. The bottom of the pipe trench will be approximately three feet wide and the top of the trench approximately five feet wide. In addition to trenching in some locations the pipe will be installed by using directional drilling, thereby reducing the estimated total trench length by approximately 3,450 feet. There will be approximately 7,850 feet of trench excavation, amounting to approximately 3,000 cubic yards of soil excavated from the proposed pipe trench.

6.6 Minimum Depth of Cover – State and Federal Standards

Xcel Energy proposes to bury the pipe to four feet below the surface in accordance with U.S. DOT pipeline standards (49 CFR, Part 192.327).

6.7 Rights-of-Way Sharing or Collocation

Of the 11,300 feet crossed by the proposed pipeline, 3,960 feet are collocated with existing high voltage electric power line rights-of-way amounting to approximately 36 percent of the lands crossed. Approximately 5,200 feet are co-located with existing road right-of-way (**Figure 6**). The purpose of co-locating the pipeline with existing rights-of-way is to reduce the impact to current and future land uses and to minimize human and environmental impacts.

6.8 Access Roads

Xcel Energy intends to use existing roads to access the construction right-of-way. Roads that are paved will not require modification. Some minor grading and leveling may be required along the electric transmission line corridor to ensure safe access for construction equipment. No wetlands will be filled for construction of access roads.

6.9 Contractor Staging Yard/Pipe Storage Yard

The locations of the yard(s) and pipe unloading area have not yet been deemed necessary. Xcel Energy will obtain any federal, state and/or local permits and/or approvals required for relevant activities at the yard(s) if needed.

6.10 Right-of-Way Evaluation and Acquisition

This project will require approximately 11,300 feet of right-of-way; much of it collocated with existing infrastructure. Xcel Energy will work with the City of Burnsville, the City of Eagan, the MN Department of Transportation and any other affected landowners to determine temporary and permanent rights-of-way needed to construct and operate this pipeline. The evaluation and acquisition process for easements includes title examination, initial owner contacts, survey work, document preparation, and purchase.

6.11 Design Options to Accommodate Future Expansion

The proposed gas pipeline is designed to meet foreseeable natural gas supply needs for the plant.

7.0 Right-of-Way Preparation Procedures and Construction Activity Sequence

The right-of-way preparation procedures and construction sequence for the proposed Project will generally proceed in the order of the activities listed below.

7.1 Survey and Staking of the Right-of-Way

Xcel Energy will conduct a centerline survey to accurately depict the location and layout of the pipeline, followed by staking of the pipeline centerline. This survey will also identify the extent of temporary right-of-way or construction corridor. Prior to the commencement of any survey activities, all affected landowners will be contacted to obtain any necessary survey permission. In addition, Xcel Energy will comply with Minnesota Rules 7852.0600 regarding public notice and distribution of application materials.

7.2 Clearing and Grading

Preparation of the right-of-way is the initial step in the construction of the Project. Clearing and grading will commence along the right-of-way after the centerline survey and staking has been completed. Clearing of the right-of-way will take place in accordance with all permit conditions, as well as agreed upon landowner considerations. Clearing of vegetation and obstacles will be limited to the extent necessary to allow safe and effective use of construction equipment. Stumps will only be removed when necessitated by pipeline installation (e.g., trenching) or at landowner's request. Debris created from preparation of the right-of-way will be disposed of at a licensed facility, mulched or otherwise handled using methods approved by the landowner and in accordance with applicable regulations. Fences encountered during construction will be cut and braced on each side of the right-of-way to prevent damage to the remaining fence. Temporary gates will be installed as needed to prohibit public access to the right-of-way during construction.

Following clearing activities, grading will be conducted as necessary in certain areas to create level working surfaces across the right-of-way in order to allow for the safe operation and travel of equipment. After construction is completed, graded areas will be restored as close as possible to pre-construction contours.

Prior to any ground-disturbing activities, notification will be provided to the Minnesota Gopher State One-Call as required to ensure all utilities are properly identified. All other safety procedures will be adhered to as required by the Minnesota Office of Pipeline Safety, Xcel Energy safety procedures, and worker safety regulations.

7.3 Trenching

The trench will be excavated by track-mounted backhoes, or other similar equipment to a depth that provides sufficient cover over the pipeline after backfilling as required by U.S. DOT specifications. Due to the size of the pipe (16.00-inch-outside-diameter), the trench will be approximately five to six feet deep (to allow for about four feet of cover) and about five feet wide at the top of the trench.

During periods of excessive precipitation or where high water tables are encountered, the excavated trench may collect water and may need to be dewatered. Heavily silt-laden water will not be discharged from the trench into wetlands or waterbodies. To the extent practicable, discharges will be directed to well-vegetated upland areas. If discharge activities need to be located off the right-of-way, landowner consent will be obtained and locations will be chosen that will minimize off-right-of-way impacts and impacts to sensitive resources. In accordance with agency permits and approvals obtained for the Project, water will be discharged into an energy dissipating device if necessary (e.g., straw bale structure, filter bag, etc.).

The pipeline will cross Minnesota Highway 13 and the Union Pacific Railroad. These features will be crossed by directionally drilling beneath them which requires the excavation of a pit on each side of the feature, the

placement of drilling equipment adjacent to the pit, then directionally drilling a hole under the feature at least as large as the diameter of the pipe. The size of the pits will vary depending on the topography at the location of each. Pit sizes can range from an area of 10 x 20 feet up to an area 25 x 50 feet in some locations. All pits will be located in-line with the pipeline within the right-of-way. Once the hole is drilled, a prefabricated pipe section will be pulled through the borehole. For long crossings, sections may be welded onto the pipe string just before being pulled through the borehole. There will be little or no disruption to traffic at road or railroad crossings that are directionally drilled.

7.4 Padding Ditch Bottom

If areas of rock are encountered during trenching, padding material such as finer grain sand, soil, or gravel will be placed in the bottom of the trench to protect the pipeline during backfilling activities. No topsoil will be used as padding material.

7.5 Pipe Stringing

After the pipe trench is excavated, sections of externally coated pipe up to 40 feet long (also referred to as joints) will be transported to the construction right-of-way by truck and strung along the side of the trench using side-boom tractors or other equipment in preparation for subsequent bending and welding operations.

7.6 Bending

After the joints of pipe are strung along the trench and before the sections of pipe are joined together by welding, individual sections of the pipe may be bent by using a track-mounted, hydraulic pipe-bending machine to tailor the shape of the pipe to conform to the contours of the terrain. Sections of pipe that require multiple or complex bends may be pre-fabricated off-site.

7.7 Line-up and Welding

After the pipe ends are sufficiently cleaned and bending activities have been completed, the pipe joints are lined up and welded together until the joints are securely joined. Welding will be completed by pre-qualified welders in accordance with American Petroleum Institute (API) 1104, the code for "Welding of Pipelines and Related Facilities." Welders will comply with the welding procedures that have been developed and tested to the detailed national industry standards and pipeline regulations. All welds are required to exhibit the same structural integrity with respect to strength and ductility.

7.8 Radiographic Examination of Welds and Weld Coating

Each weld will be inspected by qualified welding inspectors to determine the weld integrity. U.S. DOT regulations require nondestructive testing of all welds in areas such as inside railroad or public road rights-of-way and in certain other areas. Radiographic examination is a nondestructive method of inspecting the inner structure of welds and determining the presence of defects. Contractors specializing in radiographic examination will perform the inspections to ensure structural integrity. Welds that do not meet established specifications will be repaired or replaced with a weld that meets U.S. DOT standards. Once the welds are approved, a protective coating will be applied to the welded joints.

7.9 Inspection and Repair of Coating

The U.S. DOT requires buried pipelines to have an acceptable protective coating. The pipe is typically coated with a mill-applied fusion-bonded epoxy prior to delivery in order to protect against corrosion. Directionally drilled pipe will be dual-coated and construction field welds will be coated in the field with an approved material that is compatible with the mill-applied coating. The entire coating will be inspected and any defects

in the coating will be field-repaired. After this coating is inspected, the pipe will be ready to be lowered into the trench.

7.10 Lowering In and Backfilling

The pipeline will be lowered into the trench after the trench is excavated and free of rocks and other debris that could damage the pipe or protective coating. Dewatering may be necessary to inspect the bottom of the trench in areas where water has accumulated. Trench dewatering activities will be performed in accordance with Minnesota Department of Natural Resources (MN DNR) Water Appropriation General Permit MN 1997-0005 and erosion control plans developed pursuant to the Minnesota Pollution Control Agency (MPCA) National Pollutant Discharge Elimination System (NPDES) Construction Storm Water Discharge Permit.

Trench breakers (stacked sand bags or polyurethane foam) will be installed in the trench as necessary to prevent subsurface water movement along the pipeline. The trench will then be backfilled using the material excavated from the trench. If the excavated material is rocky, the pipeline will be protected with a rock shield (fabric or screen that is wrapped around the pipe to protect the pipe and coating from damage by rocks, stones, roots, and other debris) or will be covered with a more suitable fill as described in Section 7.4.

7.11 Pressure Testing for Leaks

After backfilling, the pipeline will be hydrostatically tested to ensure the system is capable of withstanding the operating pressure for which it was designed. Test water will be pumped into each test section and pressurized to design test pressure. Test pressure and duration will be consistent with the requirements of Title 49 CFR Part 192. If leaks are found, they will be repaired and the section of pipe retested until the required specifications are met. Activities associated with hydrostatic testing will be performed in accordance with applicable federal, state, and local regulations.

7.12 Cleanup and Restoration

Clean-up and restoration of the right-of-way is the final phase of pipeline construction and typically begins immediately after backfilling, or as soon as weather and soil conditions allow. The right-of-way will be cleaned up by the removal and disposal of construction debris and surplus materials. Construction debris will be taken to a licensed disposal facility.

Restoration efforts may involve soil decompaction, smoothing with disc harrows or other equipment, stabilization using erosion control devices, and revegetation activities. Preconstruction contours will be reestablished to the extent possible. Permanent slope breakers will be installed as necessary; and seed, fertilizer and mulch will be applied in accordance with requests of the landowner and applicable federal, state, and local permits and approvals obtained for the Project. Xcel Energy will work with the DOT and the City of Burnsville Natural Resources Department and Parks Department to develop a restoration plan.

Xcel Energy may use both herbicides and/or mechanical methods to control the spread of noxious weeds. All herbicides used by Xcel Energy are approved by the U.S. Environmental Protection Agency and the Minnesota Department of Agriculture. These herbicides are applied by commercial pesticide applicators that are licensed by the Minnesota Department of Agriculture. If, during post-construction monitoring of the restored right-of-way, a higher density and cover of noxious weeds on the right-of-way is noted when compared to adjacent off right-of-way areas, Xcel Energy will obtain landowner permission and work to mitigate noxious weed concerns.

8.0 Operation and Maintenance

Xcel Energy will own and operate the pipeline under the jurisdiction of the U.S. DOT Pipeline and Hazardous Materials Safety Administration (PHMSA), the MN Public Utilities Commission (MPUC), and MN Office of Pipeline Safety (MNOPS). The minimum Federal Safety Standards for Gas Lines are contained in Title 49 of the Code of Federal Regulations (49 CFR Part 192). Subpart L (Operations) specifies minimum requirements for the utility's operations and maintenance plan. Under these rules, Xcel Energy is required to have the following:

- operation and maintenance plan;
- procedures for continuing surveillance of its facilities to determine and take appropriate action concerning changes in class location, failures, leakage history, corrosion, substantial changes in cathodic protection requirements, and other unusual operation and maintenance conditions;
- damage prevention programs;
- emergency plans; and
- procedures for investigation of failures.

The purpose of the regulations defined in 49 CFR Part 192, Minimum Federal Safety Standards, is to ensure safe operation of pipeline and associated facilities. The safety standards in Part 192 require each pipeline operator to:

- develop an emergency plan, working with local fire departments and other agencies to identify personnel to be contacted, equipment to be mobilized, and procedures to be followed to respond to a hazardous condition caused by the pipeline or associated facilities;
- establish and maintain a liaison with the appropriate fire, police, and public officials in order to coordinate mutual assistance when responding to emergencies;
- establish a continuing education program to enable customers, the public, government officials, and those engaged in excavation activities to recognize a natural gas pipeline emergency and report it to appropriate public officials;
- use only qualified personnel to operate and maintain the pipeline in accordance with an approved Operator Qualification Plan;
- have, maintain and implement a Pipeline Integrity Management Plan for gas pipelines in High Consequence Areas (HCA); and
- ensure that personnel working on these facilities are part of a random drug and alcohol testing program.

All personnel involved with operation and maintenance responsibilities for the pipeline facilities will be certified under an Operator Qualification Plan and will participate in a Drug and Alcohol Program in compliance with the U.S. DOT regulations.

Xcel Energy has a Gas Operations and Maintenance plan which details all aspects of operating distribution systems and gas pipelines and filed with the MNOPS upon completion. A brief description of the operations activities required for the Project is provided below.

8.1 Patrolling and Leak Surveys

The pipeline will be monitored periodically to determine and take appropriate action concerning changes in class locations (annually), gas leakage (semi-annually), erosion (quarterly), cathodic protection requirements (monthly), and other conditions affecting safe pipeline operation in accordance with 49 CFR Part 192.

8.2 Natural Gas Pipeline Markers

Natural gas pipeline markers will be installed and maintained over the buried pipeline at road crossings, railroad crossings and points along the pipeline such that a marker is visible from any point along the corridor to identify the location of the pipeline facilities, reducing the risk of inadvertent third-party damage or interference. The markers will identify the owner of the pipeline and convey emergency information in accordance with applicable governmental regulations, including U.S. DOT safety requirements.

8.3 Corrosion Control

The gas pipeline will be externally coated and cathodically protected to prevent corrosion as required by 49 CFR Part 192, Subpart I—Requirements for Corrosion Control (192.451 through 192.491). The coating is applied by the manufacturer prior to the pipe arriving on site. Cathodic protection devices will be installed by construction crews as the pipe is installed.

8.4 Pipeline Valves

Pipeline valves may consist of main line valves, blow off valves, flow control valves, lateral line valves, station valves, and various appurtenances that may require isolation for maintenance. Each valve that may be needed for the safe operation of the proposed pipeline will be checked and serviced as required by applicable regulations. Each valve shall be secured with a locking device to prevent operation by unauthorized personnel. Two valves will be installed at the gas delivery station and one at the regulation site near the Black Dog Generation Plant.

8.5 Record Keeping and Maps

Records and maps are maintained and updated to indicate the location and identification of all primary components of the pipeline system. Project alignment sheets and other system maps are provided to public agencies to assist in identifying the presence of the pipeline and/or in preparing for potential emergencies.

8.6 Safety Considerations

Safety is of prime importance for employees and contractors who will be operating and maintaining the pipeline system, and also for the general public. Safety code compliance is achieved through adherence to 49 CFR Part 192 as defined by the U.S. DOT.

General Safety Procedures:

- Strict adherence to Operations and Maintenance Plans;
- the pipeline MAOP is assured through the use of over pressure protection equipment;
- company signs, with emergency numbers, are posted along the pipeline;
- ignition sources are minimized;
- smoking will be prohibited in and around any structure or area containing gas facilities;
- "No Smoking" signs are posted where appropriate; and

- Above ground facilities will be painted or coated to prevent atmospheric corrosion.

8.7 Emergency Response

Federal rules require pipeline companies to prepare a procedural manual for operations, maintenance, and emergency plans. The State Fire Marshall has the authority to inspect the proposed pipeline (Minnesota Statutes Section 299F.63) to ensure compliance with safety requirements pursuant to Minnesota Statutes Section 299F.57. Xcel Energy follows a manual of written procedures for conducting normal operations and maintenance activities and handling abnormal operations and emergencies. The emergency plans include procedures for:

- receiving, identifying, and classifying notices of events which require immediate response by the operator;
- establishing and maintaining adequate means of communication with appropriate fire, police, and other public officials;
- prompt and effective response to a notice of each type of emergency;
- the availability of personnel, equipment, tools and material, as needed at the scene of an emergency;
- actions directed toward protecting people first, followed by property;
- emergency shutdown and pressure reduction in any section of the operator's pipeline system necessary to minimize hazards to life or property;
- making safe any actual or potential hazard to life or property;
- notifying appropriate fire, police, and other public officials of gas pipeline emergencies and coordinating with them planned responses and actual responses during emergencies;
- safely restoring any service outage; and
- training of personnel and liaison with appropriate fire, police and other public officials and continuing public education programs.

8.8 Pipeline Integrity Management Program

Xcel Energy has a Pipeline Transmission Integrity Management Program to maintain safety and integrity of pipeline systems. The program ensures that the operational integrity of Xcel Energy's natural gas pipeline system meets the requirements as detailed in 49 CFR Part 192, Subpart O, and any supplemental state regulatory requirements related to pipeline integrity.

8.9 Training

Xcel Energy has an Operator Qualification Program that will be implemented in accordance with 49 CFR Part 192, Subpart N. The program provides training, testing and record keeping for individuals performing operating or maintenance tasks on pipelines or tasks that affect the operation or integrity of the proposed pipeline.

8.10 Public Awareness Program

Xcel Energy has a public awareness program which is in accordance with federal safety standards and API RP 1162. A successful public awareness program will increase the safety and security of the proposed pipeline facilities. The program will raise public awareness of company facilities, increase the public's understanding

of the role of pipelines in transporting energy, inform the public how to recognize and respond to a pipeline emergency, notify the public who to contact in the event of an emergency, and stress the importance of using the state's one-call system before excavating.

8.11 One-Call

Xcel Energy is committed to pipeline safety and is a member of the Gopher State One-Call program. The purpose of the One-Call notification center is to reduce third-party damage to underground facilities.

9.0 Environmental Setting and Project Impacts

This section discusses the environmental setting of the Project and the potential impacts that may be incurred. The Project area as used in this section refers to the land within the proposed route as well as lands directly adjacent to the route that may be impacted by construction of the Project.

Land cover describes the type of observed physical cover on the earth's surface including natural and man-made features. Land cover data for the proposed route is illustrated on **Figure 7**. **Table 5** presents land cover classifications within the proposed pipeline route and anticipated alignment. The land cover categories located within the project route are primarily developed, with the four categories of Developed (High Intensity, Medium Intensity, Low Intensity, and Open Space) accounting for 88 percent of the land proposed pipeline route. These land cover categories are primarily associated with Minnesota Highway 13, Old Sibley Memorial Highway, the electric transmission line right-of-way, and Black Dog Generating Plant. The Deciduous Forest and Open Water categories are associated with lands within the Minnesota Valley National Wildlife Refuge and will not be impacted by construction activities as this area is proposed to be directionally drilled.

Table 5—Proposed Pipeline Route Land Cover

	Proposed Pipeline Route and Right-of-Way		Anticipated Allignment	
Land Cover Category	*Acres*	*Percent*	*Acres*	*Percent*
Barren Land	0.55	0.7%	0.00	0.0%
Developed, High Intensity	4.89	6.4%	0.11	1.0%
Developed, Medium Intensity	14.72	19.3%	1.39	13.4%
Developed, Low Intensity	15.32	20.1%	2.02	19.5%
Developed, Open Space	32.19	42.2%	5.61	54.2%
Deciduous Forest	3.83	5.0%	0.53	5.1%
Open Water	4.70	6.2%	0.71	6.8%
Totals:	**76.2**	**100.0%**	**10.37**	**100.0%**

Based on 2011 NLCD data

9.1 Natural Environment

9.1.1 Geology

The proposed pipeline overlies an area where the surficial geology is dominated by till and mixed outwash deposited by glaciation during the Pleistocene epoch (Hobbs, Aronow and Patterson 1990). The terrain has minimum relief owing to the degree of urban development that typifies the area. Elevation along the proposed pipeline ranges from 700 - 880 feet above mean sea level. No special construction techniques are expected to be necessary since the trenching for pipeline installation will be within the unconsolidated glacial drift. The limited shallow excavation of the trench will not have a significant effect on geology.

9.1.2 Soils

Potential temporary impacts to soils resulting from construction of the Project include soil erosion, soil compaction, loss of soil productivity associated with mixing of topsoil, introduction of rock into the topsoil, and poor revegetation following construction. In order to protect topsoil resources topsoil segregation procedures will be used as required in areas specified by applicable regulations, permit conditions or landowner requests. An erosion control plan will be developed pursuant to the MPCA NPDES Construction Storm Water Discharge Permit. Temporary erosion controls will include slope breakers, mulching, and the use of silt fence. Following construction, application of seed, fertilizer and mulch will commence in accordance with any existing permit requirements or landowner agreements. Inspector(s) will be used to ensure contractor compliance with these procedures.

9.1.3 Water Resources

Surface Waters

The Project is located within the Lower Minnesota River watershed within the Minnesota River Basin. A watershed is defined as the entire physical area or basin drained by a distinct stream or riverine system, physically separated from other watersheds by ridgetop boundaries. No surface waters will be impacted by the Project, including those listed on the MN DNR's Public Waters Inventory (PWI). The Project will directionally drill under Black Dog Lake, which is a PWI basin. Xcel Energy will coordinate with MN DNR to obtain a Public Water Crossing License for crossing this water feature. **Figure 8** illustrates waterbodies and wetlands that were identified and discussed in this section.

Wetlands

Wetland areas were initially identified using National Wetlands Inventory (NWI) data to assess wetlands that may be present within the proposed pipeline route. There were no NWI wetlands identified during the desktop review. Merjent, Inc., on behalf of Xcel Energy, conducted a wetland delineation within the anticipated alignment. Two palustrine emergent (PEM) wetlands were identified, both in the electric transmission line right-of-way (**Figure 9**).

Table 6—Proposed Pipeline Wetland Cover

	Anticipated Alignment	
Wetland Category	*Acres*	*Percent*
PEM	0.38	27.3%
L2U	0.49	35.3%
PFO	0.28	20.1%
PSS	0.24	17.3%
Totals:	**1.39**	**100.0%**

The U.S. Army Corps of Engineers (COE) and the City of Burnsville regulate construction activities in wetlands. Xcel Energy will submit the wetland delineation report to COE and Burnsville and coordinate impacts and potential mitigation as appropriate.

