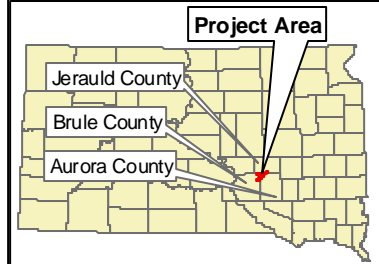
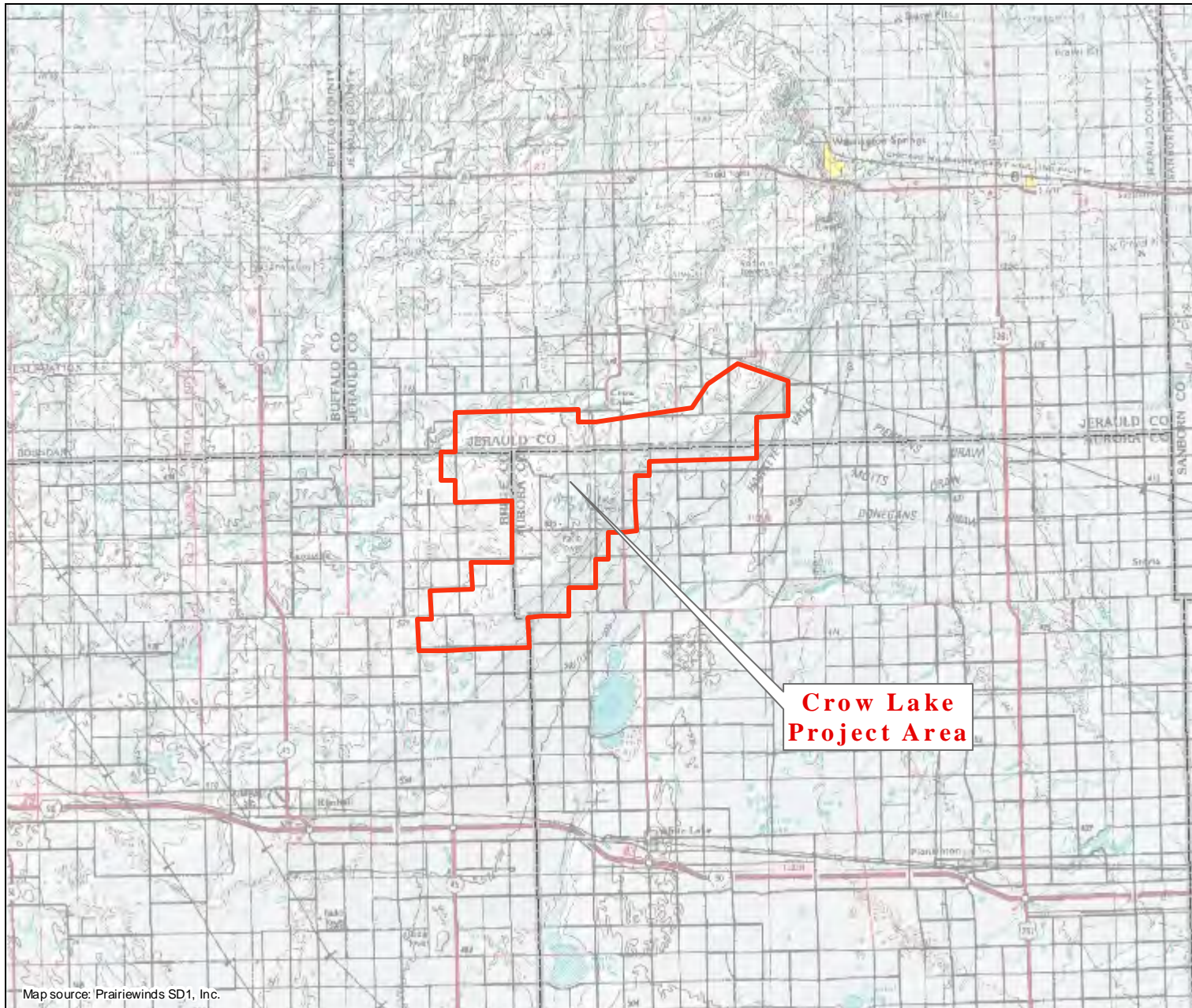


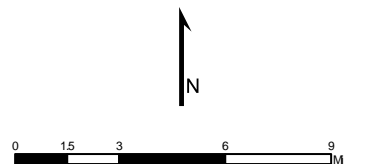


Figure 1 - Facility Location



-  Project Boundary
-  County Boundaries



Public Utilities Permit Application

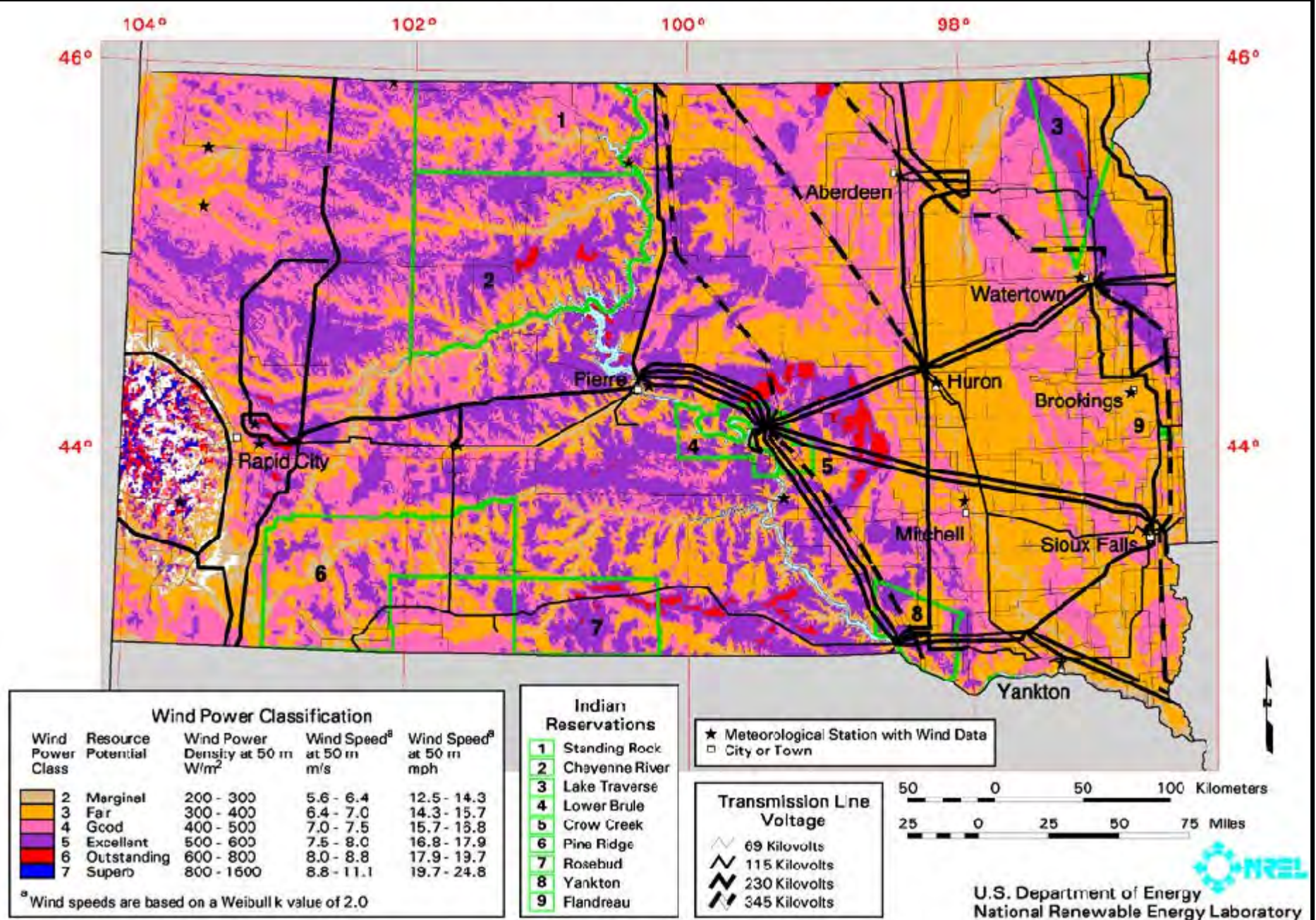
Prairiewinds SD1 Wind Farm Project

Date: 11/10/2009

Aurora, Brule, and Jerauld Counties, South Dakota

Author: KCS

Figure 2 - South Dakota Wind Resources



Public Utilities Permit Application

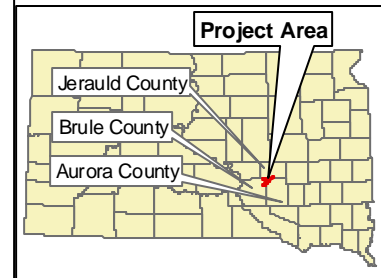
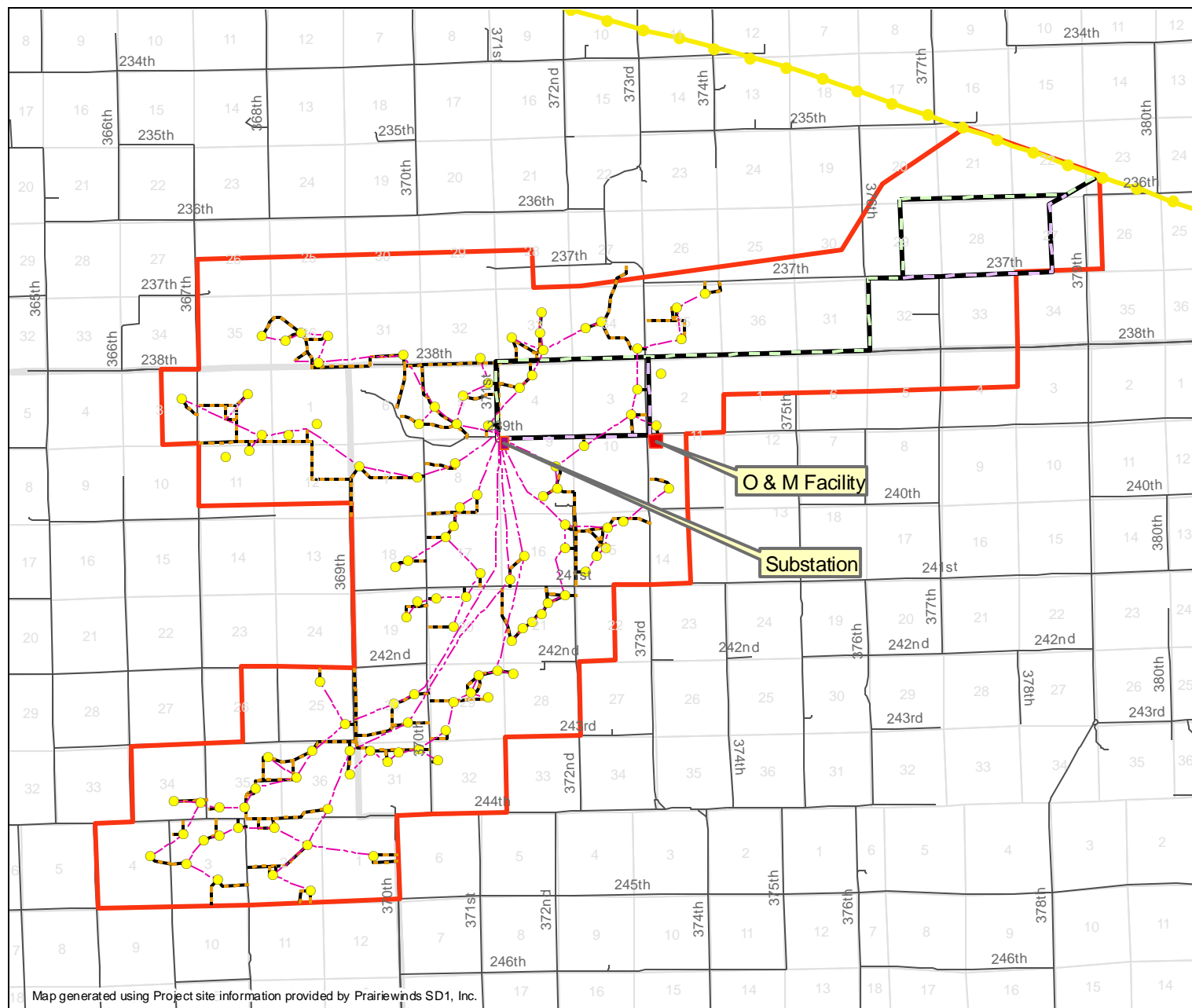
Prairiewinds SD1 Wind Farm Project