Groundwater

Construction of the proposed pipeline may cause a minor short-term impact on shallow groundwater if locally present, but is not expected to affect overall groundwater recharge in the area. Shallow groundwater is not a major source of drinking water in the area. The pipeline trench will be approximately five to six feet deep and will not intersect any drinking water aquifers. The proposed Project will not require the installation or abandonment of any water wells or connection to or changes in any public water supply. A single abandoned and sealed well was found within 200 feet of the proposed pipeline alignment using the County Well Index database that is maintained by the Minnesota Departments of Health and Natural Resources (MDH, 2016). The abandoned well is located near the western edge of the property at 11008 27th Ave South and was sealed in December 2013 (**Figure 9**).

Construction equipment could cause compaction of organic and mineral soils, resulting in locally reduced water infiltration rates. Potential short-term construction impacts to surficial aquifers may include increased temporary turbidity from excavation, short-term disruption of recharge and localized flow along the pipeline trench. Pipeline construction, operation, and maintenance activities are not expected to have long-term impacts on groundwater resources.

Accidental equipment spills or leaks of fuel or oils could contaminate soil and groundwater. Contaminated soils could continue to leach pollutants to the groundwater for an extended period after the spill or leak. A Spill Prevention Containment and Countermeasure Plan (SPCC Plan) will be developed and implemented during construction to manage equipment spills or leaks should they occur.

Floodplain

The 100-year floodplain is defined as the land that is predicted to flood during a 100-year storm, which has a 1% chance of occurring in any given year. The proposed pipeline route crosses a 100-year floodplain associated with the Minnesota River and Black Dog Lake. However, construction of the pipeline will not impact the floodplain as this portion of the proposed alignment will be installed via directional drilling. The City of Burnsville has confirmed that if above ground work is not proposed within the floodplain, a Conditional Use Permit will not be required. The City will require a FEMA Elevation Certificate and No Rise Certificate and "as-constructed" plans be submitted post-construction.

9.1.4 Biological Resources

Flora

Vegetation clearing and tree cutting will occur along the pipeline construction right-of-way. Permanent impacts to vegetation associated with construction of the proposed pipeline will primarily include the clearing and maintenance of trees along the permanent right-of-way.

Impacts to vegetation adjacent to the right-of-way will be minimized by restricting construction activities to only the approved work areas. After construction is complete vegetation will be reestablished by applying seed, mulch, and fertilizer mixtures specified by permit conditions, land managing agencies, and/or landowners. During operation of the pipeline, the permanent right-of-way will be maintained by mechanically clearing trees and shrubs about once every three to five years to maintain accessibility of the pipeline and to accommodate inspection and potential maintenance of the pipeline.

Fauna

The proposed route is characterized by urban and suburban development containing both wooded and open areas which provide habitat for a variety of wildlife. Wildlife typically found in the area are those species which have adapted to urban and suburban development and include white-tailed deer, coyotes, fox,

raccoons, beaver, opossum, woodchucks, squirrels, muskrats, and a variety of owl and other raptor species, including osprey, red-shouldered hawks, and bald eagles.

Construction of the proposed facilities will likely result in temporary impacts to wildlife habitat in the immediate vicinity of the construction areas. Vegetation clearing will result in reduced cover, nesting and foraging habitat for some wildlife. Wildlife-friendly erosion control matting will be used in any areas where erosion control matting is needed to stabilize soils. Specifications of the wildlife-friendly erosion control measures are presented in **Appendix E**. The proposed construction will temporarily displace mobile avian, mammal, amphibian and reptile species that inhabit the Project area. The displaced species will likely colonize in nearby areas or reestablish their original habitats after construction activities are complete and the construction site is restored.

Long-term effects to wildlife are expected to be limited to occasional displacement or impact to individual animals due to future periodic clearing of the permanent right-of-way to maintain the vegetative cover in an herbaceous state. Vegetation maintenance of the right-of-way will comply with any wildlife timing windows if specified by natural resource agencies. Construction and maintenance of the proposed pipeline will not significantly alter the character of the landscape in the Project area. Consequently, effects to wildlife will likely be short-term and the habitat disturbed by project-related activities is expected to generally revert back to preconstruction conditions. If soil conditions and topographic features allow, restoration efforts may include the introduction of pollinator plants. Xcel Energy will work with the City of Burnsville Natural Resources Department and Parks Department to the applicability of such a plan.

Threatened and Endangered Species

Xcel Energy reviewed the most recent MN DNR Natural Heritage Information System (NHIS) database to obtain the locations of rare and unique natural resources within the Project area. Queries to the NHIS database often display species that either do not have a legal status or are of special concern. Species or communities that do not have a status, or are classified as special concern, have no legal protection in Minnesota. Only potential impacts on species with legal protection (threatened and endangered) are discussed below.

Given the developed nature of the Project area, there will not be impacts to rare or significant tree communities (*e.g.,* old growth forest, federal/state-managed timber, *etc.*).

Two federally-endangered mussel species - the Higgins eye pearlymussel (*Lampsilis higginsii*) and the snuffbox mussel (Epioblasma triquetra) - may be found in waters in the vicinity of the Project. The federally-threatened northern long-eared bat *(Myotis septentrionalis*) and the federally-threatened prairie bush-clover (*Lespedeza leptostachya*) are also known to occur in Dakota County and may be present in the Project area.

The Higgins eye pearlymussel is a freshwater mussel of larger rivers where it is typically found in deep water with moderate currents. The animals bury themselves in sand and gravel river bottoms with just the edge of their partially opened shells exposed; the species feeds by siphoning the water for microorganisms. In Minnesota, the Higgins eye is found in the Mississippi and St. Croix Rivers, and is believed to be extirpated from the Minnesota River. Project activities will not take place within the Minnesota River, and Black Dog Lake will be crossed via directional drilling. As such, it is reasonable to conclude that the Project will have no effect on the Higgins eye pearlymussel.

The snuffbox mussel is a small freshwater mussel primarily found in small- to medium-sized creeks in areas with a swift current, although it has also been found in larger rivers and Lake Erie. Adults often burrow deep in sand, gravel or cobble substrates, except when they are spawning or the females are attempting to attract host fish. They are suspension feeders, typically feeding on algae, bacteria, detritus, microscopic animals, and dissolved organic material. Project activities will not take place within the Minnesota River, and Black Dog

Lake will be crossed via directional drilling. As such, it is reasonable to conclude that the Project will have no effect on the snuffbox mussel.

The range of the northern long-eared bat (NLEB) stretches across much of the eastern and Midwestern United States. During summer, northern long-eared bats roost singly or in colonies under bark, in cavities, or in crevices of both live and dead trees. Males and non-reproductive females may also roost in cooler places such as caves and mines. This species is thought to be opportunistic in selecting roosts, utilizing tree species based on the tree's ability to retain bark or provide cavities or crevices. It has also been found, rarely, roosting in structures such as barns and sheds. In winter, northern long-eared bats utilize caves and mines as hibernacula. The NLEB was listed as a federally threatened species in May, 2015, with an interim 4(d) rule; effective February 16, 2016, the USFWS finalized the 4(d) rule which restricts tree clearing within 0.25 miles of a hibernacula and within 150 feet of a known maternal roost tree during the months of June and July. A 4(d) rule may only be applied to species listed as threatened, and is a tool periodically utilized by the USFWS to allow for flexibility in Endangered Species Act (ESA) implementation. The rule allows the USFWS to tailor take restrictions to those that make the most sense for protecting and managing at-risk species, and directs the USFWS to issue regulations considered "necessary and advisable to provide for the conservation of threatened species."

The NHIS review confirmed the absence of known hibernacula within 0.25 miles and the absence of known roost trees within 150 feet from the Project. Scheduling tree clearing activities to take place between November 1 and March 31 (e.g., when bats are hibernating and not present on the landscape) greatly reduces impacts to NLEB. However, if tree clearing activities will take place after March 31, 2016, Xcel would rely on the programmatic Biological Opinion developed by USFWS on January 5, 2016 to fulfill the Section 7 consultation for this species. Therefore, we believe the Project may affect, but incidental take is not prohibited for the northern long-eared bat.

Prairie bush clover is found only in the tallgrass prairie region of four Midwestern states. It is a member of the bean family and a Midwestern "endemic" – known only from the tallgrass prairie region of the upper Mississippi River Valley. The Project area is located in a suburban housing development. Therefore, we believe the Project will have no effect on the prairie bush clover.

A query of the Natural Heritage Inventory System database was conducted to determine if any state-listed species or other significant natural features are known to occur within an approximate one-mile radius of the proposed Project. No Element Occurrences (EOs) intersect the Project workspace. Xcel Energy has submitted a request for concurrence of a finding of No Impacts to Protected Species to the MN DNR; to date, that response is forthcoming.

Four element occurrences (EOs) for calcareous fens are found within one mile of the Route (**Figure 10**). Calcareous fens are distinctive wetlands characterized by a non-acidic peat substrate. They are dependent upon a steady supply of cold, oxygen-poor water rich in magnesium and calcium bicarbonates. They are legally protected in Minnesota due to their rarity and their ability to support a number of rare plant species[2]. Calcareous fens are designated as "outstanding resource value waters" in water quality regulations administered by the Minnesota Pollution Control Agency (MPCA) (see Minnesota Rules part 7050.0180) and they are given special protection through Minnesota Rules part 8420.1010 - 8240.1060. The Wetlands Conservation Act, authorized by Minnesota Statutes 103G.223, states that calcareous fens may not be filled, drained, or otherwise degraded, wholly or partially, by any activity, except as provided for in a management plan approved by the Commissioner of the MN DNR. Many of the unique characteristics of calcareous fens result from the upwelling of groundwater through calcareous substrates. Because of their dependence on

[2] MNDNR 2015. Calcareous Fen Fact Sheet. Available at: http://www.bwsr.state.mn.us/wetlands/Calc_fen-factsheet.pdf

delicate groundwater hydrology, calcareous fens can be indirectly affected by activities away from the fen. The Project does not intersect the fens and is located primarily within previously disturbed corridors, and therefore, will have no impact on these ecological resources.

Three additional EOs for natural communities are within one mile of the Project: a southern wet ash swamp, a seepage meadow/carr, and black ash seepage swamp (**Figure 10**). The Project does not intersect these EOs, and as such, will have no impact on these ecological resources.

Three fish species have one EO each within one mile of the Project (**Figure 10**). The paddlefish (*Polyodon spathula*), the black buffalo (*Ictiobus niger*), and the pugnose shiner (*Notropis anogenus*) are state-listed threatened species. Paddlefish are found in the open waters of large rivers and river lakes (such as Lake Pepin and Lake St. Croix), oxbow lakes, and backwaters. They have been associated with areas of deep water and low current velocities (Zigler et al. 2003). Paddlefish feed primarily on zooplankton (Becker 1983), and require free-flowing rivers with gravel bars that are inundated in spring floods for spawning. The black buffalo is found both fast- and slow-flowing portions of rivers, as well as in sloughs and impoundments, and (Hatch et al. in preparation). Little is known regarding the life history of the species in Minnesota, but the black buffalo is thought to have similar habits to smallmouth and bigmouth buffaloes. The black buffalo however, tends to occupy deeper water and areas of faster moving currents than the latter two species. The black buffalo's diet includes mollusks, insects, crayfish, duckweed, and algae, and typically spawns from April to mid-June (Becker 1983). The pugnose shiner is found primarily in clear, glacial lakes and streams with an abundance of submerged vegetation. They live in habitats with slow velocity currents over sand, mud, or gravel substrates, and are commonly found in pondweed (*Potamogeton* spp.), water milfoil (*Myriophyllum* spp.), elodea (*Elodea* spp.), eelgrass (*Verbascum blattaria*), coontail (*Ceratophyllum* spp.), bulrush (*Scirpus* spp.), muskgrass (*Chara* spp.), and filamentous algae. The presence of rooted aquatic plants seems more important to this species than substrate type (Hatch et al. in preparation). No in-water work will be performed for the Project, and Black Dog Lake will be crossed via directional drilling. Therefore, we believe the Project will have no impact on these fish species.

Records for five state-threatened plant species were identified within one mile of the Project: one record for sterile sedge (*Carex sterilis),* one record for hair-like beak rush (*Rhynchospora capillacea*), one record for whorled nutrush (*Scleria verticillata*), three records for edible valerian (*Valeriana edulis var. ciliate*), and one record for tuberous Indian-plantain (*Arnoglossum plantagineum*). Sterile sedge, hair-like beak rush, whorled nutrush, and edible valerian are associated with and found primarily in calcareous fens (**Figure 10**). The Project will not impact calcareous fens; therefore, impacts to these species are not expected. Tuberous Indian-plantain is largely restricted to native, moist prairies in the southern portion of Minnesota, although a few populations are found on dry soils in bluff prairies. These habitats are often found on old railroad rights-of-way. The Project will not impact prairie habitat, and railroad rights-of-way will be crossed via the directional drill associated with Black Dog Lake.

Since data collected on mussel species from 2008-2015 has not been added to the Rare Features Database, Xcel Energy also reviewed records from the Minnesota Statewide Mussel Survey. Multiple EOs for a variety of state-listed threatened and endangered mussels are found within one mile of the Project (**Figure 10**). No in-water work will be performed for the Project, and Black Dog Lake will be crossed via directional drilling. As such the Project will have no impact on these mussel species.

9.1.5 Noise

When in service, the proposed pipeline will not generate noise during normal operations. The Project will not include new compression facilities so there will not be exhaust or other noise sources that would be associated with compressor stations. Noise will be generated by the construction of the Project. Construction noise will be predominantly intermittent sources originating from diesel engine driven construction

equipment. Potential noise impacts will be mitigated by proper muffling equipment fitted to construction equipment and restricting activities if necessary.

9.1.6 Air Quality

Potential air quality effects related to pipeline construction facilities include fugitive dust emissions during construction, and exhaust emissions from construction equipment. Dust will be controlled through implementation of a stormwater pollution prevention plan (SWPPP) which will include control measures for exposed soils. These potential effects are considered to be relatively minor and of short duration. The pipeline by itself will not have any long-term impacts on air quality.

9.2 Human Environment

9.2.1 Land Use and Zoning

The Project traverses land that has undergone significant development, including commercial facilities as well as rights-of-way for road, pipeline, and electrical transmission lines. As illustrated in **Figure 7**, the portion of the proposed alignment within the City of Eagan is situated on land zoned as Business Park and Light Industrial. The portion of the proposed pipeline route within the City of Burnsville is situated on lands zoned as Neighborhood, General Business and Park. Land within the permanent and temporary rights-of-way, and workspace within the proposed aboveground facilities will be impacted during construction of the Project. The impact will be short-term, as the construction period, including restoration, is not expected to exceed 6-7 months. The primary permanent impact of construction will be the removal of trees and shrubs from the construction work area. Xcel Energy will develop a Vegetation Management Plan with input from the DNR, the DOT, and the cities of Burnsville and Eagan to address impacts to vegetation and potential restoration plantings. As referenced in Section 7.12, the permanent right-of-way will be maintained in an open condition consisting of primarily herbaceous or shrub communities to facilitate maintenance and inspection activities.

9.2.2 Recreational Areas

There is currently a bike trail paralleling Minnesota State Highway 13 which will be impacted during construction. Xcel Energy has an agreement with the City of Burnsville to replace the trail after construction is complete. The Project will also impact the City of Burnsville's Tennisioux Park, which overlaps the existing Xcel Energy single-circuit 115 kV and a double-circuit 345/345 kV electric transmission line corridor and is illustrated on **Figures 11 and 12**. The park does not currently have any amenities; however the City of Burnsville has requested that Xcel Energy construct a new 10 foot wide paved bike trail which would eventually connect the existing trail along Highway 13 to Black Dog Park. Xcel Energy will work with the City to facilitate construction of the trail. The proposed pipeline will also cross the Minnesota Valley National Wildlife Refuge; however, no impacts are expected because Xcel Energy will directionally drill underneath Refuge managed lands.

9.2.3 Cultural Resources

On behalf of Xcel Energy, Merjent, Inc. conducted a Phase Ia Background Cultural Resource Literature Review of the Project area as well as a one mile surrounding buffer in June of 2016 at the Minnesota State Historic Preservation Office ("SHPO") (see **Appendix C**). This area is defined as the Area of Potential Effect (APE) for the Project. The goal of the review was to identify recorded cultural resource sites and assess the potential for unrecorded sites within the APE. The standard for considering a cultural property as significant is whether it meets the criteria for listing on the National Register of Historic Places (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.

Two (2) previously recorded archaeological sites and one (1) previously inventoried historic structure within or proximal to the proposed Project route. Both archaeological sites are documented as human burial sites and are protected under Minnesota Statute 307.08. However, these sites are located external to the proposed Project route and will not be impacted by proposed construction activities. The inventoried structure is located south of the Project and will not be impacted by proposed construction activities. Based on the findings it was concluded that the Project will not affect properties listed on, or eligible for listing on, the National Register of Historic Places, and no known or suspected archaeological properties in the area will be affected by the Project. The assessment further recommended that no cultural resources field inventory be required. A letter report summarizing the findings has been submitted to the Minnesota State Historic Preservation Office (SHPO) requesting comments regarding the nature of future cultural resource investigations.

In the event that buried cultural deposits or human remains are encountered, work in the immediate vicinity of the find will be stopped until a professional archaeologist can evaluate the find and recommend treatment in consultation with the Minnesota State Historic Preservation Office.

9.2.4 Human Settlement

Economic benefits to the local economy will be realized during construction resulting from the influx of Project labor workforce. These benefits include material expenditures, workforce lodging, fuel sales, grocery sales and restaurant expenditures. Additional local benefits include easement payments, permit fees and property tax revenues.

The Project may result in short-term impacts to the human environment during pipeline construction activities. Impacts to existing roads would be minimized by installing the pipeline underneath these features through the use of the directionally drilling as described in Sections 4.1 and 6.4. These crossing methods will minimize traffic interruptions and prevent disturbance to the road and rail surfaces. If directional drilling is not successful, roads may be crossed by open-cut construction methods. In the event that a road is open-cut, traffic disruptions will be minimized if possible by maintaining one open lane of traffic except when the pipeline is being trenched and backfilled. Transportation of equipment and materials to the right-of-way could also result in minimal short-term impacts to traffic in the area. Xcel will obtain all necessary permits for road right-of-way crossings.

9.2.5 Public Health and Safety

Safety is a prime consideration for employees and contractors who will be operating and maintaining the pipeline system, and also for the general public. Safety code compliance is achieved through adherence to 49 CFR Part 192 as defined by the U.S. DOT. General safety procedures include:

- strict adherence to an operations and maintenance plan;
- the pipeline MAOP is assured through the use of over pressure protection equipment;
- company signs, with emergency numbers, are posted along the pipeline;
- ignition sources are minimized;
- smoking will be prohibited in and around any structure or area containing gas facilities;
- "no smoking" signs are posted where appropriate; and

- above ground facilities will be painted or coated to prevent atmospheric corrosion.

Xcel Energy will implement proper safeguards, as described in sections 7 and 8, during construction and operation to avoid potential impacts public health and safety. The Project will be designed in compliance with local, state, federal and Xcel Energy standards for, crossing utilities and buildings, strength of materials, and right-of-way widths. Xcel Energy will ensure that construction and contract crews comply with local, state, and company standards for installation of facilities and standard construction practices. Xcel Energy-established and industry safety procedures will also be followed after the gas transmission line is installed. This will include clear signage during all construction activities.

With implementation of safeguards and protective measures, the Project is not anticipated to result in adverse or significant impacts on public health and safety.

9.2.6 Public Services and Infrastructure

The proposed route runs adjacent to Sioux Trail Elementary School at the intersection of River Hills Drive and State Highway 13 (**Figure 12**). Additionally, there is one licensed family child care facility adjacent to the proposed route, which is located along the existing transmission line corridor. There are no libraries, police stations, fire stations, or hospitals along the proposed route.

Other infrastructure in the Project vicinity includes a natural gas line, existing high voltage transmission line, and Union Pacific railroad.

The Project is not anticipated to result in adverse or significant impacts on public services or infrastructure.

9.3 Land-Based Economics

9.3.1 Agriculture

The Project is not located in an agricultural area and, therefore, is not expected to impact agricultural lands.

9.3.2 Forestry

Based on property parcel data, no economically significant forestry resources are located within the proposed route (see **Figure 8**).

9.3.3 Tourism

The primary tourism activities in the county include camping, recreational use of lakes and rivers for fishing and boating, snowmobiling, bicycling, hiking, bird or wildlife viewing, or cross country skiing. Direct impacts on existing tourist attractions in the vicinity of the Project will be avoided because the proposed alignment will not cross these areas and it is collocated with existing road and utility rights-of-way for the majority of its length.

9.4 Cumulative Effects

Construction of the pipeline is not expected to have any direct effect on the cultural, historic or aesthetic values of the area. No significant changes in the vegetation, wildlife, wetlands, water quality, geology or soils are expected to result from the Project. The area presently has an existing natural gas pipeline, high voltage transmission lines, and municipal facilities. Installation of the pipeline will not significantly change land use patterns. Consequentially, the cumulative potential effect of the Project is expected to be minimal.

9.4.1 Unavoidable Impacts

Unavoidable impacts are those impacts that cannot be avoided if the Project is constructed. Construction of the proposed pipeline will have minimal unavoidable impacts. The Project will parallel existing road ROW for a majority of the proposed route. As discussed above, paralleling existing road ROW will avoid the direct impacts associated with constructing new transmission ROW.

Xcel Energy has analyzed the potential environmental effects from the proposed Project. It has been determined that no significant unavoidable impacts to protected species, water resources or other natural resources will result from construction of the proposed pipeline line.

The proposed Project route allows for the construction of the pipeline without impacts to homeowners. All wetlands and water bodies will be protected during construction. Upon the issuance of the Route Permit, Xcel Energy will continue to coordinate with state or federal agencies to ensure the Project complies with all applicable laws and regulations and minimizes impacts to the natural environment to the best extent practicable

9.4.2 Irreversible and Irretrievable Commitment of Resources

Irreversible and irretrievable resource commitments are related to the use of nonrenewable resources and the effects that the use of these resources have on future generations. Irreversible commitments of resources are those that result from the use or destruction of a specific resource that cannot be replaced within a reasonable time frame. Irretrievable resource commitments are those that result from the loss in value of a resource that cannot be restored after the action. The Project will require minimal commitments of resources that are irreversible and irretrievable.