Date: 11/10/2009

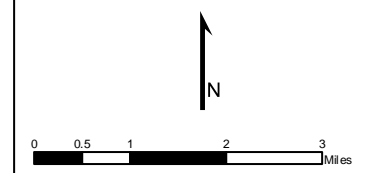
Aurora, Brule, and Jerauld Counties, South Dakota

Author: KCS

Figure 3 - Proposed Wind Farm Layout

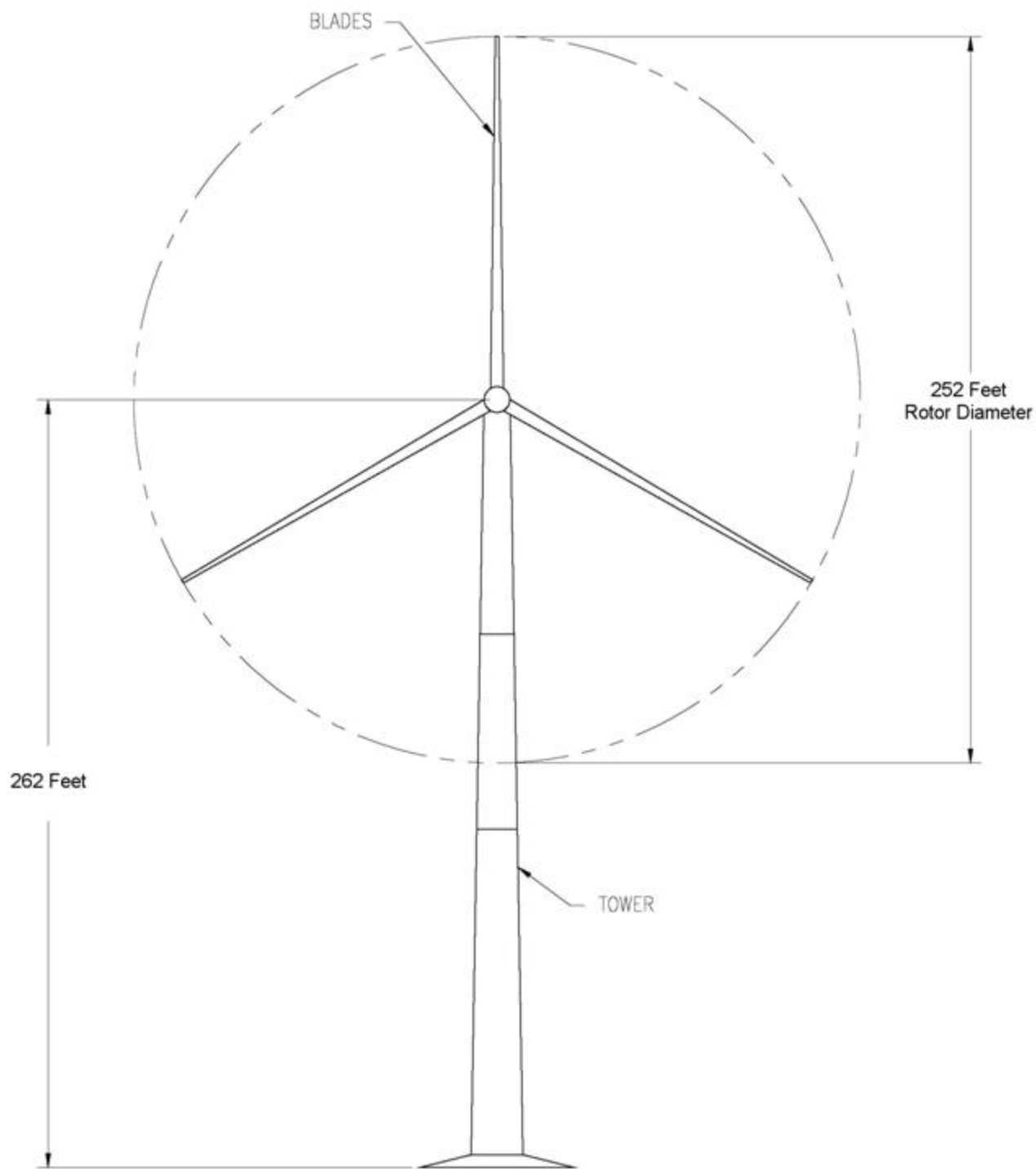


- Proposed Turbines
- Western Utility Line
- Proposed Substation
- Proposed O & M Facility
- 230 kV Transmission Routes**
 - Proposed Route
 - - - Alternate Route
 - - - Collector System
- - - Proposed Access Roads
- Existing Roads
- Project Boundary
- County Boundaries