Anticipated commitments expected are those related to construction activities and may include aggregate resources, steel, and hydrocarbon fuel. Vehicles employed during construction would be deployed on site and would travel to and from the Project. Other resources would be used in pipeline construction and other construction activities

9.5 Impact Mitigation by Regulatory and Permit Conditions

Potential negative human and environmental impacts, which could result from the Project, are mitigated by many factors. Several levels of federal, state, county and local governmental authorities have jurisdiction over the Project. Environmental jurisdictions include an overall Project permit and partial exemption determination from the MPUC; and permits and approvals by independent agencies charged with responsibility for management of environmental resources, discharge limitations, and restrictions on land use modification. A listing of each environmental permit required for the Project is found in Section 10.0 of this application. Engineering regulatory requirements include U.S. DOT Pipeline and Hazardous Materials Safety Administration (PHMSA) material specifications, pipeline construction and operational standards, and building permit standards. U.S. DOT PHMSA construction and operation requirements are discussed in Sections 4, 6, and 7 of this application. Additional protection is provided by on-site third party inspectors and agency oversight.

10.0 Agency Involvement, Public Participation, and Required Permits and Approvals

10.1 U.S. Fish and Wildlife Service

Xcel Energy sent a letter to the USFWS on June 29, 2016, requesting a review of the Proposed Route for federally listed threatened and endangered species. No response had been received by the time of this filing. If a response is received Xcel Energy will file that response in the Project docket.

10.2 Minnesota Department of Transportation

Xcel Energy reached out to DOT staff on May 9, 2016 to discuss the proposed pipeline and determine if there were any issues with locating the pipeline within road right-of-way along the anticipated alignment. Staff indicated that this would not be a problem. Project team staff also met with DOT staff in person to review the project in more detail on July 18, 2016. Staff confirmed that the proposed alignment would be acceptable to the DOT as long as the proposed pipeline does not impact other existing facilities within road right-of-way (fiber-optic cable, street and signal lignting) and an *Application for Utility Accommodation on Trunk Highway Right-of-Way* was filed.

10.3 Minnesota Department of Natural Resources

Xcel Energy sent letters to the MN DNR Natural Heritage and Nongame Research Program on June 29, 2016, requesting concurrence that the Proposed Route will not impact state threatened and endangered species and rare natural features. No response had been received by the time of this filing. When a response is received Xcel Energy will file that response on the Project docket.

10.4 Minnesota State Historic Preservation Office

Xcel Energy conducted a literature review of the Project and concluded that the Project will not affect sites that are eligible for or listed on the National Register of Historic Places. Further, no known or suspected archaeological sites will be affected. A letter report summarizing the findings was submitted to the Minnesota State Historic Preservation Office (SHPO) on August 5th, 2016, requesting a review of the Proposed Route for archaeological and historic cultural features. No response had been received by the time of this filing. When a response is received Xcel Energy will file that response on the Project docket.

10.5 Army Corps of Engineers

Xcel Energy sent a letter to the United States Army Corps of Engineers, St. Paul District (USACE) dated June 29, 2016, requesting comments on the proposed Project. No response had been received by the time of this filing. If a response is received Xcel Energy will file that response on the Project docket.

10.6 Dakota County, Cities of Burnsville and Eagan

On June 29, 2016 Xcel Energy sent letters to representatives of Dakota County and the cities of Burnsville and Eagan requesting comments on the proposed Project. In addition, Xcel Energy met with representatives from the Cities of Burnsville on March 22, May 5, and July 21, 2016 and Eagan on March 25, 2016 to introduce the Project The staffs were generally in favor of the need for the Project and requested to be updated on further Project developments and informed of any scope changes. Xcel Energy will continue working with local governments on the Project.

10.7 Identification of Landowners

A list of the landowners within and adjacent to the proposed route is included in Appendix C.1. Addresses have been redacted from the open house landowner sign-in list and comment forms due to privacy concerns. Landowner data was obtained from Dakota County GIS parcel information.

10.8 Public Participation

Xcel Energy held a public informational meeting at the Burnsville Community Center at 100 Civic Center Parkway in Burnsville, Minnesota on June 20, 2016, prior to developing this Application. This meeting was held to inform landowners and public officials of the proposed Project and solicit input to be used in route selection. A notice for the public informational meeting was published in the Sun Thisweek on June 9, 2016. A copy of the newspaper notice is included in **Appendix D.2**.

Approximately 20 people attended the informational meeting. A copy of the sign-in/attendance form is included in **Appendix D.3**.

Generally, public interest focused primarily on the construction schedule, timing, duration, and potential road closures for the Project. Four individual comment sheets were returned on the night of the open House and are provided in **Appendix D.3**.

A majority of the comments (3 of 4) related to construction impacts to either local access or length of construction activities. One commenter expressed concern that construction along Highway 13 would disrupt traffic and supported the idea of directionally drilling crossings. Two commenters expressed support of expedient construction schedules (constrained to a single summer or rapid construction).

The second most prevalent set of comments concerned vegetation cover and restoration efforts. Two commenters requested buckthorn abatement efforts be implemented along the route. Additional requests were made to include native prairie plants that support pollinator populations in the restoration efforts and to avoid disturbing areas that have previously been planted in native species.

Of issue for one of the commenters was a concern for the property values for homes along the proposed route. Other single issues concerned the potential to create new public pathways along the project route (i.e. bike/pedestrian paths), and the desire to be consistently informed about the project and the construction efforts. One comment voiced the desire that the utility structures along the route be painted.

While there were concerns about the project, no single commenter expressed opposition to the proposed project. One commenter expressed their support for the project and wished Xcel luck in completing the pipeline. Copies of the submitted comment letters are included in **Appendix D.3**. Following the public meeting Xcel Energy staff received a few phone calls and one letter regarding the Project from people who weren't able to attend the meeting. The questions primarily focused on construction timing and impacts, and when the precise alignment would be determined.

Xcel Energy has acknowledged these public comments and will follow-up with specific design and route information as it becomes available. The Applicants will continue to work with the public throughout the Project permitting process.

10.9 Required Permits and Approvals

Table 7 identifies federal, state, and local permits and approvals that could potentially be required for the Project.

Table 7 - Required Permits

Jurisdiction and Permit	Requirement
State	
MPUC, Pipeline Routing Permit	Required for any natural gas pipeline.
Minnesota DOT, Utility Permit	Required if placing utilities on or across a Minnesota trunk highway right-of-way.
MPCA, NPDES/SDS General Stormwater Permit for Construction Activity	Required under the NPDES/SDS General Stormwater Permit for Construction Activity where construction activities will cause more than one acre of ground disturbance.
Local	
Moving Permit (Hauling)	Required whenever legal dimensions and/or axle weights are exceeded per county regulations.
Oversize/Overweight Vehicle Permit	Required on all county highways. May be required to move over-width loads on county, township, or city roads.

11.0 References

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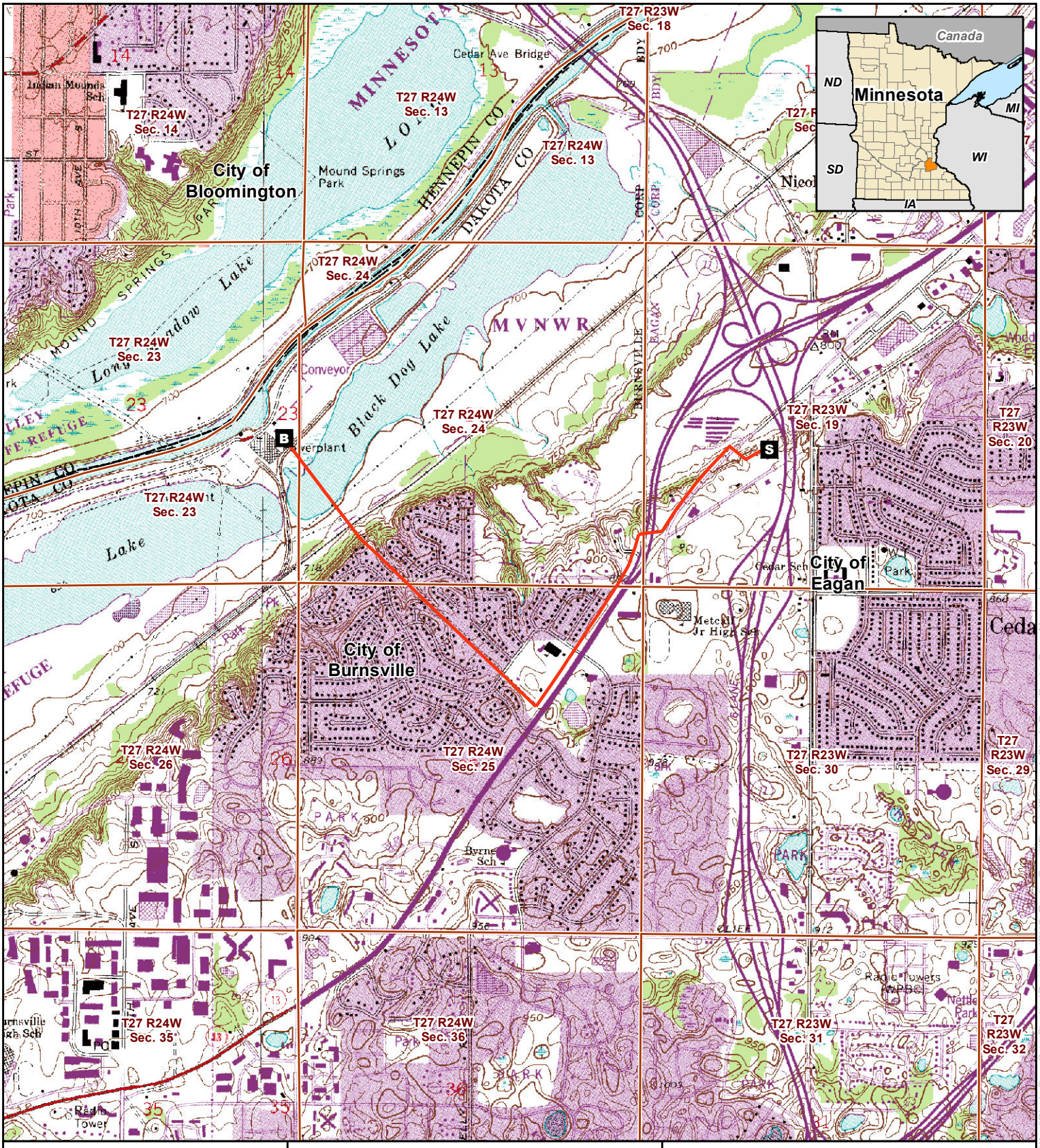
12.0 Acronyms

AC	Alternating Current
APE	Area of Potential Effect
API	American Petroleum Institute
COE	U.S. Army Corps of Engineers
DNR	Department of Natural Resources
DOT	Department of Transportation
ERW	Electrical Resistance Welded
FWS	U.S. Fish and Wildlife Service
HCA	High Consequence Area
MAOP	Maximum Allowable Operating Pressure
MN DNR	Minnesota Department of Natural Resources
MNOPS	Minnesota Office of Pipeline Safety
MPCA	Minnesota Pollution Control Agency
MPUC or Commission	Minnesota Public Utilities Commission
NHIS	Nature Heritage Information System
NPDES	National Pollutant Discharge Elimination System
NWI	National Wetlands Inventory
NSP	Northern States Powers Company
PHMSA	Pipeline and Hazardous Materials Safety Administration
Project	Black Dog Natural Gas Pipeline Project
psig	Pounds per square inch gauge
PWI	Public Waters Inventory
SHPO	State Historic Preservation Office
SMYS	Specified minimum yield strength
SPCC Plan	Spill Prevention Containment and Countermeasure Plan
U.S. DOT	United States Department of Transportation
USGS	U.S. Geological Survey

Figures



0 1,000 2,000 Feet

1 inch = 2,000 feet

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Figure 1
Topographic Map
Xcel Energy Black Dog Gas Pipeline Project

- B Black Dog Generation Plant
- S Cedar Station
- Proposed Pipeline
- City Boundary

Xcel Energy

For Environmental Review Purposes Only

Data Sources: Xcel, MN DOT, USGS

Data Source:

Source: Z:\Clients\U_XX\cen\Black_Dog_Gas_Pipeline\Permitting\PUC_Route_Permit\Figures\Figure_1_Black_Dog_Route_Topo_Map.mxd

Date: (6/6/2016)

0 600 1,200 Feet

1 inch = 1,200 feet

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Xcel Energy

For Environmental Review Purposes Only

Data Sources: Xcel, MN DOT, Dakota County & MNDNR

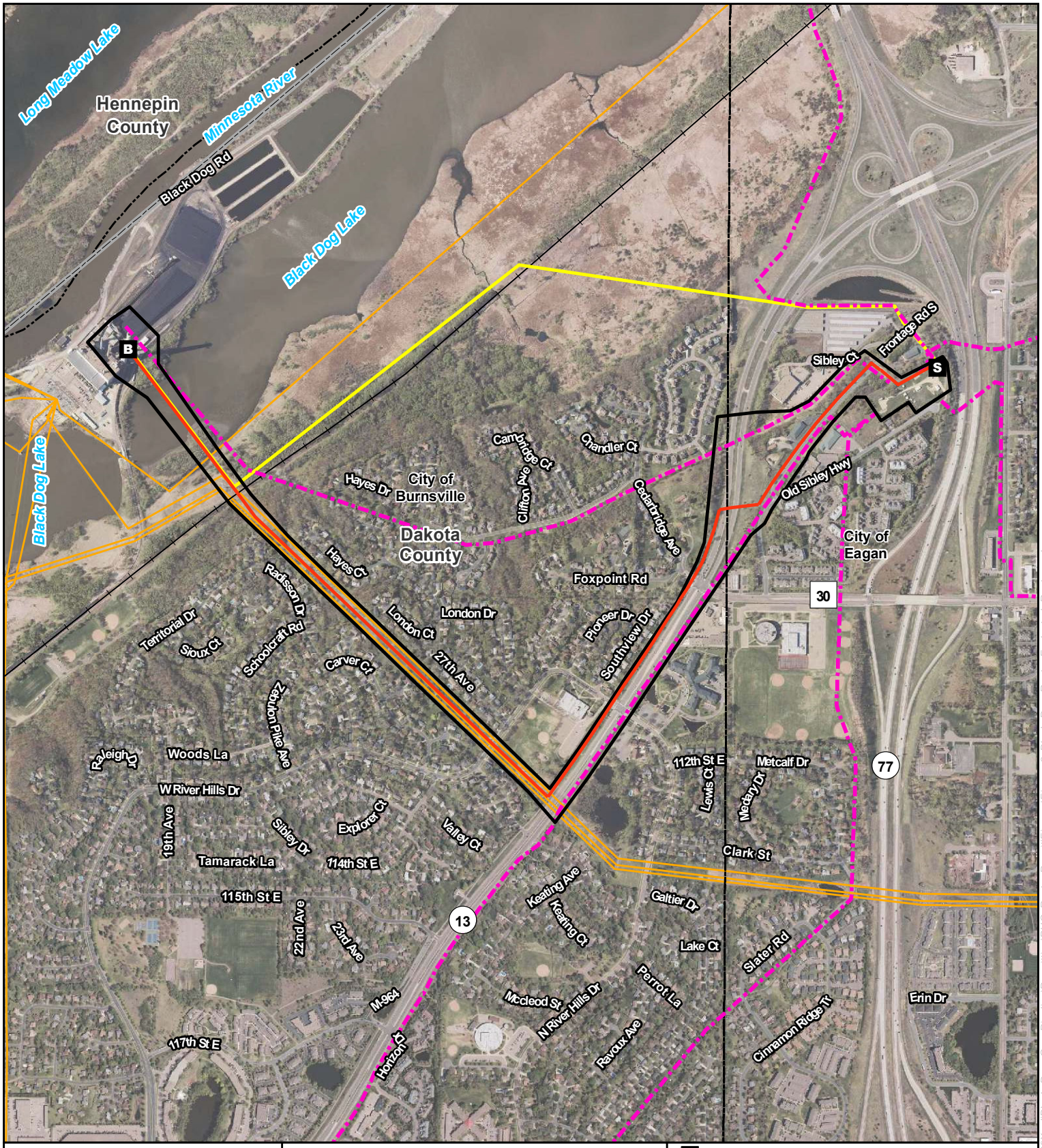
Imagery Sources: Twin Cities Metro Dakota County, 2013

Figure 2
Aerial Map
Xcel Energy Black Dog Gas Pipeline Project

- B Black Dog Generation Plant
- S Cedar Station
- Proposed Pipeline
- City Boundary

Source: Z:\Clients\U_X\Xcel\Black_Dog_Gas_Pipeline\Permitting\PUC_Route_Permit\Figures\Figure_2_Black_Dog_Route_Aerial_Map.mxd

Date: (6/7/2016)



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1 inch = 1,200 feet

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Data Sources: Xcel, MN DOT, Dakota County & MNDNR

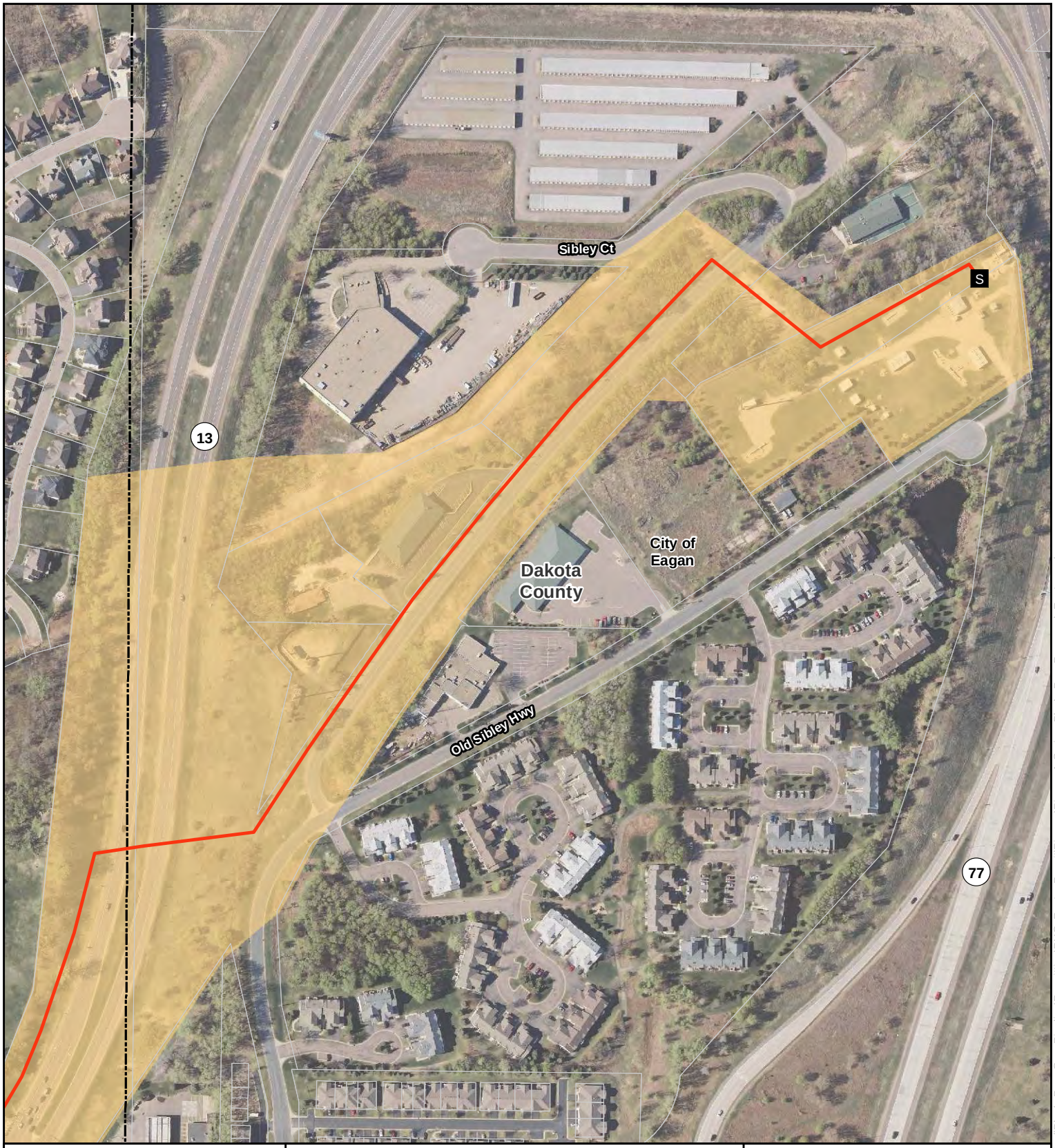
Imagery Sources: Twin Cities Metro Dakota County, 2013

Figure 3
Evaluated Routes
Xcel Energy Black Dog Gas Pipeline Project

- B Black Dog Generation Plant
- S Cedar Station
- Proposed Pipeline Route
- Proposed Pipeline Alignment
- Other Evaluated Alignment
- Existing Electric Transmission Line
- Existing Gas Pipeline

Source: Z:\Clients\U_A\Xcel\Black_Dog_Gas_Pipeline\Permitting\PUC_Route_Permit\Figures\Figure_3_Black_Dog_Route_Evaluated_Route.mxd

Date: (6/16/2016)



0 150 300 Feet

1 inch = 300 feet

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Xcel Energy

For Environmental Review Purposes Only

Data Sources: Xcel, MN DOT, Dakota County & MNDNR

Imagery Sources: Twin Cities Metro Dakota County, 2013

Figure 4.1
Proposed Route
Xcel Energy Black Dog
Gas Pipeline Project

- B Black Dog Generation Plant
- S Cedar Station
- Proposed Pipeline
- Proposed Pipeline Route
- Parcel Boundary
- City Boundary

Source: Z:\Clients\D_Xcel\Black_Dog_Gas_Pipeline\Permitting\PUC_Route_Permit\Figures\Figure_4_Series_Black_Dog_Proposed_Route.mxd

Date: (6/16/2016)

0 150 300 Feet

1 inch = 300 feet

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Xcel Energy

For Environmental Review Purposes Only

Data Sources: Xcel, MN DOT, Dakota County & MNDNR

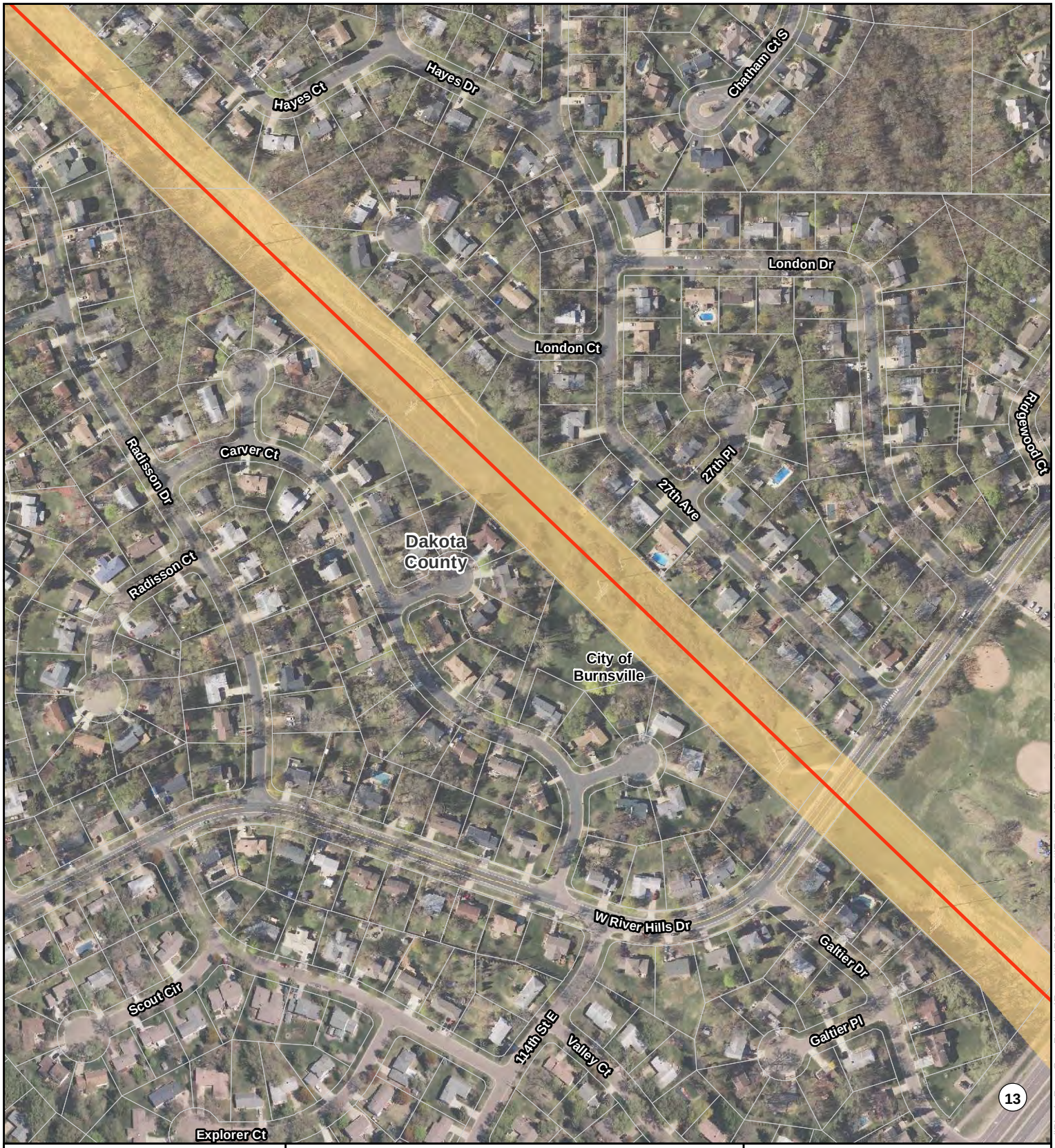
Imagery Sources: Twin Cities Metro Dakota County, 2013

Figure 4.2
Proposed Route
Xcel Energy Black Dog Gas Pipeline Project

- B Black Dog Generation Plant
- S Cedar Station
- Proposed Pipeline
- Proposed Pipeline Route
- Parcel Boundary
- City Boundary

Source: Z:\Clients\Xcel\Black_Dog_Gas_Pipeline\Permitting\PUC_Route_Permit\Figures\Figure_4_Series_Black_Dog_Proposed_Route.mxd

Date: (6/16/2016)



0 150 300 Feet

1 inch = 300 feet

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Xcel Energy

For Environmental Review Purposes Only

Data Sources: Xcel, MN DOT, Dakota County & MNDNR

Imagery Sources: Twin Cities Metro Dakota County, 2013

Figure 4.3
Proposed Route
Xcel Energy Black Dog Gas Pipeline Project

- B Black Dog Generation Plant
- S Cedar Station
- Proposed Pipeline
- Proposed Pipeline Route
- Parcel Boundary
- City Boundary

Source: Z:\Clients\Xcel\Black_Dog_Gas_Pipeline\Permitting\PUC_Route_Permit\Figures\Figure_4_Series_Black_Dog_Proposed_Route.mxd

Date: (6/16/2016)

0 150 300 Feet

1 inch = 300 feet

N

Xcel Energy

For Environmental Review Purposes Only

Data Sources: Xcel, MN DOT, Dakota County & MNDNR

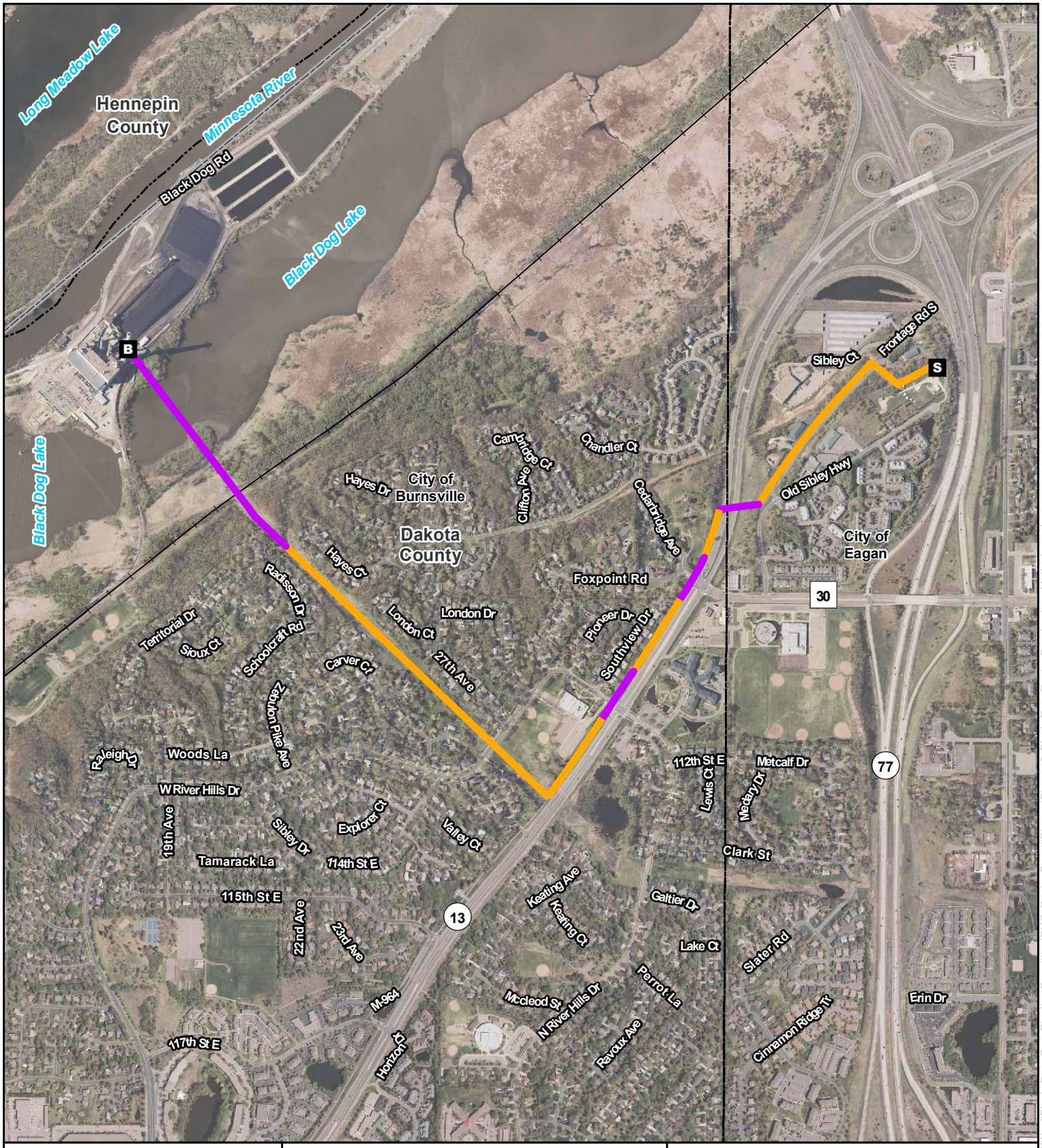
Imagery Sources: Twin Cities Metro Dakota County, 2013

Figure 4.4
Proposed Route
Xcel Energy Black Dog Gas Pipeline Project

- B Black Dog Generation Plant
- S Cedar Station
- Proposed Pipeline
- Proposed Pipeline Route
- Parcel Boundary
- City Boundary

Source: Z:\Clients\U_A\Xcel\Black_Dog_Gas_Pipeline\Permitting\PUC_Route_Permit\Figures\Figure_4_Series_Black_Dog_Proposed_Route.mxd

Date: (6/16/2016)



0 600 1,200 Feet

1 inch = 1,200 feet

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Xcel Energy®

For Environmental Review Purposes Only

Data Sources: Xcel, MN DOT, Dakota County & MNDNR

Imagery Sources: Twin Cities Metro Dakota County, 2013

Figure 5
Construction Methods
Xcel Energy Black Dog Gas Pipeline Project

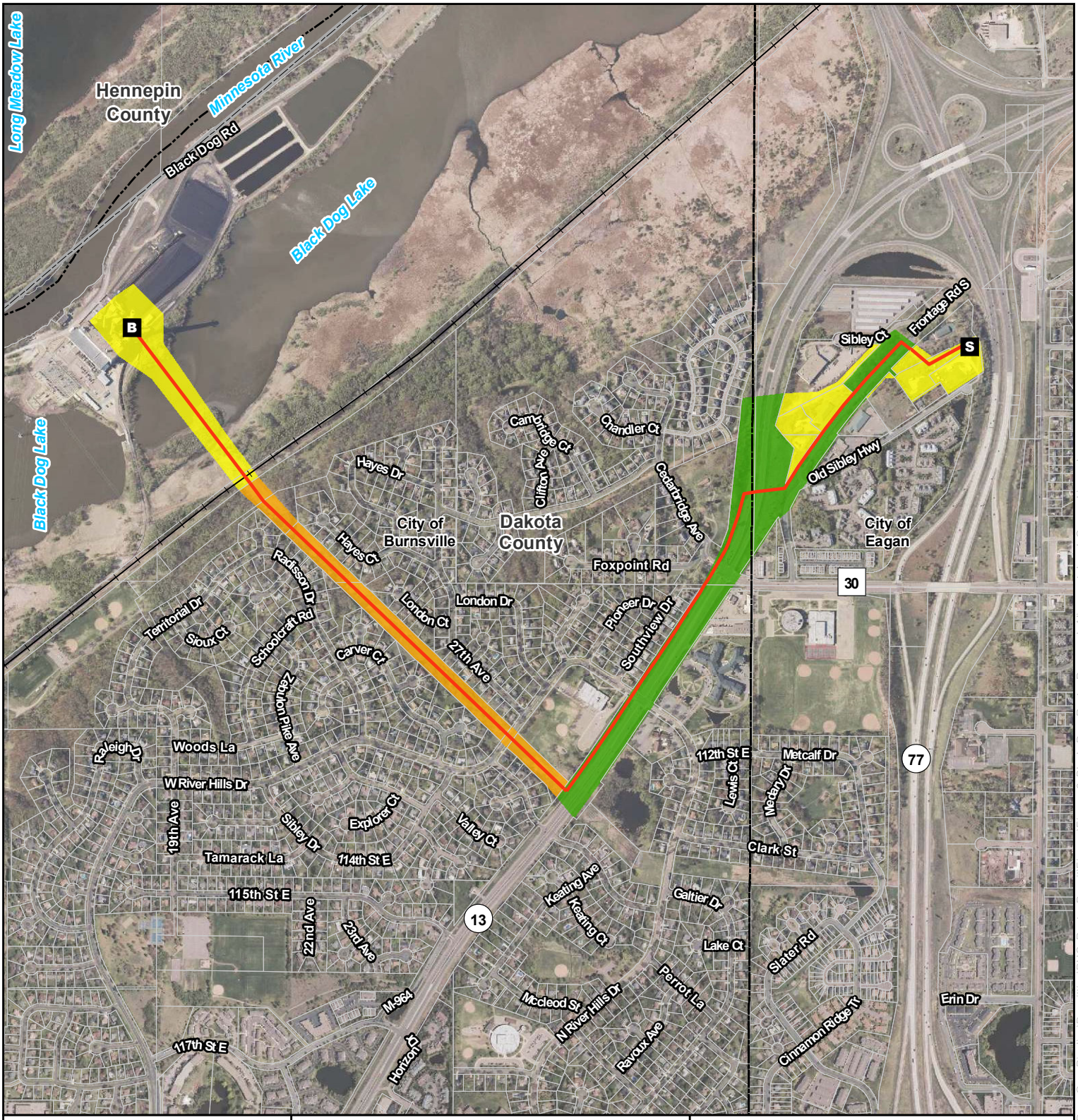
- B Black Dog Generation Plant
- S Cedar Station

Proposed Pipeline Alignment

- Directional Drill
- Trench
- City Boundary

Source: Z:\Clients\U_A\Xcel\Black_Dog_Gas_Pipeline\Permitting\PUC_Route_Permit\Figures\Figure_5_Black_Dog_Route_Construction_Methods.mxd

Date: (6/16/2016)



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1 inch = 1,200 feet

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For Environmental Review Purposes Only

Data Sources: Xcel, MN DOT, Dakota County & MNDNR

Imagery Sources: Twin Cities Metro Dakota County, 2013

Figure 6
Proposed Pipeline Alignment
Land Ownership
Xcel Energy Black Dog
Gas Pipeline Project

- B Black Dog Generation Plant
- S Cedar Station
- Proposed Pipeline Alignment

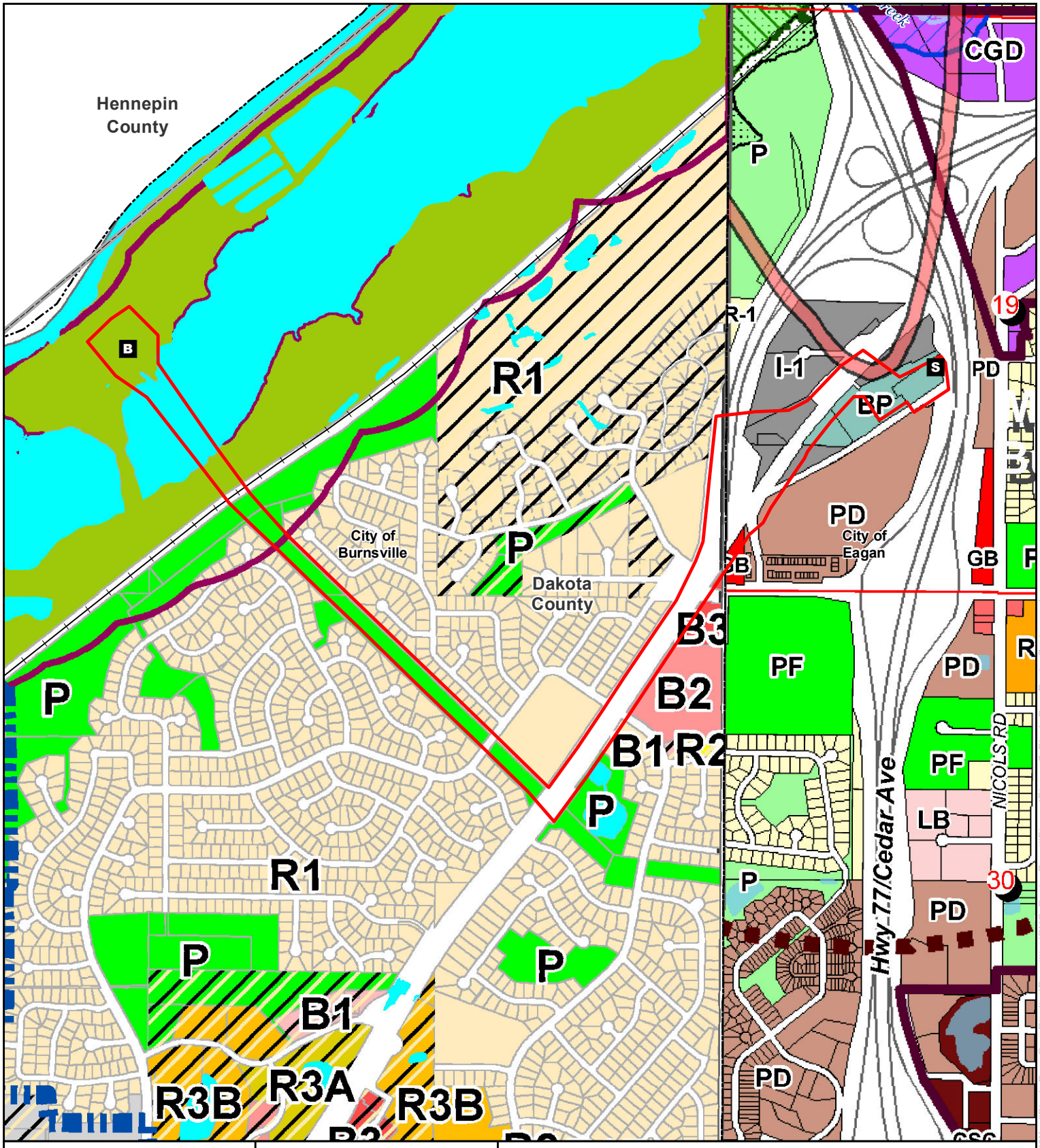
Proposed Pipeline Route

Land Ownership

- City Owned
- Private
- Road Right-of-Way
- Parcel Boundary

Source: Z:\Clients\U_A\Xcel\Black_Dog_Gas_Pipeline\Permitting\PUC_Route_Permit\Figures\Figure_6_Black_Dog_Route_Proposed_Alignment_Land_Ownership.mxd

Date: (6/16/2016)



0 600 1,200 Feet

1 inch = 1,200 feet

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Xcel Energy

For Environmental Review Purposes Only

Data Sources: Xcel, MN DOT, Dakota County & MNDNR

Imagery Sources: Twin Cities Metro Dakota County, 2013

Figure 7
Zoning
Xcel Energy Black Dog Gas Pipeline Project

- B Black Dog Generating Plant
- S Cedar Station
- Proposed Pipeline Route
- City Boundary

Burnsville Zoning

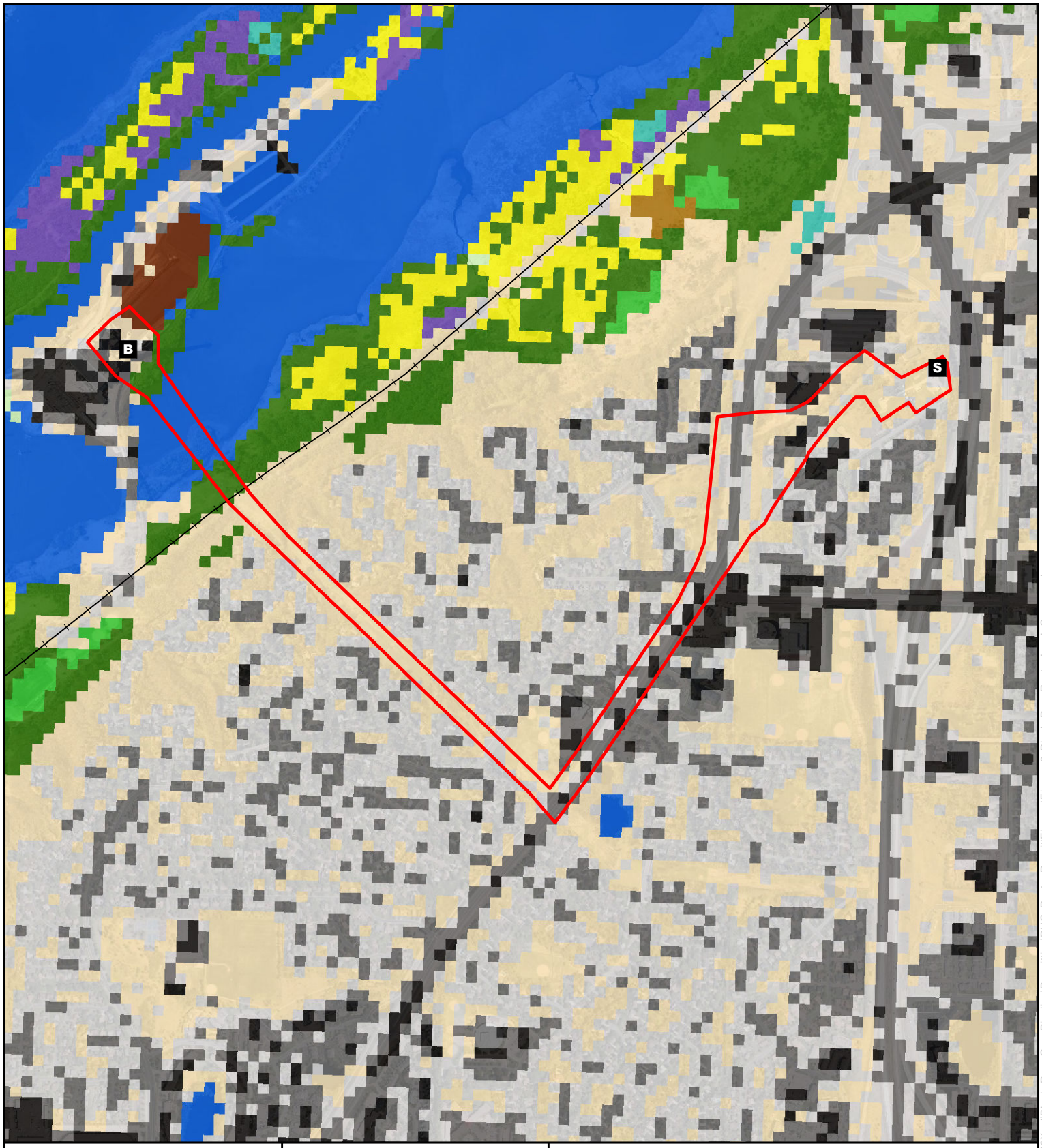
- CD - Conservancy
- Park
- Water

Eagan Zoning

- BP - Business Park
- I-1-Limited Industrial

Source: Z:\Clients\U_A\Xcel\Black_Dog_Gas_Pipeline\Permitting\PUC_Route_Permit\Figures\Figure_7_Black_Dog_Route_Zoning.mxd