Map generated using Project site information provided by Prairiewinds SD1, Inc.

Figure 4 – Typical Turbine Dimensions



GE WIND ENERGY 1.5 SLE 60 HZ WIND TURBINE

Source: Prairiewinds SD1, Inc.

Public Utilities Permit Application

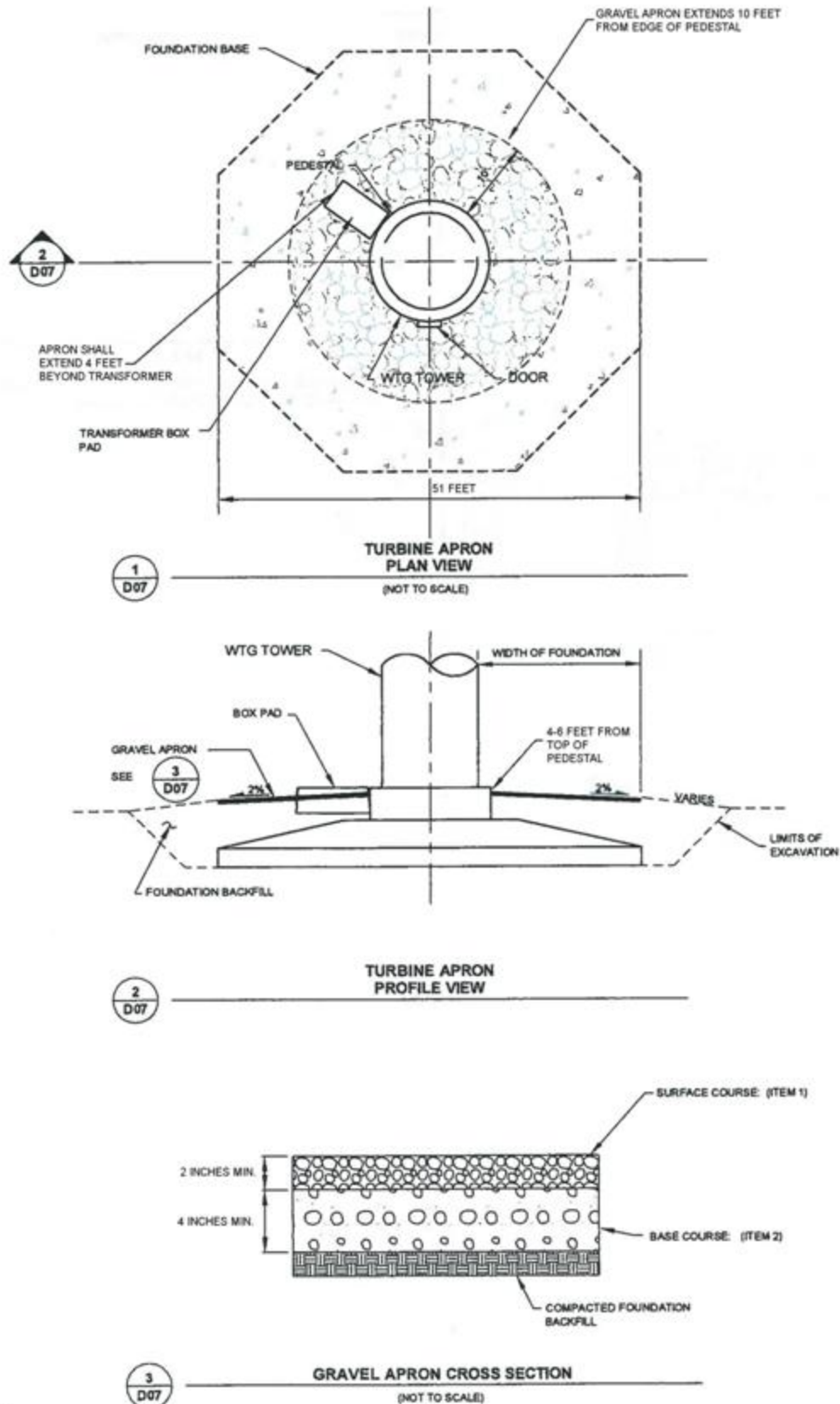
Prairiewinds SD1 Wind Farm Project

Date: 11/10/2009

Aurora, Brule, and Jerauld Counties, South Dakota

Author: KCS

Figure 5 – Typical Turbine Foundation



Source: Prairiewinds SD1, Inc.