Date: (6/16/2016)



0 600 1,200 Feet

1 inch = 1,200 feet

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For Environmental Review Purposes Only

Data Sources: Xcel, USDA/NRCS

Imagery Sources: Twin Cities Metro Dakota County, 2013

Figure 8
Land Cover (NLCD)
Xcel Energy Black Dog Gas Pipeline Project

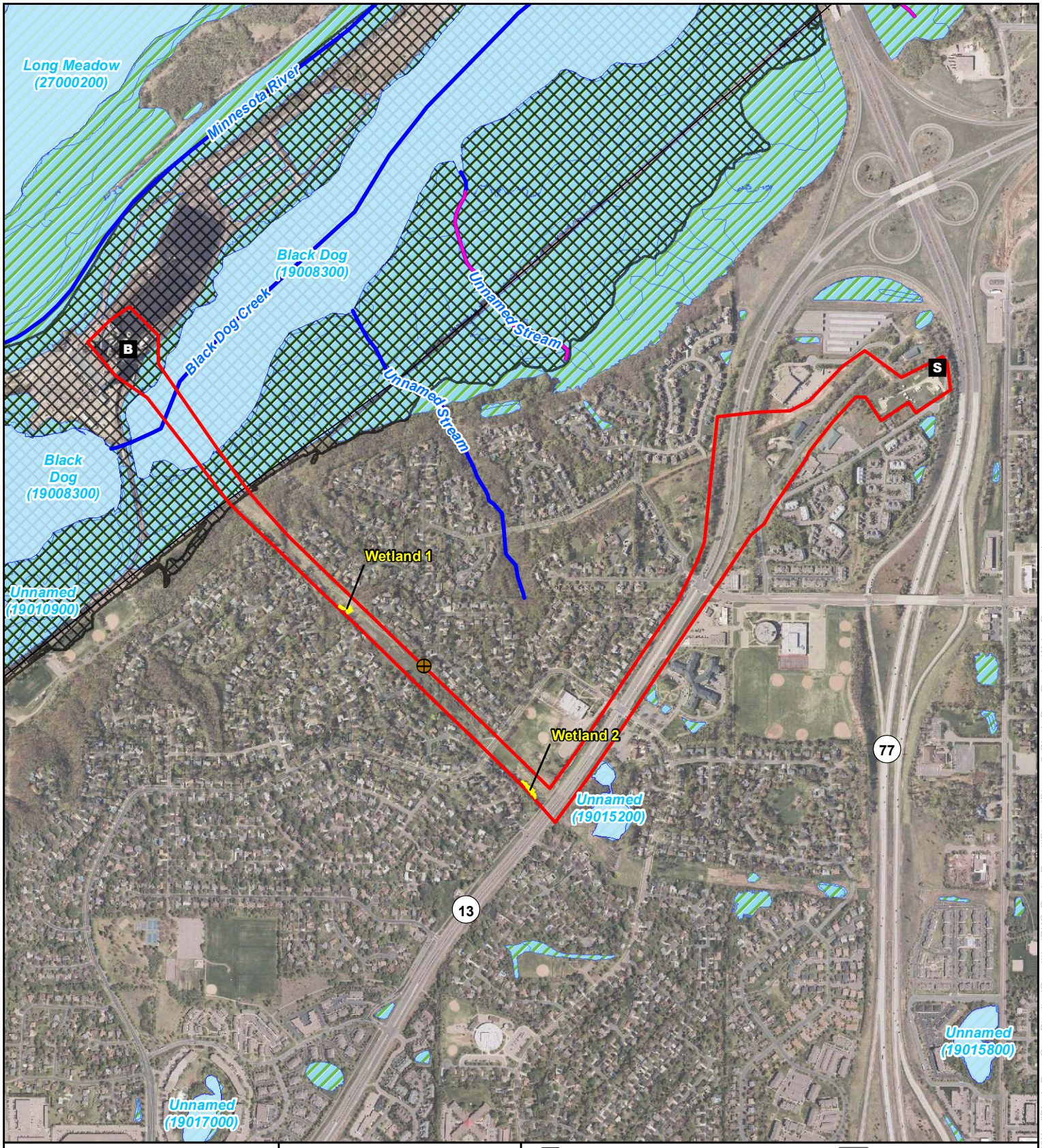
- B Black Dog Generation Plant
- S Cedar Station
- Proposed Pipeline Route

NLCD LULC

- Woody Wetlands
- Open Water
- Hay/Pasture
- Grassland/Herbaceous
- Evergreen Forest
- Emergent Herbaceous Wetlands
- Developed, Open Space
- Developed, Medium Intensity
- Developed, Low Intensity
- Developed, High Intensity
- Deciduous Forest
- Cultivated Crops
- Barren Land

Source: Z:\Clients\U_Z\Xcel\Black_Dog_Gas_Pipeline\Permitting\PUC_Route_Permit\Figures\Figure_8_Black_Dog_Route_Land_Cover.mxd

Date: (6/16/2016)



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For Environmental Review Purposes Only

Data Sources: Xcel, FEMA (NFHL) & MNDNR

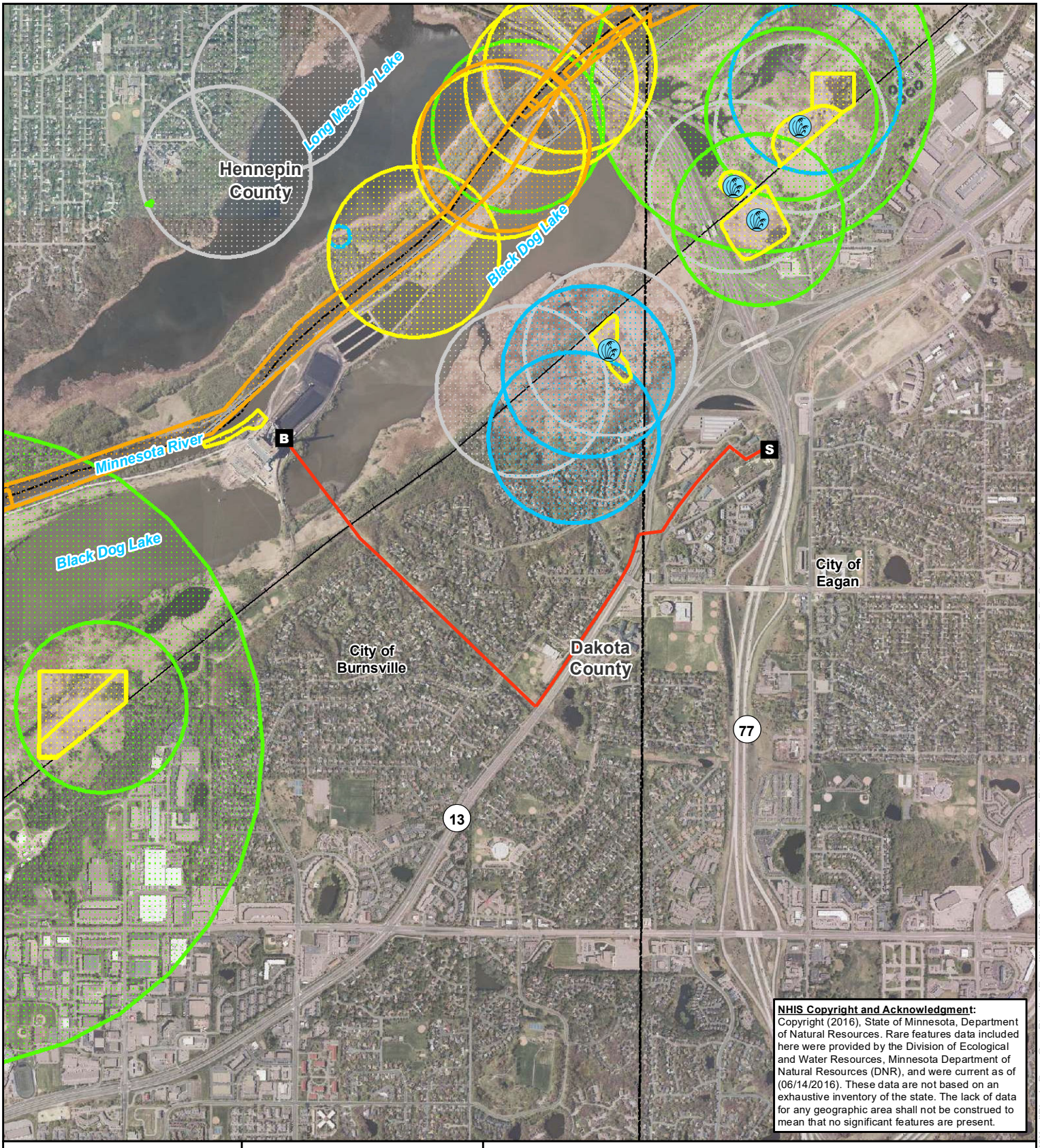
Imagery Sources: Twin Cities Metro Dakota County, 2013

Figure 9
Water Resources
Xcel Energy Black Dog Gas Pipeline Project

- B Black Dog Generation Plant
- S Cedar Station
- Proposed Pipeline Route
- Field Delineated PEM
- Designated Trout Stream
- Public Water Watercourse
- Public Waters Basins
- Floodplain
- NWI
- Abandoned Well (CWI)

Source: Z:\Clients\U_Z\Xcel\Black_Dog_Gas_Pipeline\Permitting\PUC_Route_Permit\Figures\Figure_9_Black_Dog_Route_Water_Resources.mxd

Date: (6/16/2016)



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1 inch = 2,000 feet

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Xcel Energy

For Environmental Review Purposes Only

Data Sources: Xcel, MN DOT, Dakota County & MNDNR

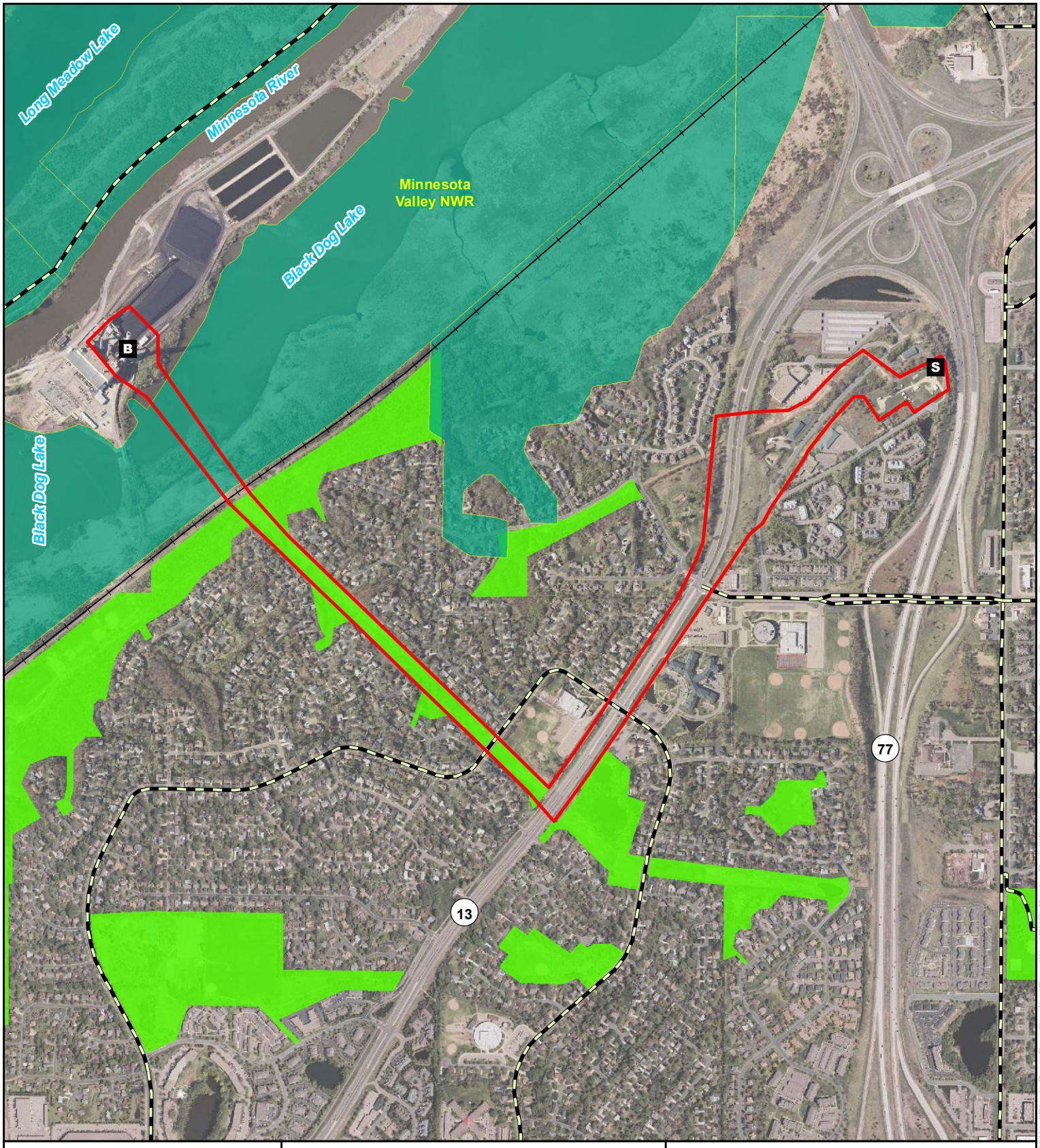
Imagery Sources: Twin Cities Metro Dakota County, 2013

Figure 10
Rare / T and E Species
Xcel Energy Black Dog Gas Pipeline Project

- B — Black Dog Generation Plant
- S — Cedar Station
- Proposed Pipeline Alignment
- City Boundary
- Calcareous Fen

Natural Heritage Inventory System (NHIS)

- Endangered
- Threatened
- Special Concern
- Watchlist
- N/A



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1 inch = 1,200 feet

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For Environmental Review Purposes Only

Data Sources: Xcel, MN DOT, Dakota County & MNDNR

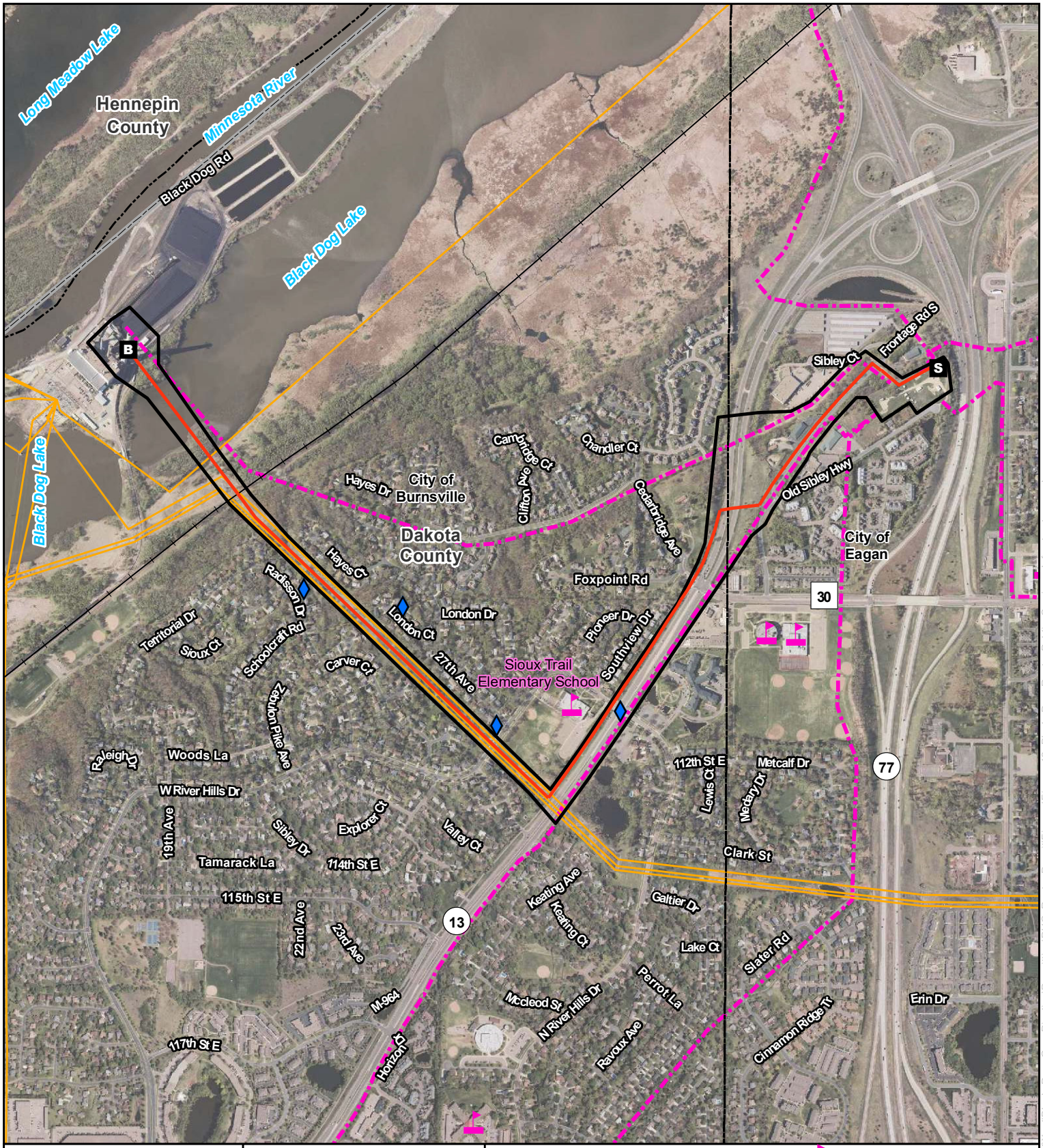
Imagery Sources: Twin Cities Metro Dakota County, 2013

Figure 11
Parks and Recreation
Xcel Energy Black Dog Gas Pipeline Project

- B Black Dog Generation Plant
- S Cedar Station
- Proposed Pipeline Route
- Minnesota Valley NWR
- City Parks
- Bike Trail

Source: Z:\Clients\U_A\Xcel\Black_Dog_Gas_Pipeline\Permitting\PUC_Route_Permit\Figures\Figure_11_Black_Dog_Route_Parks_and_Rec.mxd

Date: (6/16/2016)



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For Environmental Review Purposes Only

Data Sources: Xcel, MN DOT, Dakota County & MNDNR

Imagery Sources: Twin Cities Metro Dakota County, 2013

Figure 12
Public Services and Infrastructure
Xcel Energy Black Dog Gas Pipeline Project

- B Black Dog Generation Plant
- S Cedar Station
- Proposed Pipeline Alignment
- Proposed Pipeline Route
- Licensed Day Care
- School
- Existing Electric Transmission Line
- Existing Gas Pipeline
- City Boundary

Source: Z:\Clients\U_A\Xcel\Black_Dog_Gas_Pipeline\Permitting\PUC_Route_Permit\Figures\Figure_12_Black_Dog_Route_Public_Services_Infrastructure.mxd

Date: (6/16/2016)

Appendix A: Material Data Safety Sheets

NATURAL GAS

ENRON

Revised: 1/1/1991

Internal ID: 7878

Primary CAS: N/A

Filename: 007659

Hazard Ratings

NFPA	Health - 1	Flammability - 4	Reactivity - 0	Other - GF
HMIS	Health -	Flammability -	Reactivity -	PPE -

This product is also known as

N/A

Other Information

Spill: 3

Ingredients

N/A

Locations

FLEET / Xcel North

MSDS Material Safety Data Sheet

MSDS NO. 7878

PRODUCT NAME: NATURAL GAS

NORTHERN STATES POWER COMPANY
MATERIAL SAFETY DATA SHEET

STATUS: NOT EVALUATED
REV. DATE: 01-01-1991

PRODUCT LABEL INFORMATION

NSP HAZARDOUS SUBSTANCE LABEL CODES:

HEALTH: 1 FIRE: 4 REACTIVITY: 0 STORAGE CATEGORY: G/F SPILL: 3

WARNINGS: See sections III and V

SECTION I - PRODUCT IDENTIFICATION

EMERGENCY TELEPHONE: 800-424-9300 (CHEMTREC 24-hours)

PRODUCT NAME: NATURAL GAS
PRODUCT NUMBER:

CHEMICAL NAME/SYN: Methane, marsh gas. CHEMICAL FAMILY/FORMULA: Hydrocarbon CH4-C2H6 C3 H8. CAS #74-82-8.

MANUFACTURER NUMBER: 1455
MANUFACTURER NAME/ ENRON CORP.
ADDRESS P.O. BOX 1188
HOUSTON, TX 77251-1188

TELEPHONE NO. 713-750-7113

SECTION II - HAZARDOUS INGREDIENTS

NAME	CAS NO.	%	PEL(TWA)	TLV(TWA)
Methane	NE	94	NE	NE
Ethane	NE	3	NE	NE
Propane, nitrogen and other gases	NE	3	NE	NE

COMMENTS: Natural Gas composition may vary slightly, depending on the supply point. A typical composition is shown above.

SECTION III - HEALTH HAZARD INFORMATION

PRIMARY ROUTES OF EXPOSURE: See below.

EFFECTS OF ACUTE OVEREXPOSURE:
Natural Gas in non-toxic. However it can act as an asphyxiant by displacing or partially displacing the air required to support life. Workers exposed to oxygen deficient atmospheres may experience nausea, diarrhea, loss of appetite, dizziness, disorientation, headache, excitation, rapid respiration, drowsiness, labored breathing, amnesia, and other central nervous system effects, collapse and death can occur at low oxygen levels. OCCUPATIONAL EXPOSURE LIMITS: A.C.G.I.H. classifies Natural Gas (Methane) as a simple asphyxiant. A threshold limit value (T.L.V.) is not recommended because of the limiting factor of available oxygen.

INHALATION: See above.

SKIN CONTACT: See above.

EYE CONTACT: See above.

INGESTION: See above.

EFFECTS OF CHRONIC OVEREXPOSURE: NE

CONDITIONS AGGRAVATED BY EXPOSURE: NE

IS PRODUCT OR ANY INGREDIENT LISTED AS A CARCINOGEN BY: IARC(N) NTP(N) OSHA(N).

INGREDIENTS LISTED AS CARCINOGENS: NE

SECTION IV - FIRST AID

EYES: Immediately flush eyes with running water for at least 15 minutes. If irritation develops, seek medical attention.

SKIN: Frozen tissues should be flooded or soaked with warm water (105 - 115 F). Do not use hot water. Cryogenic burns which result in blistering or deeper tissue freezing should be promptly seen by a physician.

INHALATION: Remove victim to fresh air. Restore breathing if necessary. Have trained person administer oxygen if breathing difficulties persist. Get medical help.

INGESTION: Rinse mouth with water. Drink 1-2 glasses of water. Do not induce vomiting unless directed by medical personnel.

NOTES TO PHYSICIAN: None

SECTION V - SPECIAL PROTECTION INFORMATION

PERSONAL PROTECTIVE EQUIPMENT:

RESPIRATORY: Use supplied Air Respiratory Protection where Natural Gas has displaced the oxygen content of air (19%). Monitor enclosed areas for oxygen deficiency and explosive atmosphere.

EYEWEAR: Use safety glasses or wear required chemical goggles and face shield when handling gas.

GLOVES: NE

CLOTHING: NE

VENTILATION: Use adequate ventilation to control exposure below recommended levels.

ADDITIONAL PRECAUTIONS: NE

SECTION VI - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED): -306 F (-187.8 C)

FLAMMABLE(EXPLOSIVE) LIMITS(%): UPPER 15 LOWER 5

EXTINGUISHING MEDIA: Stop flow of gas. CO2, dry chemical.

SPECIAL FIRE FIGHTING PROCEDURES: Stop flow of gas; use water to cool exposures. Natural gas without sufficient air or with too much air will not burn or explode. Vapor is lighter than air and will disperse.

UNUSUAL FIRE AND EXPLOSION HAZARDS: A hazard of reignition or explosion exists if flame is extinguished without stopping flow of gas.

ADDITIONAL INFORMATION: AUTO IGNITION TEMPERATURE: 1004 F (540 C).

NFPA CODES: HEALTH: FIRE: REACTIVITY:

SECTION VII - PHYSICAL DATA

BOILING POINT (F): See below

SPECIFIC GRAVITY (WATER=1): Gas

VAPOR PRESSURE (MM HG): Gas

DENSITY: NE

VAPOR DENSITY (AIR=1): .6

% VOLATILE BY VOLUME: NE

SOLUBILITY IN WATER: See below

PH: NE

VISCOSITY: NE

EVAPORATION RATE: NE

APPEARANCE AND ODOR: Colorless, odorless and tasteless gas. (The local utility company typically adds a trace of Mercaptan as an odorizer).

ADDITIONAL DATA: BOILING POINT, 760 mm/Hg: -259 F (-162 C). SOLUBILITY IN WATER, % by Weight: Very slightly soluble. MOLECULAR WEIGHT: 16.7. FREEZING POINT: -182.6 C.

SECTION VIII - REACTIVITY DATA

STABILITY: Stable.

INCOMPATIBLE MATERIALS: Explosive reaction can occur between Natural Gas and oxidizing agents such as Chlorine, Bromine Pentafluoride, Oxygen Difluoride and Nitrogen Trifluoride. It will ignite spontaneously when mixed with Chlorine Dioxide.

HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS: Products of combustion are Carbon Monoxide, Carbon Dioxide and other toxic materials.

OTHER PRECAUTIONS: CONDITIONS TO AVOID: Avoid contact with heat or flame.

SECTION IX - SPILL OR LEAK PROCEDURES

PROCEDURES: Natural gas is lighter than air and freely dissipates. Evacuate area. Remove sources of ignition. Stop leak if possible. Ventilate enclosed areas to reduce explosion hazard.

WASTE DISPOSAL METHOD: Product is non-toxic and will dissipate in air if ignition does not occur. ENVIRONMENTAL HAZARDS - None.

SECTION X - SPECIAL PRECAUTIONS

HANDLING AND STORAGE REQUIREMENTS: Provide adequate general and local exhaust ventilation (explosion-proof) to prevent accumulation of gas in enclosed area.

OTHER PRECAUTIONS: See section V

SECTION XII - TRANSPORTATION INFORMATION

DOT HAZARDOUS MATERIAL:

PROPER SHIPPING NAME: Methane

HAZARD CLASS: Flammable Gas

I.D.(UN NA) NUMBER: UN 1971

REPORTABLE QUANTITY: NE

ADDITIONAL REQUIREMENTS OR INFORMATION: DOT Label: Flammable Gas. DOT Placard: Flammable gas.

SECTION XIII - TOXICOLOGY

TOXICITY DATA: Non-toxic, simple asphyxiant.

NA-NOT APPLICABLE NE-NOT ESTABLISHED N-NO Y-YES

Appendix B: Agency Correspondence

414 Nicollet Mall
Minneapolis, MN 55401

1-800-895-4999
Xcelenergy.com

[Date]

[Name]
[Title]
[Agency]
[Address]

Re: Black Dog Gas Pipeline Project Notice and Request for Comments
Dakota County, Minnesota

Dear [Agency Contact]:

Northern States Power Company-Minnesota, an Xcel Energy Company. ("Xcel Energy"), is proposing to construct an approximately 2-mile long, 16-inch diameter natural gas pipeline (Black Dog Gas Pipeline Project; "Project"). The proposed Project will connect the Cedar Town Border Station to Xcel Energy's Black Dog Generating Plant within the cities of Burnsville and Eagan in Dakota County, Minnesota (see **the enclosed map**). The Project is needed to serve as the main gas supply line as Xcel Energy re-powers the Black Dog Generating Plant from a coal burning plant to a natural gas plant.

The proposed gas line would parallel existing linear corridors along Minnesota Highway 13 and existing transmission lines and would require an approximately 50 foot wide temporary construction corridor. The pipeline will be installed to a depth of 4-feet and be constructed using both open trench and horizontal directional drilling methods. The attached map includes preliminary data regarding the proposed project route.

Xcel Energy intends to apply for a Partial Exemption Route Permit Application from the Minnesota Public Utilities Commission for the Black Dog Gas Project. We anticipate submitting the application at the end of July, 2016.

To assist in the initial evaluation processes and provide Xcel Energy with additional information we respectfully request your input, questions and/or comments associated with the Black Dog Gas Project. Please respond within 30 days of receipt of this letter so that Xcel Energy can address, as appropriate, and include them in the PUC application. We appreciate your assistance as we evaluate siting and routing information and work through the PUC's approval process.

Contact Options:

Ellen Heine
Xcel Energy
414 Nicollet Mall, 414-6
Minneapolis, MN 55401

Email: Ellen.L.Heine@xcelenergy.com

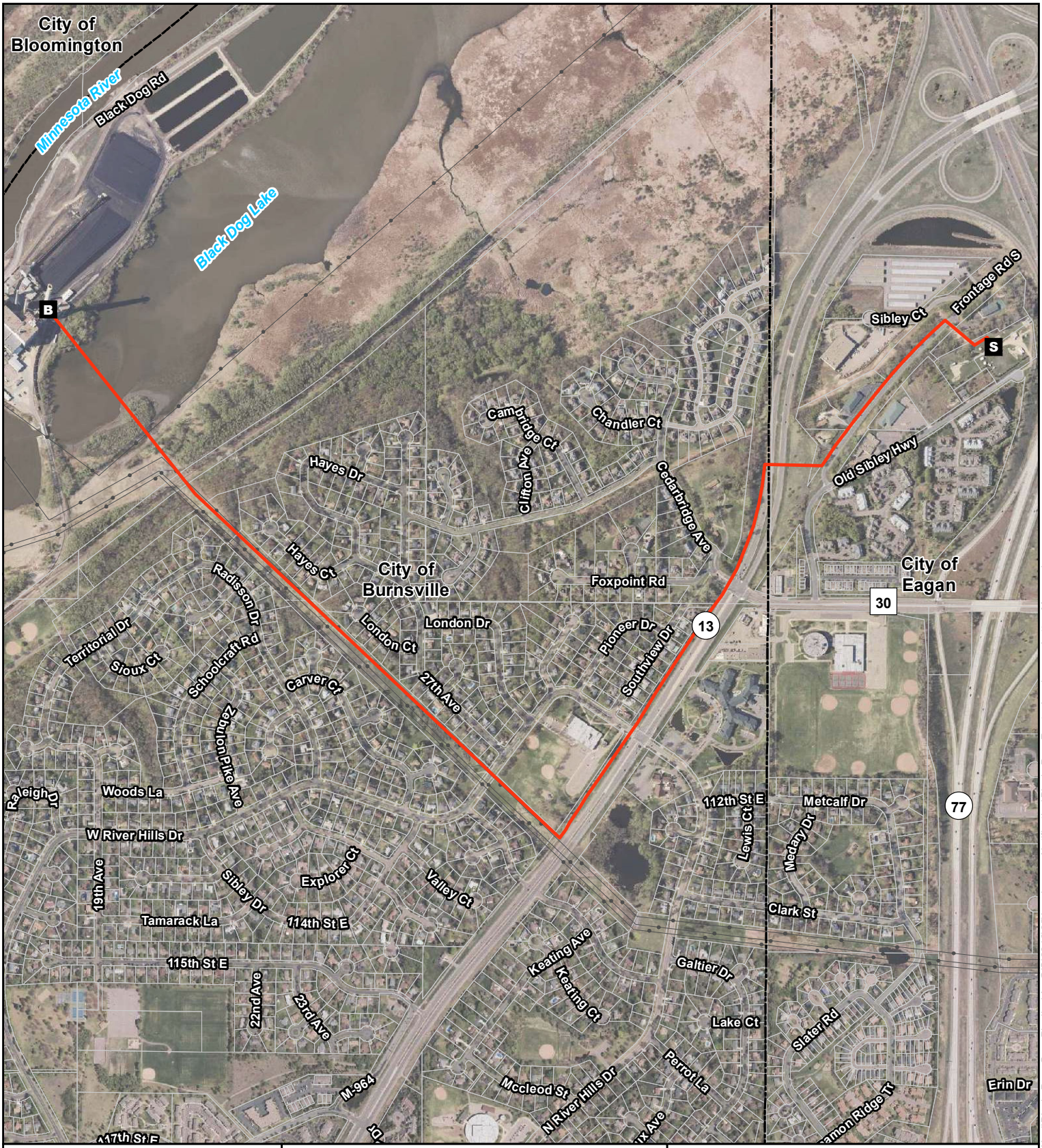
Phone: 612-330-6073

We look forward to your input and appreciate your assistance.

Sincerely,

Ellen Heine
Sr. Land Agent, Siting and Land Rights

Enclosure: Project Location Map



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1 inch = 1,000 feet

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Xcel Energy

For Environmental Review Purposes Only

Data Sources: Xcel, MN DOT, Dakota County & MNDNR

Imagery Sources: Twin Cities Metro Dakota County, 2013

Xcel Black Dog Gas Pipeline Project

Dakota County, Minnesota

- B — Black Dog Power Plant
- S — Cedar Station
- Proposed Route
- Existing Electric Transmission Line
- City Boundary
- Parcel Boundary

Source: Z:\Clients\U_XX\Xcel\Black_Dog_Gas_Pipeline\ArcGIS\20160815\Landowner_Notification\Black_Dog_Route_Landowner_Letter_Map.mxd

Date: (6/8/2016)

Agency	Contact Name	Title	Address 1	City	State	Zip
Black Dog Watershed Management Organization	Daryl Jacobson	Administrator	100 Civic Center Pkwy	Burnsville	MN	55337
Black Dog Watershed Management Organization	Roger Baldwin	Board Chair	100 Civic Center Pkwy	Burnsville	MN	55337
Black Dog Watershed Management Organization	Greg Helms	Board Vice Chair	100 Civic Center Pkwy	Burnsville	MN	55337
Black Dog Watershed Management Organization	Tom Goodwin	Alternate Board Member	100 Civic Center Pkwy	Burnsville	MN	55337
Black Dog Watershed Management Organization	Mike Hughes	Board Member	100 Civic Center Pkwy	Burnsville	MN	55337
Black Dog Watershed Management Organization	Tom Harmening	Board Member	100 Civic Center Pkwy	Burnsville	MN	55337
Black Dog Watershed Management Organization	Scott Thureen	Secretary/Treasurer	100 Civic Center Pkwy	Burnsville	MN	55337
Black Dog Watershed Management Organization	John Glynn	Alternate Board Member	100 Civic Center Pkwy	Burnsville	MN	55337
Black Dog Watershed Management Organization	Curtis Enestvedt	Alternate Board Member	100 Civic Center Pkwy	Burnsville	MN	55337
Dakota County Soil & Water Conservation District	Laura Zanmiller	Chair, District 1	1016 MacArthur Ave.	West St. Paul	MN	55118
Dakota County Soil & Water Conservation District	Brian Watson	District Manager/Wetland Specialist	4100 220th Street West, Suite 102	Farmington	MN	55024
City of Burnsville	Elizabeth Kautz	Mayor	100 Civic Center Pkwy	Burnsville	MN	55337
City of Burnsville	Macheal Collins	City Clerk	100 Civic Center Pkwy	Burnsville	MN	55337
City of Burnsville	Mary Sherry	City Council Member	100 Civic Center Pkwy	Burnsville	MN	55337
City of Burnsville		Planning Commission Chairperson	100 Civic Center Pkwy	Burnsville	MN	55337
City of Burnsville	Jenni Faulkner	Community Development Director	100 Civic Center Pkwy	Burnsville	MN	55337
City of Burnsville	Deb Garross	City Planner	100 Civic Center Pkwy	Burnsville	MN	55337
City of Burnsville	Regina Dean	City Planner	100 Civic Center Pkwy	Burnsville	MN	55337
City of Burnsville	Jane Hovind	City Planning Assistant	100 Civic Center Pkwy	Burnsville	MN	55337
City of Burnsville	Bill Coughlin	City Council Member	100 Civic Center Pkwy	Burnsville	MN	55337
City of Burnsville	Dan Kealey	City Council Member	100 Civic Center Pkwy	Burnsville	MN	55337
City of Burnsville	Heather Johnston	City Manager	100 Civic Center Pkwy	Burnsville	MN	55337
City of Burnsville	Suzanne Nguyen	City Council Member	100 Civic Center Pkwy	Burnsville	MN	55337
City of Burnsville	Steve Albrecht	Public Works Director	100 Civic Center Pkwy	Burnsville	MN	55337

City of Burnsville	JJ Ryan	Recreation & Facilities Superintendent	100 Civic Center Pkwy	Burnsville	MN	55337
City of Burnsville	Terry Schultz	Director of Parks, Recreation, and Natural Resources	100 Civic Center Pkwy	Burnsville	MN	55337
City of Burnsville	Skip Nienhaus	Economic Development Coordinator	100 Civic Center Pkwy	Burnsville	MN	55337
City of Burnsville	Jon Nissen	Parks Superintendent	13713 Frontier Ct.	Burnsville	MN	55337
City of Eagan	Eric Macbeth	Water Resources Manager	3830 Pilot Knob Road	Eagan	MN	55122
City of Eagan	Dave Osberg	City Administrator	3830 Pilot Knob Road	Eagan	MN	55122
City of Eagan	Dianne Miller	Assistant City Administrator	3830 Pilot Knob Road	Eagan	MN	55122
City of Eagan	Mike Maguire	Mayor	3830 Pilot Knob Road	Eagan	MN	55122
City of Eagan	Paul Bakken	Councilmember	3830 Pilot Knob Road	Eagan	MN	55122
City of Eagan	Cyndee Fields	Councilmember	3830 Pilot Knob Road	Eagan	MN	55122
City of Eagan	Gary Hansen	Councilmember	3830 Pilot Knob Road	Eagan	MN	55122
City of Eagan	Meg Tilley	Councilmember	3830 Pilot Knob Road	Eagan	MN	55122
City of Eagan	Tom Garrison	Communications Director	3830 Pilot Knob Road	Eagan	MN	55122
City of Eagan	Jon Hohenstein	Community Development Director	3830 Pilot Knob Road	Eagan	MN	55122
City of Eagan	Mike Ridley	City Planner	3830 Pilot Knob Road	Eagan	MN	55122
City of Eagan	Dale Schoeppner	Chief Building Official	3830 Pilot Knob Road	Eagan	MN	55122
City of Eagan	Paul Graham	Superintendent of Parks	3830 Pilot Knob Road	Eagan	MN	55122
City of Eagan	Jared Flewellen	Assistant Parks and Recreation Director	3830 Pilot Knob Road	Eagan	MN	55122
City of Eagan	Gregg Hove	City Forestor	3830 Pilot Knob Road	Eagan	MN	55122
City of Eagan	Paula Nowariak	Recreation Program Manager	3830 Pilot Knob Road	Eagan	MN	55122
City of Eagan	Russ Matthys	Public Works Director	3830 Pilot Knob Road	Eagan	MN	55122
City of Eagan	John Gorder	City Engineer	3830 Pilot Knob Road	Eagan	MN	55122
City of Eagan	Jon Eaton	Utilities Supervisor	3830 Pilot Knob Road	Eagan	MN	55122
Dakota County Historical Society	Matthew Carter	Executive Director	130 3rd Ave N.	South St. Paul	MN	55075
Minnesota Department of Agriculture	Dave Frederickson	Commissioner	625 Robert Street N.	St. Paul	MN	55155
Minnesota Department of Natural Resources - Region 3	Keith Parker	Regional Director	1200 Warner Road	St. Paul	MN	55106
Minnesota Department of Natural Resources - Division of Ecological and Water Resources	Luke Skinner	Director	500 Lafayette Road	St. Paul	MN	55155

Minnesota Department of Natural Resources	Doug Norris	Wetlands Program Coordinator	500 Lafayette Road	St. Paul	MN	55155
Minnesota Department of Natural Resources	Lisa Joyal	Endangered Species Review Coordinator	500 Lafayette Road	St. Paul	MN	55155
Minnesota Department of Transportation - District 3	Jeff Dierberger	Mn/DOT Permits - Metro Division	1500 West County Road B2	Roseville	MN	55113
Minnesota Pollution Control Agency	Dan Card	Environmental Review Unit Supervisor	520 Lafayette Road	St. Paul	MN	55155
Minnesota Public Utilities Commission	Bret Eknes	Energy Facilities Planning, Supervisor	121 7th Place East, Suite 350	St. Paul	MN	55101
U.S. Army Corps of Engineers - St. Paul District	Dakota County Project Manager		180 5th Street East, Suite 700	St. Paul	MN	55101
U.S. Fish and Wildlife Service - Minnesota	Peter Fasbender	Field Office Supervisor	4101 American Blvd East	Bloomington	MN	55425
Dakota County Board of Commissioners	Thomas Egan	District 3 - Commissioner	1590 Highway 55	Hastings	MN	55033
Dakota County Board of Commissioners	Liz Workman	District 5 - Commissioner	1590 Highway 55	Hastings	MN	55033
Dakota County	Matt Smith	County Manager	1590 Highway 55	Hastings	MN	55033
Dakota County Planning Commission	Kurt Chatfield		14955 Galaxie Ave	Apple Valley	MN	55124

Appendix C: Cultural Resource Background Literature Review

414 Nicollet Mall
Minneapolis, MN 55401

1-800-895-4999
Xcelenergy.com

August 5, 2016

Minnesota State Historic Preservation Office
Barbara Mitchell Howard
Minnesota Historical Society
345 Kellogg Blvd. W.
St. Paul, MN 55102-1903

Re: Black Dog Gas Pipeline Project Notice and Request for Comments
Dakota County, Minnesota

Dear Ms. Howard:

Northern States Power Company-Minnesota, an Xcel Energy Company. ("Xcel Energy"), is proposing to construct an approximately 2-mile long, 16-inch diameter natural gas pipeline (Black Dog Gas Pipeline Project; "Project"). The proposed Project will connect the Cedar Town Border Station to Xcel Energy's Black Dog Generating Plant within the cities of Burnsville and Eagan in Dakota County, Minnesota (see **the enclosed map**). The Project is needed to serve as the main gas supply line as Xcel Energy re-powers the Black Dog Generating Plant from a coal burning plant to a natural gas plant.

The proposed gas line would parallel existing linear corridors along Minnesota Highway 13 and existing transmission lines and would require an approximately 50 foot wide temporary construction corridor. The pipeline will be installed to a depth of 4-feet and be constructed using both open trench and horizontal directional drilling methods. The attached map includes preliminary data regarding the proposed project route.

Xcel Energy intends to apply for a Partial Exemption Route Permit Application from the Minnesota Public Utilities Commission for the Black Dog Gas Project. We anticipate submitting the application at the end of August, 2016.

On behalf of Xcel Energy, Merjent, Inc. conducted a cultural resources Phase Ia literature review for the proposed Project, a copy of which is enclosed for review and comment. The Report includes a recommendation that no archaeological or historic resources will be adversely affected by construction or operation of the replacement transmission lines. Xcel Energy respectfully request SHPO written agreement with our Report findings. We anticipate that your written comments on the Project will be submitted to us within 30 days. Thank you for your consideration of our request.

To assist in the initial evaluation processes and provide Xcel Energy with additional information we respectfully request your input, questions and/or comments associated with the Black Dog Gas Project. Please respond within 30 days of receipt of this letter so that Xcel Energy can address, as appropriate, and include them in the PUC application. We appreciate your assistance as we evaluate siting and routing information and work through the PUC's approval process.