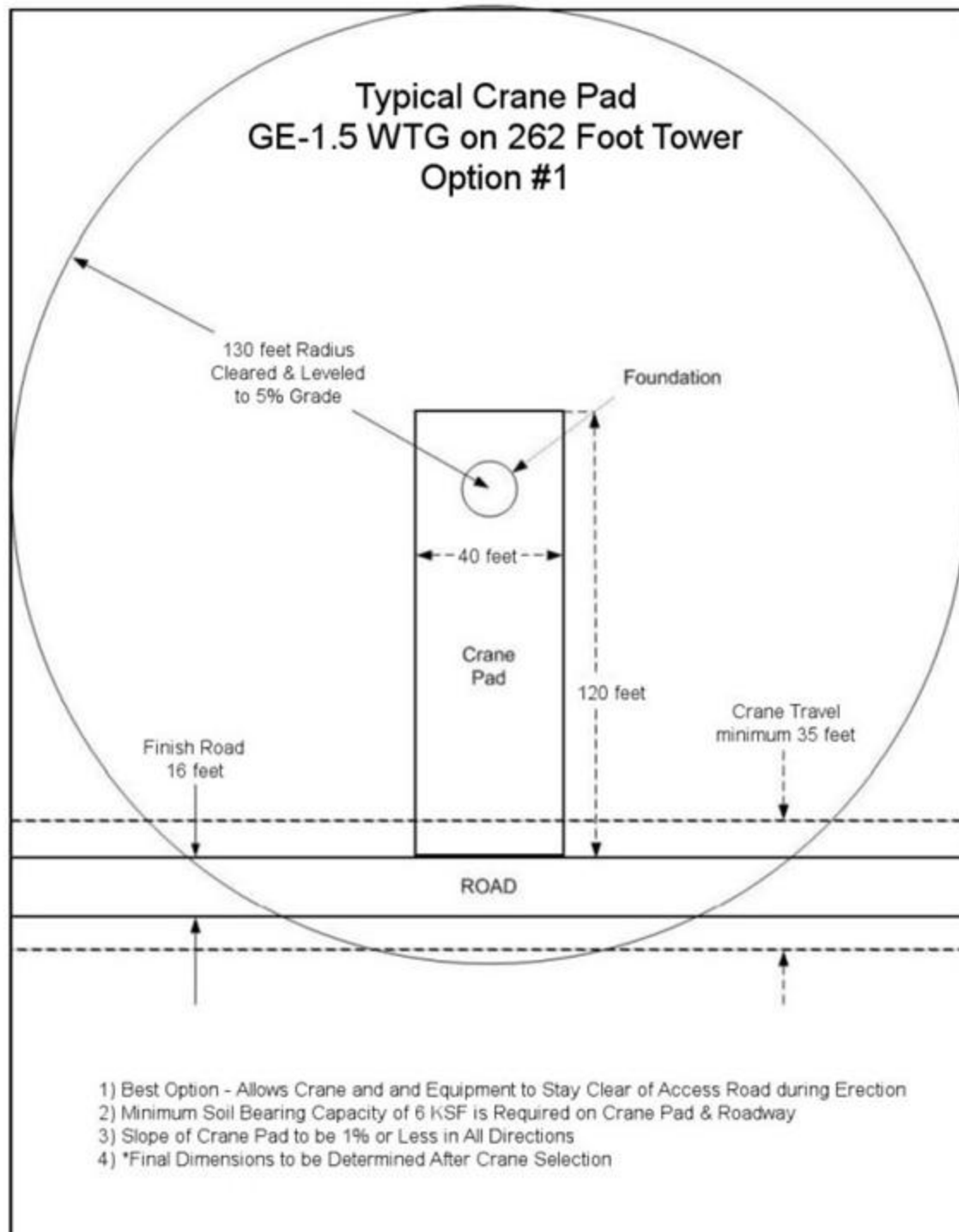
Public Utilities Permit Application
Prairiewinds SD1 Wind Farm Project

Date: 11/10/2009

Aurora, Brule, and Jerauld Counties, South Dakota

Author: KCS

Figure 6 – Typical Crane Pad



Typical Crane Pad Option 1

Source: Prairiewinds SD1, Inc.

Public Utilities Permit Application

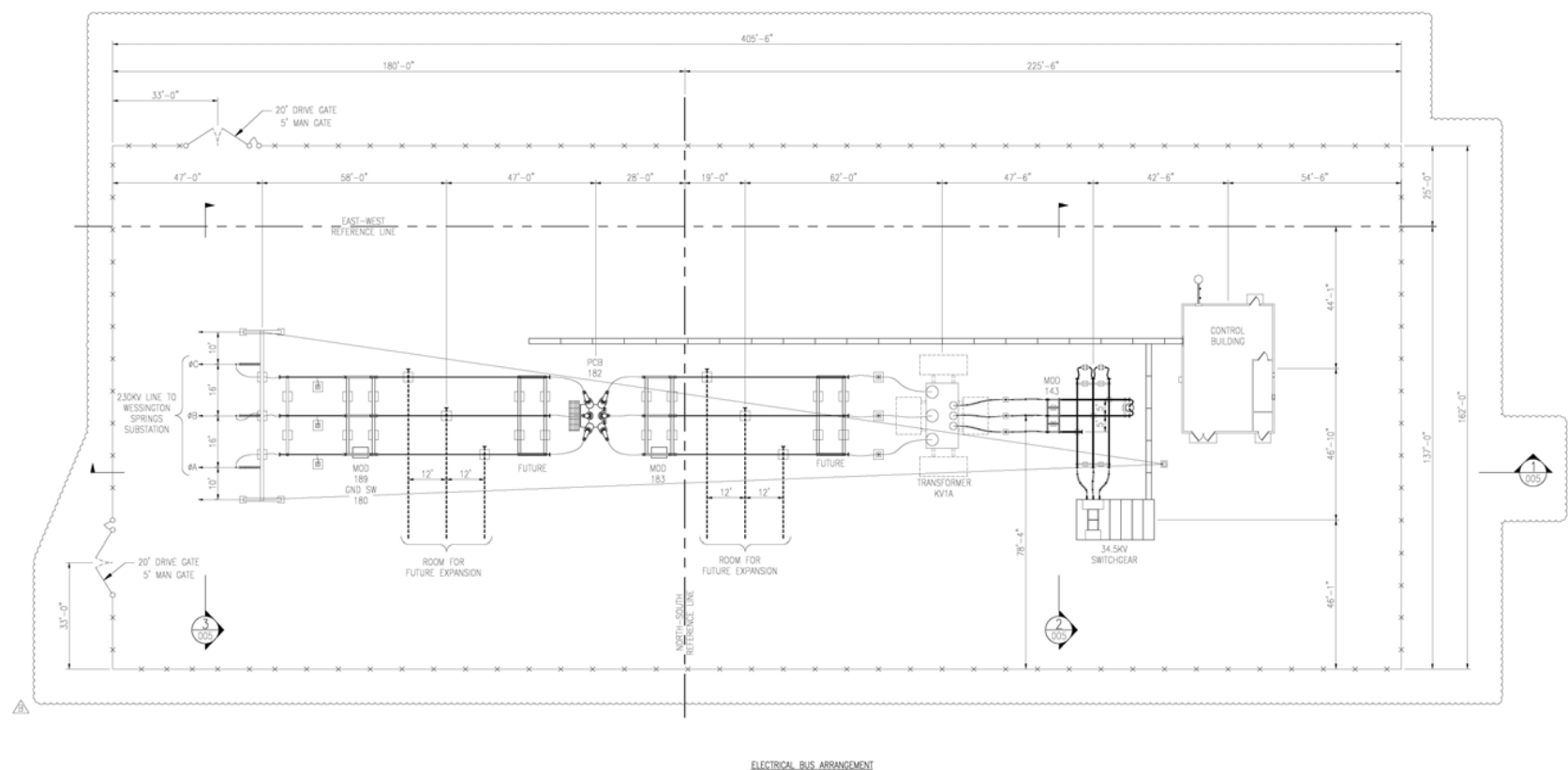
Prairiewinds SD1 Wind Farm Project

Date: 11/10/2009

Aurora, Brule, and Jerauld Counties, South Dakota

Author: KCS

Figure 7 – Preliminary Substation Layout



TO BE COMPLETED OR VERIFIED:
 1. PCB SIZE
 2. XFMR SIZE
 4. CABLE TRENCH SIZE

ELECTRICAL BUS ARRANGEMENT

TYPES OF CONNECTIONS

F FUSED
 S SLIP
 EX EXPANSION

BEPC SUBMITTAL REVIEW

() NO EXCEPTION NOTED/PROCEED
 () PROCEED AS NOTED, MAKE CORRECTION AND RESUBMIT
 () REVISE AND RESUBMIT FOR APPROVAL BEFORE PROCEEDING

BY _____ DATE _____

PRELIMINARY

REV.	DESCRIPTION	DATE	BY	DATE
B	REVISED PER BEPC COMMENTS	5/12/09	M. KAWANAGHI	E. SWENSON
A	ISSUED FOR REVIEW	5/4/09	M. KAWANAGHI	E. SWENSON

REFERENCE DRAWINGS
443-054-E3-003 230KV ELECTRICAL LAYOUT PLAN
443-054-E3-004 34.5KV ELECTRICAL LAYOUT PLAN
443-054-E3-005 34.5/230KV ELECTRICAL LAYOUT ELEVATIONS
443-054-E4-001 34.5KV & 230KV ELEC. LAYOUT DETAILS SH. 1 OF 2
443-054-E4-002 34.5KV & 230KV ELEC. LAYOUT DETAILS SH. 2 OF 2

PROJECT: TRANSMISSION SYSTEM MAINTENANCE	DATE: 3/2/09
DRAWING NO: 443-34.5/230KV CROW LAKE COLLECTOR SUBSTATION	DATE: 3/2/09
DESIGNER: M. KAWANAGHI	DATE: 3/2/09
CHECKER: E. SWENSON	DATE: 3/2/09
APPROVED: _____	DATE: _____
SCALE: 1/16" = 1'-0"	
REVISIONS/ISSUANCES FROM:	
REVISION NO. ORIGINAL REV.	
ISSUED FOR REVIEW	3/2/09
DATE: 5/4/09	REV. NO. B



Basin Electric Power Cooperative
 A Touchstone Energy® Cooperative

Map source: Prairiewinds SD1, Inc.