Contact Options:

Ellen Heine
Xcel Energy
414 Nicollet Mall, 414-6
Minneapolis, MN 55401

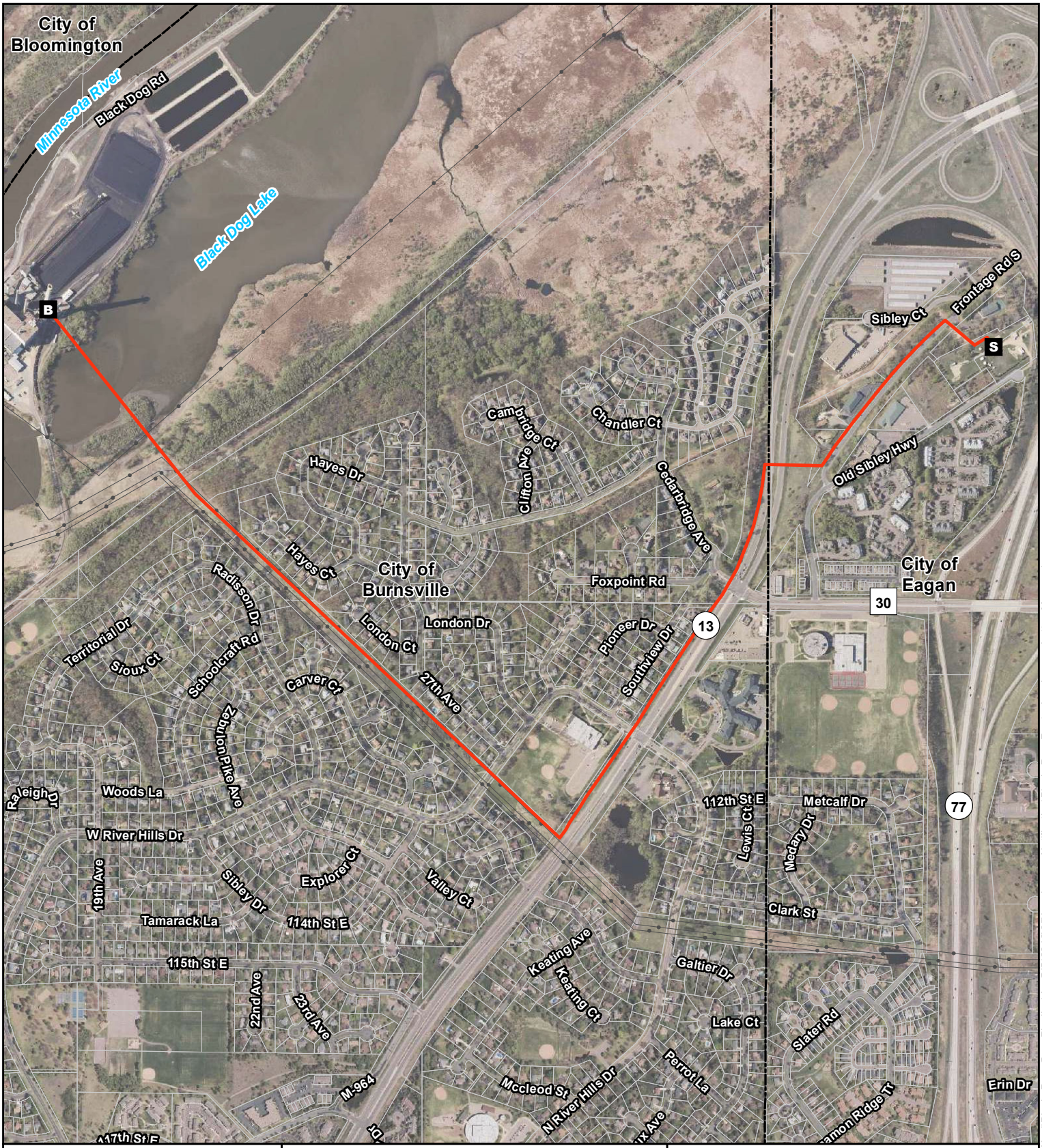
Email: Ellen.L.Heine@xcelenergy.com
Phone: 612-330-6073

We look forward to your input and appreciate your assistance.

Sincerely,

Ellen Heine
Sr. Land Agent, Siting and Land Rights

Enclosure: Project Location Map



0 500 1,000 Feet

1 inch = 1,000 feet

N

Xcel Energy

For Environmental Review Purposes Only

Data Sources: Xcel, MN DOT, Dakota County & MNDNR

Imagery Sources: Twin Cities Metro Dakota County, 2013

Xcel Black Dog Gas Pipeline Project

Dakota County, Minnesota

- B — Black Dog Power Plant
- S — Cedar Station
- Proposed Route
- Existing Electric Transmission Line
- City Boundary
- Parcel Boundary

Source: Z:\Clients\U_XX\Xcel\Black_Dog_Gas_Pipeline\ArcGIS\20160815\Landowner_Notification\Black_Dog_Route_Landowner_Letter_Map.mxd

Date: (6/8/2016)

merjent

p 612.746.3660 ▪ f 612.746.3679

800 Washington Avenue North ▪ Suite 315 ▪ Minneapolis, Minnesota ▪ 55401

August 5, 2016

Ellen Heine
Senior Land Agent, Siting and Land Rights
Xcel Energy
414 Nicolet Mall – 414-6
Minneapolis, MN 55401

Re: Phase IA Cultural Resources Assessment of the proposed Natural Gas Pipeline for the Black Dog Power Generating Plant, Douglas County, Minnesota.

Dear Ellen:

Merjent was contacted by Xcel Energy to conduct a Phase IA Cultural Resources Assessment in support of the proposed Natural Gas Pipeline for the Black Dog Power Generating Plant in Douglas County, Minnesota.

Project Description

Northern States Power Company-Minnesota, an Xcel Energy Company. ("Xcel Energy"), is proposing to construct an approximately 2-mile long, 16-inch diameter natural gas pipeline (Black Dog Gas Pipeline Project; "Project"). The proposed Project will connect the Cedar Town Border Station to Xcel Energy's Black Dog Generating Plant within the cities of Burnsville and Eagan in Dakota County, Minnesota (Figure 1). The Project is needed to serve as the main gas supply line as Xcel Energy re-powers the Black Dog Generating Plant from a coal burning plant to a natural gas plant.

The proposed gas line would parallel existing linear corridors along Minnesota Highway 13 and existing transmission lines and would require an approximately 50 foot wide temporary construction corridor. The pipeline will be installed to a depth of 4-feet and be constructed using both open trench and horizontal directional drilling methods. The attached map includes preliminary data regarding the proposed project route.

Proposed Project Study Area includes those section in which construction activities may occur and a surrounding one-mile buffer. The Project Study Area contains the following legal locations:

County	Township	Range	Sections
Douglas	27N	24W	23, 24, 25, 26
Douglas	27N	23W	18, 19, 20, 30

Literature Review

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 study area. The standard for considering a cultural property as significant is whether it meets the criteria for listing on the National Register of Historic Places (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.

Merjent reviewed and followed the published guidelines for conducting cultural resources literature reviews in Minnesota. The Minnesota State Historic Preservation Office (SHPO), located in the Minnesota History Center in St. Paul, maintains the state's prehistoric and historic archaeological site files, historic standing structure inventory files, and field survey reports.

Merjent examined the current topographic maps and aerial photographs to understand the modern land use of the study area and to provide a baseline for examining the historic maps and documents. Merjent also examined primary sources that have been digitized and made available online, such as the original land survey maps and the original land patent records.

Merjent Senior Cultural Resource Specialist Dean Sather examined site files maintained at the SHPO in June 2016.

Previously Recorded Archaeological Resources

Merjent identified two (2) previously recorded archaeological sites in the study area.

Site Number/Site Name/Site Type	County, Location (TRS)	Site Significance	Location to Project
21DK0008 / Black Dog Mound Group	Douglas, 27N/23W/19	Burial Site, protected MN 307.08	External to and east of Project Area
21DK0041 / Pemton-River Hills Site	Douglas, 27N/24W/24	Burial Site, protected MN 307.08	External to and north of Project Area

Both archaeological sites are documented as a human burial sites and are protected under Minnesota Statute 307.08. However, the sites are located external to the proposed Project Area and will not be impacted by proposed construction activities.

Previously Recorded Standing Historic Structures

Merjent identified 1 previously inventoried historic structures in the study area.

Site Number/Site Name/Site Type	County, Location (TRS)	Site Significance	Location Relative to Project
DK-BVC-002	Douglas, 27N/24W/25	Unevaluated	External to and south of Project Area

The inventoried structure is located south of the Project area and will not be impacted by proposed construction activities.

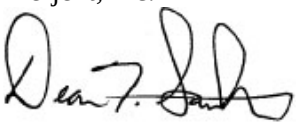
Conclusions

Merjent recommends that there will be no adverse impact on known or suspected cultural resources as a result of this Project. The Project is anticipated to share a corridor with existing infrastructure and has been previously disturbed to the degree that the potential for intact cultural remains to be discovered is

minimal. Merjent recommends that there will be no adverse impact on known or suspected cultural resources as a result of this project and that no cultural resource survey is needed. Merjent recommends that if construction plans are altered to affect areas that were not previously surveyed or disturbed, these locations should be examined for cultural resources. Further, if human remains are encountered during construction activities, all ground disturbing activity must cease and local law enforcement must be notified per MN 307.08.

Please contact me at 612.924.3984 if you have questions.

Sincerely,
Merjent, Inc.



Dean T. Sather, MA, RPA
Sr. Cultural Resource Specialist

Cultural Resources Report figure redacted. Contains protected data.

Appendix D: Public Participation

Appendix D.1: List of Landowners

Highlighted text indicates landowners directly affected by the proposed Project. No highlight indicates landowners who were notified because they were located near the Project, but not directly affected.

Landowner	City, State, Zip
City Of Burnsville	Burnsville, MN 55337
Dimmen Bros LLC	Eagan, MN 55122
Minnesota Department of Transportation	St. Paul, MN 55155
Northern States Power Co	Minneapolis, MN 55401
A Gordon & Barbara M Barr	Burnsville, MN 55337
Aaron & Lindsey Guetter	Burnsville, MN 55337
Abebe B Ewnetu	Burnsville, MN 55337
Adam C Zdenek	Burnsville, MN 55337
Ailyna C Khath & Samirock Samean Sao	Burnsville, MN 55337
Alan L & Michele M Kolstad	Burnsville, MN 55337
Albert J & Donette Kranz	Burnsville, MN 55337
Ali & Deborah Awad	Burnsville, MN 55337
Allen J & Deanna G Hennes	Burnsville, MN 55337
Alvin & Marlene Derusha	Burnsville, MN 55337
Amy & Troy Powell	Burnsville, MN 55337
Amy L Schwartz & Jeffrey A Timmerman	Burnsville, MN 55337
Andrew & Nancy Dennis	Burnsville, MN 55337
Andrew G & Nancy A Roscoe	Burnsville, MN 55337
Andrew J, Van Risseghem & Susanna Vorlicky	Burnsville, MN 55337
Andrew K & Michelle M Schlagel	Burnsville, MN 55337
Andrew P & Rachel M Gorton	Burnsville, MN 55337
Andrew R & Amy S Krenzer	Wayzata, MN 55391
Andrey B & Natalia R Belova	Eagan, MN 55122
Andrey Kirkov & Anna Kirkova	Burnsville, MN 55337
Angela Kane & Christopher Haas	Burnsville, MN 55337
Ann J & Peter C Greenlund	Burnsville, MN 55337
Anne M Driver	Burnsville, MN 55337
Anthony & Rachel Portela	Burnsville, MN 55337
Anthony & Rebecca M Sconza	Burnsville, MN 55337
Anthony Mills	Burnsville, MN 55337
Arden P & Sharon L Smutzler	Burnsville, MN 55337
Asad Z & Jennifer Ahmed	Burnsville, MN 55337
Ashley Hafdal	Eagan, MN 55122
Aslan Holdings LLC	Eagan, MN 55122
Bank Of, NEw York Mellon Tste	West Palm Beach, FL 33416
Barbara J & William D Harrison Tste	Burnsville, MN 55337
Barbara L Impagliazzo	Burnsville, MN 55337
Barbara Leiter Moran	Burnsville, MN 55337
Barry E & Lynae R Rogers	Burnsville, MN 55337
Ben J & Sumiyah Y Labathe	Burnsville, MN 55337
Benjamin F & Sara M Haselbauer	Burnsville, MN 55337
Benjamin H Whitten Tste	Burnsville, MN 55337
Binhson Thi Quan & Ducminh Le	Burnsville, MN 55337
Birgit M Westman	Eagan, MN 55122
Bonita D Blonigen	Eagan, MN 55122
Bradley B Drayna & Tori K Stewart	Burnsville, MN 55337
Brandon N Nguyen & Kalin T Ngo	Burnsville, MN 55337
Brandon S & Lynn M Rivard	Burnsville, MN 55337
Brent Gregoire & Kellye Rose	Burnsville, MN 55337
Brian G & Christine Wolff	Burnsville, MN 55306

Brian H & Tamela A Johnson	Burnsville, MN 55337
Brian M & Tamara E Ihrke	Burnsville, MN 55337
Brian Mcgroarty	Burnsville, MN 55337
Bridget A Harrington	Burnsville, MN 55337
Bruce A Zilka	Eagan, MN 55122
Bruce J & Michelle A Maher	Burnsville, MN 55337
Bruce J & Renae L Keller	Burnsville, MN 55337
Bruce J & Sherry A T Mason	Burnsville, MN 55337
Bruce M & Susan D Sullivan	Burnsville, MN 55337
Bruce W & Brenda L Hermanson	Burnsville, MN 55337
Bruck Getachew & Fentezia Zewdie	Lakeville, MN 55044
Bryanna N Reinsberg	Eagan, MN 55122
Bryce J Pickart & Jayne C Davis-Pickart	Burnsville, MN 55337
Carole L Kampf	Burnsville, MN 55337
Cassandra & Daniel Rogers LLC	Eagan, MN 55122
Catherine F Hovancsak	Burnsville, MN 55337
Chad & Leslie Johnson	Burnsville, MN 55337
Chad T & Christina Stoner	Burnsville, MN 55337
Chadwick P Ward	Burnsville, MN 55337
Chance & Lisa Bartell	Burnsville, MN 55337
Charles E & Lauretta Fellows	Burnsville, MN 55337
Charles W & Carol S Ravey	Burnsville, MN 55337
Cheryl K Huber & Bernice K Lunderborg	Eagan, MN 55122
Cheryl M Yescavage	Burnsville, MN 55337
Chin Seng & Jassmine Chin Leam	Burnsville, MN 55337
Christine E Lemke Tste	Saint Louis Park, MN 55416
Christopher & Daniel Connor	Burnsville, MN 55337
Christopher & Sandra Fisher	Burnsville, MN 55337
Christopher A & Sara Johnson	Burnsville, MN 55337
Christopher J & Heather Leblanc	Burnsville, MN 55337
Christopher Phan & Annie N Nguyen	Burnsville, MN 55337
Church Of Mary	Burnsville, MN 55337
Cienfuegos Fernando Ismael Garza	Burnsville, MN 55337
Cindy J Samuelson & Colin R Freid	Burnsville, MN 55337
Clinton Pullin	Burnsville, MN 55337
Cole D & Susan M Holland	Burnsville, MN 55337
Corey & Amber Miller	Burnsville, MN 55337
Craig D & Karen B Douden	Burnsville, MN 55337
Craig P & Lois E Chittum Tst	Burnsville, MN 55337
Curtis A & Kirsten C Naumann	Burnsville, MN 55337
D K Lindo & L A Lefebvre	Burnsville, MN 55337
Dale & Joan Klossner	Burnsville, MN 55337
Dale & Sarah Cross	Burnsville, MN 55337
Danette F Colin	Burnsville, MN 55337
Daniel A Traczyk	Burnsville, MN 55337
Daniel E & Mara G Lennander	Burnsville, MN 55337
Daniel F & Theresa A Kuplic	Burnsville, MN 55337
Daniel J & Candace A Jerik	Burnsville, MN 55337
Daniel M Jorgensen	Eagan, MN 55122
Daniel P & Lisa J Ekrem	Burnsville, MN 55337
Daniel P & Sandra Koppen	Burnsville, MN 55337
Darren W & Laura L Brown	Burnsville, MN 55337
Darrick P & Tracy L Brakemeier	Burnsville, MN 55337
Darwyn & Donna Mielke	Burnsville, MN 55337

David & Nicole Stratton	Burnsville, MN 55337
David & Rebecca Cheung	Burnsville, MN 55337
David A & Janet A Rempher	Burnsville, MN 55337
David A & Lori L Sheehy	Burnsville, MN 55337
David A & Marjorie M Cahlander	Burnsville, MN 55337
David D & Jessica A, Neitzel	Burnsville, MN 55337
David J & Jennifer M Raasch	Burnsville, MN 55337
David J & Linda A Hjelmstad Tste	Burnsville, MN 55337
David J & Peggy A Louiselle	Burnsville, MN 55337
David J & Sheila A Bruce	Burnsville, MN 55337
David P & Nancy M Henrickson	Burnsville, MN 55337
David P & Susan H Spohn	Burnsville, MN 55337
David R & Faye B Anderson	Eagan, MN 55122
Dean R Karau & Molly T Eichten	Burnsville, MN 55337
Deborah J Churchill	Burnsville, MN 55337
Debra E Bauerfeld-Mcduff & Jerome F Hammer	Burnsville, MN 55337
Debra K & Steven C Schmidt	Burnsville, MN 55337
Dennis R & Betty A Olson	Burnsville, MN 55337
Dennis W & Merietta Johnson	Burnsville, MN 55337
Diane Anderson & Nancy Sponsler	Burnsville, MN 55337
Diane D Lyngstad	Burnsville, MN 55337
Diebold Diversified LLC	Marshall, MN 56258
Dina A & John P Erickson	Burnsville, MN 55337
Don & Ratsamee Suphavong	Burnsville, MN 55337
Donald & Delores Moe	Burnsville, MN 55337
Donald A & Jennifer Thompson	Burnsville, MN 55337
Donald M & Elizabeth Nicholas	Burnsville, MN 55337
Donald R Crump	Burnsville, MN 55337
Donna M Sauve	Burnsville, MN 55337
Donna Mccarty Revoca Roman	Burnsville, MN 55337
Douglas J Fugh & Tamara M Schultz-Fugh	Burnsville, MN 55337
Douglas P Norberg & Laura C Findorff-Norberg	Burnsville, MN 55337
Douglas W & Karin E Fischer	Burnsville, MN 55337
Duane & Barbara Gravley	Burnsville, MN 55337
Duane R & Susan A Harves	Burnsville, MN 55337
Duc Nguyen	Burnsville, MN 55337
Earl & Gail Weaver Lamott	Burnsville, MN 55337
Ekblad Julie L Henderson	Burnsville, MN 55337
Elizabeth A Pothen	Apple Valley, MN 55124
Elizabeth A Schreiber & Daniel P Hills	Burnsville, MN 55337
Elizabeth Ann Duethman	Burnsville, MN 55337
Elizabeth Emerson	Burnsville, MN 55337
Elizabeth R Kiesel	Burnsville, MN 55337
Eric & Ngoc Schneider	Burnsville, MN 55337
Eric G Plut & Rebecca L Ginther	Burnsville, MN 55337
Eric J, Nelson	Burnsville, MN 55337
Eric K & Shalesha D Olson	Burnsville, MN 55337
Eric Mulder	Burnsville, MN 55337
Eric R & Kimberly K Steeg	Burnsville, MN 55337
Eric T & Trina M Olson	Burnsville, MN 55337
Erik P & Nicole H Nilsen	Burnsville, MN 55337
Ernest J & Ann M Delanghe	Burnsville, MN 55337
Farhana Luna Ahmed	Burnsville, MN 55337
Federal Home Loan Mortgage Corporation	Carrollton, TX 75010

Frank & Karlene Solie	Burnsville, MN 55337
Franklin & Jean Kemp	Burnsville, MN 55337
Frederick R & Nancy Abelmann	Burnsville, MN 55337
Fredrick A & Susan B Kittams	Burnsville, MN 55337
Garrett S Fischer	Burnsville, MN 55337
Gary & Nancy Grothe	Burnsville, MN 55337
Gary C & Maret L Glockner	Burnsville, MN 55337
Gary J & Leah M Spangenberg	Burnsville, MN 55337
Gary L & Margaret S Stewart	Burnsville, MN 55337
Gennadiy & Tatyana Spector	Burnsville, MN 55337
George W & Bonnie J Stensgard	Burnsville, MN 55337
Gerald V & Josephine Jensen	Burnsville, MN 55337
Gerald W & Rosalie A Schiltz	Burnsville, MN 55337
Gregg J & Sandra Warnke	Burnsville, MN 55337
Gregory A & Sharon Kratz	Burnsville, MN 55337
Gregory J & Jean M Pechman	Burnsville, MN 55337
Gregory L Austin	Burnsville, MN 55337
Heidi L Mead	Burnsville, MN 55337
Heidi S Brommer	Eagan, MN 55122
Helen C Michael	Burnsville, MN 55337
Helen Cleary	Burnsville, MN 55337
Hothan S Muktar & Mahamud M	Burnsville, MN 55337
Howard L & Pamela K Dean	Eagan, MN 55122
Howard R Bryden Tste	Burnsville, MN 55337
Hung Tang	Burnsville, MN 55337
Igor & Lyubov Kedyk	Burnsville, MN 55337
Ilene L Jones & Matthew J Hamilton	Burnsville, MN 55337
Independent School Dist 191	Burnsville, MN 55337
Jack D Bradley	Burnsville, MN 55337
Jadean Dev Inc & Vista Dev Inc	Apple Valley, MN 55124
James & Linda Bailey	Burnsville, MN 55337
James & Mary Spangler	Burnsville, MN 55337
James A & Teresa A Lodoen	Burnsville, MN 55337
James B & Deepali J Roth	Edina, MN 55424
James E & Milane E Truax	Burnsville, MN 55337
James J & Belinda J Seitzer	Burnsville, MN 55337
James L & Carolyn A Eckerson	Burnsville, MN 55337
James O & Kelly F Strey	Burnsville, MN 55337
James R Ernst & Beth T Havlik	Burnsville, MN 55337
James Schroeder & Jaclyn Kloehn	Burnsville, MN 55337
Jan Radke	Burnsville, MN 55337
Janet L & Alfred B Engelmann Tste	Burnsville, MN 55337
Janette Connelly	Eagan, MN 55122
Jared M & Rebecca A Leagjeld	Burnsville, MN 55337
Jason & Barbara Barr	Burnsville, MN 55337
Jason & Marilynn Seashore	Burnsville, MN 55337
Jason J Mckenzie	Burnsville, MN 55337
Jay & Melissa Champine	Burnsville, MN 55337
Jayson E & Danette R Westerlund	Burnsville, MN 55337
Jean Schaefer	Burnsville, MN 55337
Jeanne E Pemble Tste	Burnsville, MN 55337
Jeffrey & Patricia Budin	Burnsville, MN 55337
Jeffrey L & Maxine Lafavre	Burnsville, MN 55337
Jeffrey P & Marie D Winker	Burnsville, MN 55337