Public Utilities Permit Application

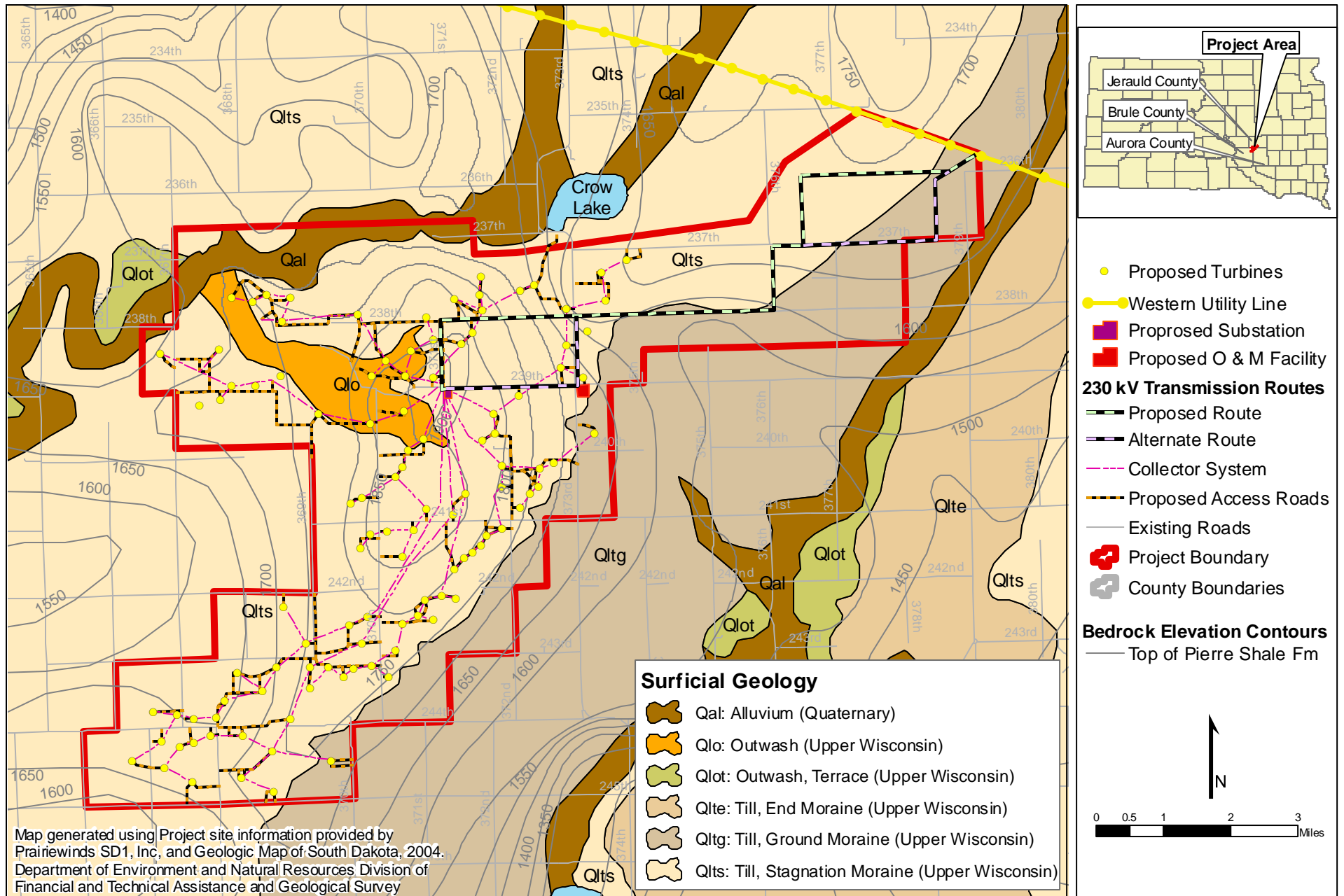
Prairiewinds SD1 Wind Farm Project

Date: 11/10/2009

Aurora, Brule, and Jerauld Counties, South Dakota

Author: KCS

Figure 8a - Bedrock Elevation Contours and Surficial Geology



Public Utilities Permit Application

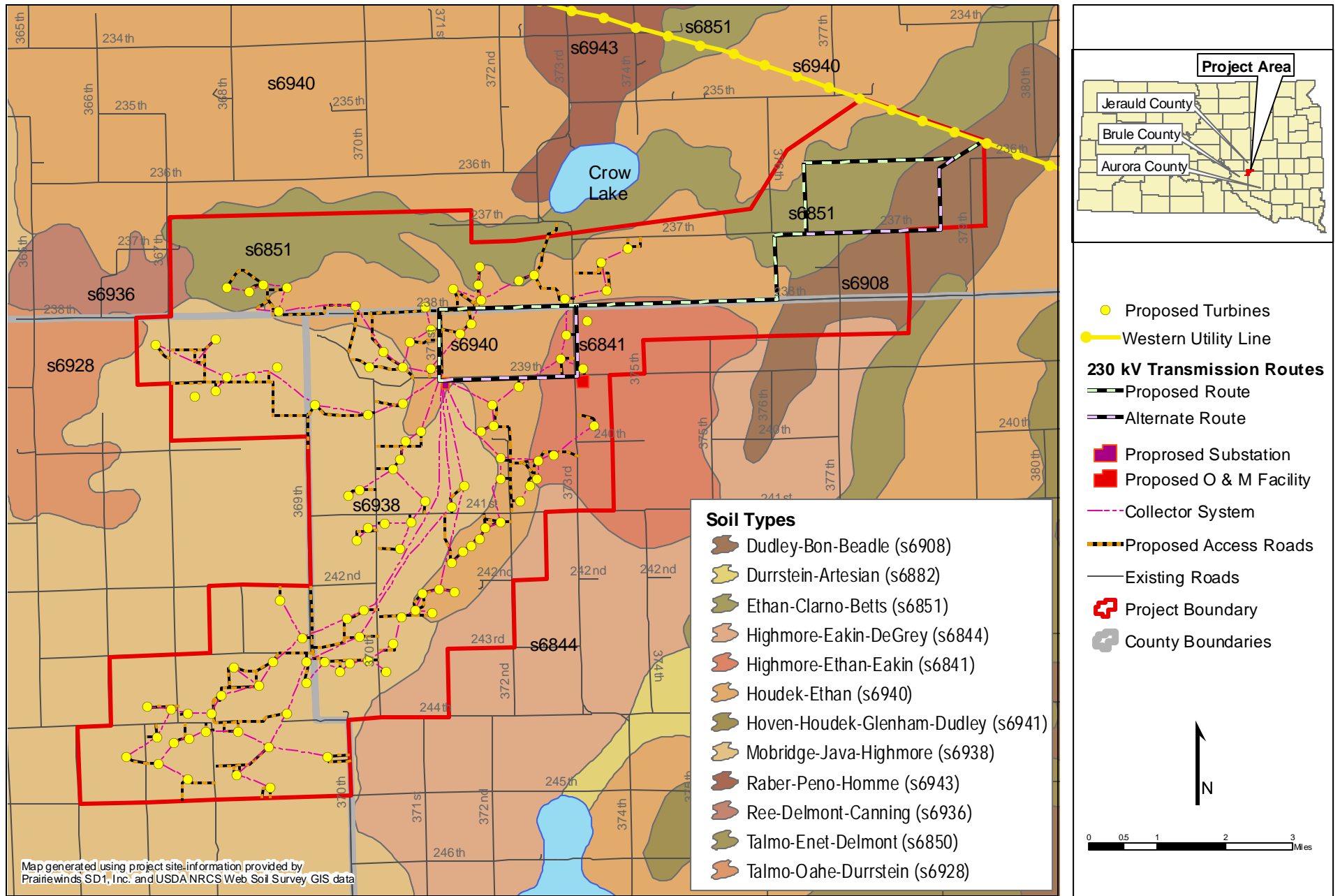
Prairiewinds SD1 Wind Farm Project