Jefray J & Holly A Sutton	Burnsville, MN 55337
Jennifer Boles	Burnsville, MN 55337
Jennifer Dessie Seidenfeld	Burnsville, MN 55337
Jennifer N Nguyen	Burnsville, MN 55337
Jerome & Joan Rongitsch	Burnsville, MN 55337
Jesse J Crenshaw	Burnsville, MN 55337
Jevon & Lisa Reuter	Burnsville, MN 55337
Jimmie L & Ann R Keelin	Apple Valley, MN 55124
JJY Industries Inc	Lakeville, MN 55044
Joanna J & Michael T Mieling	Burnsville, MN 55337
Joel L & Ann H Sandberg	Burnsville, MN 55337
Joel T & Rebecca A Dennis Johnson	Burnsville, MN 55337
John & Lavaune Emerson	Burnsville, MN 55337
John & Nancy Langren Tste	Burnsville, MN 55337
John & Patricia Larsen	Burnsville, MN 55337
John & Svala Bredt	Burnsville, MN 55337
John A & Gayle S Ladwig	Burnsville, MN 55337
John C & Denise Heitke	Burnsville, MN 55337
John D & Susan Stromgren	Burnsville, MN 55337
John E & Jennifer L Soderholm	Burnsville, MN 55337
John H Anderson	Golden Valley, MN 55427
John J Allen	Burnsville, MN 55337
John L & Deena A Tverdik	Burnsville, MN 55337
John L & Mayren R Decrans	Burnsville, MN 55337
John L & Ronda M Roberts	Eagan, MN 55122
John P & Angela M Flynn	Burnsville, MN 55337
John P & Linda C Ziegler Tst	Burnsville, MN 55337
John R & Karren Bloom	Burnsville, MN 55337
John R & Noelle C Frost	Burnsville, MN 55337
John R & Teresa L Crane	Burnsville, MN 55337
John W & Elaine I Lapp Tste	Burnsville, MN 55337
John W Buckland	Burnsville, MN 55337
John W Robinson & Vicki M French Tste	Burnsville, MN 55337
John W Vogel Tste	Burnsville, MN 55337
Jonathan & Lindsey Teigland	Burnsville, MN 55337
Jonathan & Mary Zich	Burnsville, MN 55337
Jordan Lasota & Kathryn Marie Michaux	Burnsville, MN 55337
Jose L & Shelly L Moreno	Burnsville, MN 55337
Joseph & Shirley Rasinowich	Burnsville, MN 55337
Joseph H & Daina Meillier	Burnsville, MN 55337
Joseph W & Kay Sachs Campbell	Burnsville, MN 55337
Joshua & Julie K Otto	Burnsville, MN 55337
Joyce A Dicks & Randall B Ohm	Burnsville, MN 55337
Joyce G Diedrich	Minneapolis, MN 55406
Julie Kvistad Moore	Burnsville, MN 55337
Karen A Wright	Burnsville, MN 55337
Karen E Fox	Eagan, MN 55122
Kathleen Padilla	Burnsville, MN 55337
Kathryn Abbott	Burnsville, MN 55337
Keith & Mikiesha Mayes	Burnsville, MN 55337
Keith T & Patricia L Resvick	Burnsville, MN 55337
Kelsey E Peterson	Burnsville, MN 55337
Kenneth P & Carrie A Harpell	Burnsville, MN 55337
Kent D & Christine L Johnson	Burnsville, MN 55337

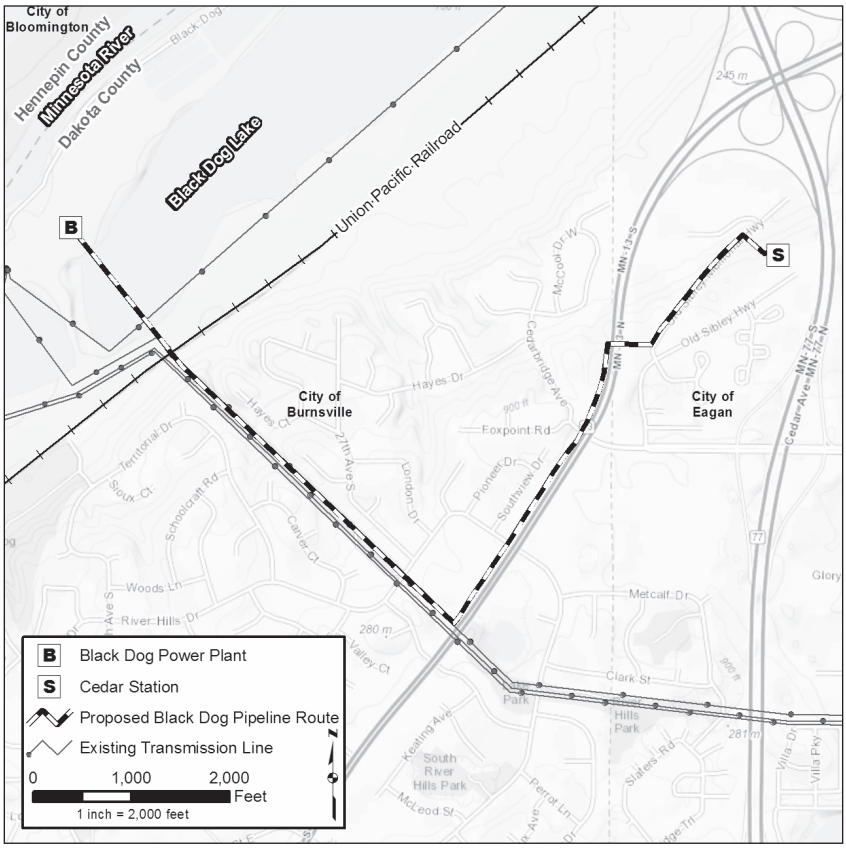
Kermit & Fern Wilhelm	Burnsville, MN 55337
Kevin & Bethany Olander	Burnsville, MN 55337
Kevin & Judith Corrigan	Burnsville, MN 55337
Kevin B Duffy	Burnsville, MN 55337
Kevin C Langworthy & Kristine A Stage	Burnsville, MN 55337
Kevin T Scott & Renee M Florence	Burnsville, MN 55337
Kiem Dao & Tina Hoang	Burnsville, MN 55337
Kimberly & Shaun Kim	Burnsville, MN 55337
Kirk Hanson	Stillwater, MN 55082
Kristen Berg	Burnsville, MN 55337
Kristin Evangeline W Johnson	Burnsville, MN 55337
Kurt & Amy Isenberger	Burnsville, MN 55337
Kurt P Stadther	Burnsville, MN 55337
Kyle R & Kelly T Fosburgh	Burnsville, MN 55337
Lance E Swanson	Arlington, WA 98223
Larae M Brown	Burnsville, MN 55337
Larry E & Constance Yandle	Burnsville, MN 55337
Larry V & Ruth E Davidson Tste	Burnsville, MN 55337
Laura Anderson	Burnsville, MN 55337
Laura D Schmitz	Burnsville, MN 55337
Laurie Ann Kusek	Burnsville, MN 55337
Lawrence R & Sandra J Johnson	Burnsville, MN 55337
Lee D & Sandra Hillis	Burnsville, MN 55337
Leo R & Jeanne D Mrozek	Burnsville, MN 55337
Leonard R & Rebecca L Josephs	Burnsville, MN 55337
Leone M Schultz	Eagan, MN 55122
Leslie & Monna S Cochran Trste	Burnsville, MN 55337
Lillian Jane Gaitley	Burnsville, MN 55337
Linda Ann Gellerman	Burnsville, MN 55337
Linda L Jacobson	Burnsville, MN 55337
Linda Lee Alberts	Burnsville, MN 55337
Linelle R Johnson	Burnsville, MN 55337
Lola M Pena-Carter	Burnsville, MN 55337
Long M & Kim N Hoang	Burnsville, MN 55337
Lori A Flategraff	Eagan, MN 55122
Lori L Woodcock	Burnsville, MN 55337
Louise A Schmidt	Burnsville, MN 55337
Lovegreen Partners LLP	Eagan, MN 55122
Lyle P & Debra Birr	Burnsville, MN 55337
Lyndsey S Johnson	Burnsville, MN 55337
M N & Bette Mannick	Burnsville, MN 55337
Manfred P Froebe	Burnsville, MN 55337
Mansa & Krishnakoema Etwaru	Burnsville, MN 55337
Marcia Jane Marshall	Burnsville, MN 55337
Margaret J Wilkie	Burnsville, MN 55337
Margaret M Cedarberg	Eagan, MN 55122
Maria M Wilson	Burnsville, MN 55337
Marianne R Naas	Burnsville, MN 55337
Mark & Nanette Remme	Burnsville, MN 55337
Mark & Tracy Berkovtiz	Burnsville, MN 55337
Mark & Trista Harris	Burnsville, MN 55337
Mark A & Dawn D Whittenburg	Burnsville, MN 55337
Mark B & Cheryl A Peterson	Burnsville, MN 55337
Mark Burtnett	Burnsville, MN 55337

Appendix D.2: Newspaper Publication for Public Information Meeting

~ PUBLIC NOTICE ~

XCEL ENERGY PUBLIC NOTICE

Northern States Power Company-Minnesota, an Xcel Energy Company ("Xcel Energy") is proposing to construct an approximately 2-mile long, 16-inch diameter natural gas pipeline between the Cedar Town Border Station in Eagan and the Black Dog Generating Plant in Burnsville. This pipeline will serve as the main supply line for the plant when it is converted from coal burning to natural gas. Xcel Energy will be hosting a public open house on June 20, 2016 from 5 to 8 p.m. at the Burnsville City Hall to provide information and solicit public feedback on the proposed project prior to filing a Route Permit Application with the Minnesota Public Utilities Commission this summer.



Xcel Energy invites you to attend the open house to learn more about the project including schedule, permitting process, and how you can be involved. Please stop by any time during the hours of the open house. No formal presentation is scheduled. If you have questions, contact Tim Rogers from Xcel Energy at (612) 330-1955 or timothy.g.rogers@xcelenergy.com.

XCEL ENERGY OPEN HOUSE

When: Monday, June 20, 5-8 p.m.

Where: Burnsville City Hall
100 Civic Center Parkway
Burnsville, MN 55337

Xcel Energy®

16062XX2

Minnesota Newspaper Association
10 South Fifth Street Suite 1105
Minneapolis, MN 55402
612-332-8844

Affidavit of Publication

The Minnesota Newspaper Association verifies the

Burnsville Project Public Notice

Ran in Burnsville Eagan Sun ThisWeek June 10, 2016

By: Lykin Hills Executive Director

Date: 6/23/16

Subscribed and sworn to before me this 23 day of June, 2016.

Notary: Claudia Johnson

My Commission Expires January 31, 2020

Claudia Marie Johnson
NOTARY PUBLIC
MINNESOTA
My Commission Expires Jan. 31, 2020

Education

194 in compliance with transgender bathroom directive

Some parents concerned about federal directive

by Laura Adelmann
SUN THISWEEK
DAKOTA COUNTY TRIBUNE

In the weeks since President Obama and the Department of Justice directed public schools to allow transgender students to use the bathroom of their choice, Lakeville Area School District spokeswoman Amy Olson said the district has received a handful of inquiries from Lakeville parents.

While District 194 has not adopted a unisex bathroom policy, its schools allow accommodations for all students on a case-by-case basis, according to Olson.

She said the U.S. departments of Education and Justice guidance released to school districts recently state that Title IX of the Education Amendments of 1972 prohibits sex discrimination in educational programs and activities operated by recipients of federal financial assistance.

"This includes creating a safe, nondiscriminatory environment for all students, including transgender students," Olson said.

She added that the district has not adopted a policy of unisex bathrooms and does not anticipate implementing any kind of a policy specific to the use of restrooms.

According to Olson, there has not been an example of a case involving a transgender student wishing to use a specific bathroom brought to the district's attention.

She added that security and safety is of "utmost importance" to the district.

"We encourage our students to have open, respectful discussions with one another, whether they agree or disagree, as we believe this promotes learning," Olson said. "Our district has established policies that strictly prohibit bullying and harassment. Any such allegations are investigated promptly, with appropriate steps taken to address student misbehavior. This includes potential disciplinary action."

Several parents sent emails to the district regarding the issue, including Lakeville parent Jeff Tyson who relayed safety and privacy concerns for his daughters in an email to Superintendent Lisa Snyder.

Parent Joy Beckman emailed her child's principal, in part stating, "I am a praying parent, and want to know what else I need to be praying for as we are most definitely moving into a brand new season and normal for our children in this day in age."

In an interview, Beckman said she is teaching her children not to judge others, but as a parent just wanted to make sure their daughter felt safe at school.

"I have plenty of friends in the homosexual lifestyle," she said. "Good for them. Who am I to judge them? But this comes down to what is safe for our kids."

Parent Susan McPhee spoke at a May 24 School Board meeting, citing concerns about the directive, and describing inclusivity as a new sheriff in town that trumps debate or political process.

She said the policy is being misused when the assertions of a "tiny percentage of the population trumps the majority."

McPhee said the directive is being used to shame those who voice opposition and label them "the typical sad buzzwords" like intolerant and haters, and said the concern is not about attacking people, and advocating for treating everyone with respect and dignity.

"While saying that people can't be excluded based on gender, race, class, sexuality or disability is the right thing to do in most situations," McPhee said, "it doesn't have to follow our kids into the bathrooms or locker rooms."

Laura Adelmann is at laura.adelmann@ecm-inc.com.

Job Transitions Group to meet June 14

The June 14 meeting of the Easter Job Transitions Group will be a breakout session on "I Don't Know What I Want!" The group meets at 7:30 a.m. at Easter Lutheran Church – By The Lake, 4545 Pilot Knob Road, Eagan.

Small group sessions are offered following the meeting at 9:30 a.m. each week on many different topics.

Call 651-452-3680 for information.

Burnsville - Eagan Sun This Week 6/16

Appendix D.3: Public Participation and Comments from Public Information Meeting

Xcel Energy
Northern States Power Company – Minnesota
Proposed Black Dog Pipeline Project
Public Meeting June 20, 2016

PLEASE SIGN IN

NAME	ADDRESS	PHONE/EMAIL	REPRESENTING
Dan Rogers	[redacted]	[redacted]	Cedar Technologies
Jim Swanson	[redacted]	[redacted]	-com
*Tony e mail map Yvonne Shirk	[redacted]	[redacted]	.com
Bill & Barbara Harrison	[redacted]	[redacted]	Self
JAMIE FITZKE	[redacted]	[redacted]	EDU
Nick Rowse	[redacted]	[redacted]	l.com
Terry Schultz	[redacted]	[redacted]	City of Burnsville
Pat Boerboom ALAN Wright	[redacted]	[redacted]	

Xcel Energy
Northern States Power Company – Minnesota
Proposed Black Dog Pipeline Project
Public Meeting June 20, 2016

PLEASE SIGN IN

NAME	ADDRESS	PHONE/EMAIL	REPRESENTING
Benjamin Seaglus		[redacted]	SuperAmerica
Frank & Jean Kemp	[redacted]	[redacted]	
Jerry & Jody Jensen	[redacted]	[redacted]	
Tom Johnson	[redacted]	[redacted]	Arbor Institute
Dianne Rowse	[redacted]	[redacted]	
Deb GARROSS	[redacted]	[redacted]	City of Burnsville Planning Dept
Angie Flynn	[redacted]	[redacted]	Resident
Ruth Swanson	[redacted]	[redacted]	Owner

Xcel Energy
Northern States Power Company – Minnesota
Proposed Black Dog Pipeline Project
Public Meeting June 20, 2016

PLEASE SIGN IN

NAME	ADDRESS	PHONE/EMAIL	REPRESENTING
David Cahlander	[redacted]	[redacted]	self
Marjorie Cahlander	[redacted]	[redacted]	"

Xcel Energy
NORTHERN STATES POWER

PROPOSED BLACK DOG PIPELINE PROJECT
Burnsville – Eagan, Minnesota
June 20, 2016 Open House Meeting
COMMENT FORM

FROM:

Name	BILL AND BARBARA HARRISON
Address	[redacted]
	BURNSVILLE, MN. 55337
Representing	OURSELVES.

Please note your property location/address. (Town, Range, and Section number are fine.)

SEE ABOVE

My concerns/questions regarding this project are:

- WE TOTALLY SUPPORT THIS PROJECT.
- CONCERN OF HAVING TO SHUT DOWN THE RIGHT LANE OF SB TH 13 ON THE ~~SOUTH~~ EARLY PORTION OF THE WORK ALONG TH 13. THIS IS A VERY BUSY HIGHWAY. HOPEFULLY THIS WILL NOT BE REQUIRED.
- BORING UNDER CROSSINGS AND ENTRYS IS GOOD.
- KEEP US INFORMED.
- GOOD LUCK.

Please return your comments to Tim Rogers, Xcel Energy, (see address on back) or email them to timothy.g.rogers@xcelenergy.com.

Xcel Energy
NORTHERN STATES POWER

PROPOSED BLACK DOG PIPELINE PROJECT
Burnsville – Eagan, Minnesota
June 20, 2016 Open House Meeting
COMMENT FORM

FROM:

Name	Angie Flynn
Address	[redacted]
	Burnsville MN
Representing	

Please note your property location/address. (Town, Range, and Section number are fine.)

My concerns/questions regarding this project are:

Paint Power line Poles

Love the idea of a bike path

Only take one Summer

Please return your comments to Tim Rogers, Xcel Energy, (see address on back) or email them to timothy.g.rogers@xcelenergy.com.

Xcel Energy
NORTHERN STATES POWER

PROPOSED BLACK DOG PIPELINE PROJECT
Burnsville – Eagan, Minnesota
June 20, 2016 Open House Meeting
COMMENT FORM

FROM:

Name	PATRICIA BRINTON
Address	[redacted]
	Burnsville MN 55337
Representing	

Please note your property location/address. (Town, Range, and Section number are fine.)

My concerns/questions regarding this project are:

Property Value
Speed of Completion
Would like removal of Buckthorn

Please return your comments to Tim Rogers, Xcel Energy, (see address on back) or email them to timothy.g.rogers@xcelenergy.com.

Xcel Energy
NORTHERN STATES POWER

PROPOSED BLACK DOG PIPELINE PROJECT
Burnsville – Eagan, Minnesota
June 20, 2016 Open House Meeting
COMMENT FORM

FROM:

Name	Dianne Rowse
Address	[redacted]
Representing	self

Please note your property location/address. (Town, Range, and Section number are fine.)

My concerns/questions regarding this project are:

* Please be careful not to impact the restored native prairie located at the south corner of the Tennisioux Park / Sioux Trail Elementary land. It's called Whispering Starr prairie, planted by the students ~15 years ago. It is not on the power line right-of-way.

* Please plan to re-seed disturbed areas after pipeline installation with native prairie forbs + grasses that are beneficial to pollinators.

* Please remove buckthorn trees along the MNDOT Highway 13 route (along the bike trail) + treat the cut stumps with herbicide.

Thank you!

Please return your comments to Tim Rogers, Xcel Energy, (see address on back) or email them to timothy.g.rogers@xcelenergy.com.

Appendix E: Wildlife-Friendly Erosion Control Fact Sheet

Wildlife-friendly Erosion Control

Wildlife entanglement in, and death from, plastic netting and other man-made plastic materials has been documented in birds (Johnson, 1990; Fuller-Perrine and Tobin, 1993), fish (Johnson, 1990), mammals (Derraik, 2002), and reptiles (Barton and Kinkead, 2005; Kapfer and Paloski, 2011). Unfortunately, the use of these materials for erosion control continues in many cases, often without consideration for wildlife impact. This plastic netting is frequently used for erosion control during construction and landscape projects and can negatively impact terrestrial and aquatic wildlife populations as well as snag in maintenance machinery, resulting in costly repairs and delays. However, erosion-control materials that are wildlife friendly do exist and are sold by several large companies. Below are a few key considerations before starting a project.

Know Your Options

- Remember to consult with local natural resource agencies (DNR, USFWS, etc.) before starting a project. They can help you identify sensitive areas and rare species.
- When erosion control is necessary, select products with biodegradable netting (natural fiber, biodegradable polyesters, etc.).
- DO NOT use products that require UV-light to biodegrade (also called "photodegradable") as they do not biodegrade properly when shaded by vegetation.
- Use netting with rectangular-shaped mesh (not square mesh).
- Use netting with flexible (non-welded) mesh.

Woven 100% natural fiber erosion-control materials being utilized along a central Minnesota stream. ©MN DNR, Nick Proulx

Know the Landscape

- It is especially important to use wildlife-friendly erosion control around:
    - Areas with threatened or endangered species.
    - Wetlands, rivers, lakes, and other watercourses.
    - Habitat-transition zones (prairie – woodland edges, rocky outcrop – woodland edges, steep rocky slopes, etc.).

Fish trapped and killed by welded-plastic square erosion-control mesh improperly placed along a small central Minnesota stream. Photo courtesy of Ben Lowe.

- Use erosion mesh wisely; not all areas with disturbed ground necessitate its use. Do not use plastic mesh unless it is specifically required. Other erosion-control options exist (open weave textile (OWT), rolled erosion control products (RECPs) with woven, natural fiber netting).

Protect Wildlife

- Avoid photodegradable erosion-control materials where possible.
- Use only biodegradable materials (typically made from natural fibers), preferably those that will biodegrade under a variety of conditions.
- The cost of erosion-control material that is wildlife friendly is often comparable to conventional plastic netting.

Plains Gartersnake trapped and killed by welded-plastic square erosion-control mesh placed along a newly installed cement culvert in southern Minnesota. ©MN DNR, Carol Hall

A small vole that was strangled and killed by plastic erosion-control material with welded and square mesh. Photo taken in southern Minnesota and provided courtesy of Tom Jessen.

Literature Referenced

Barton, C. and K. Kinkead. 2005. Do erosion control and snakes mesh? Soil and Water Conservation Society 60:33A-35A.

Derraik, J.G.B. 2002. The pollution of the marine environment by plastic debris: a review. Marine Pollution Bulletin 44:842-852.

Fuller-Perrine, L.D., and M.E. Tobin. 1993. A method for applying and removing bird-exclusion netting in commercial vineyards. Wildlife Society Bulletin 21:47-51.

Johnson, S.W. 1990. Distribution, abundance, and source of entanglement debris and other plastics on Alaskan beaches, 1982-1988. Proceedings of the Second International Conference on Marine Debris 331-348.

Kapfer, J.M., and R.A. Paloski. 2011. On the threat to snakes of mesh deployed for erosion control and wildlife exclusion. Herpetological Conservation and Biology 6:1-9.