Date: 11/10/2009

Aurora, Brule, and Jerauld Counties, South Dakota

Author: KCS

Figure 9 - Soil Types



Public Utilities Permit Application

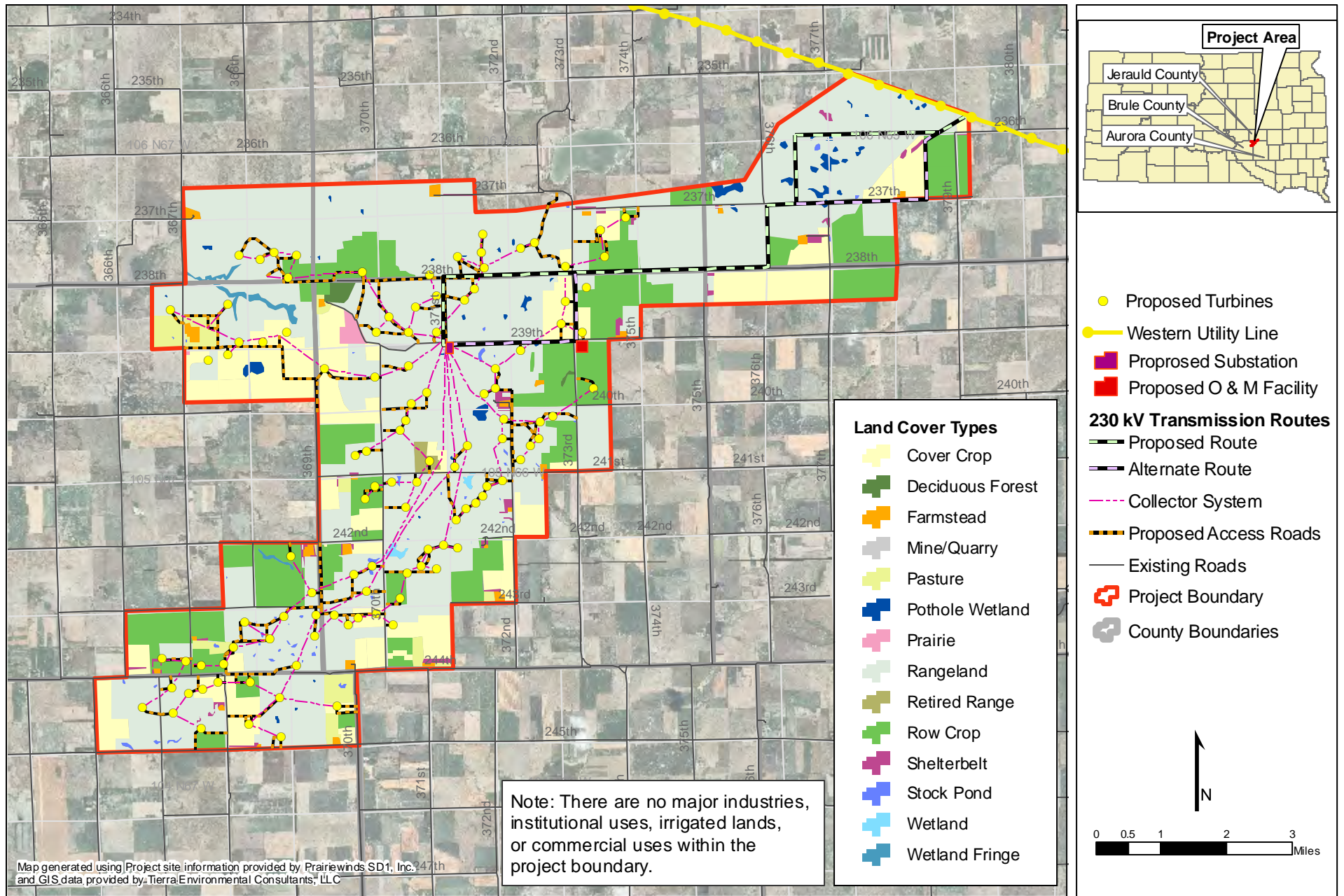
Prairiewinds SD1 Wind Farm Project

Date: 11/10/2009

Aurora, Brule, and Jerauld Counties, South Dakota

Author: KCS

Figure 10 - Land Cover Types



Public Utilities Permit Application

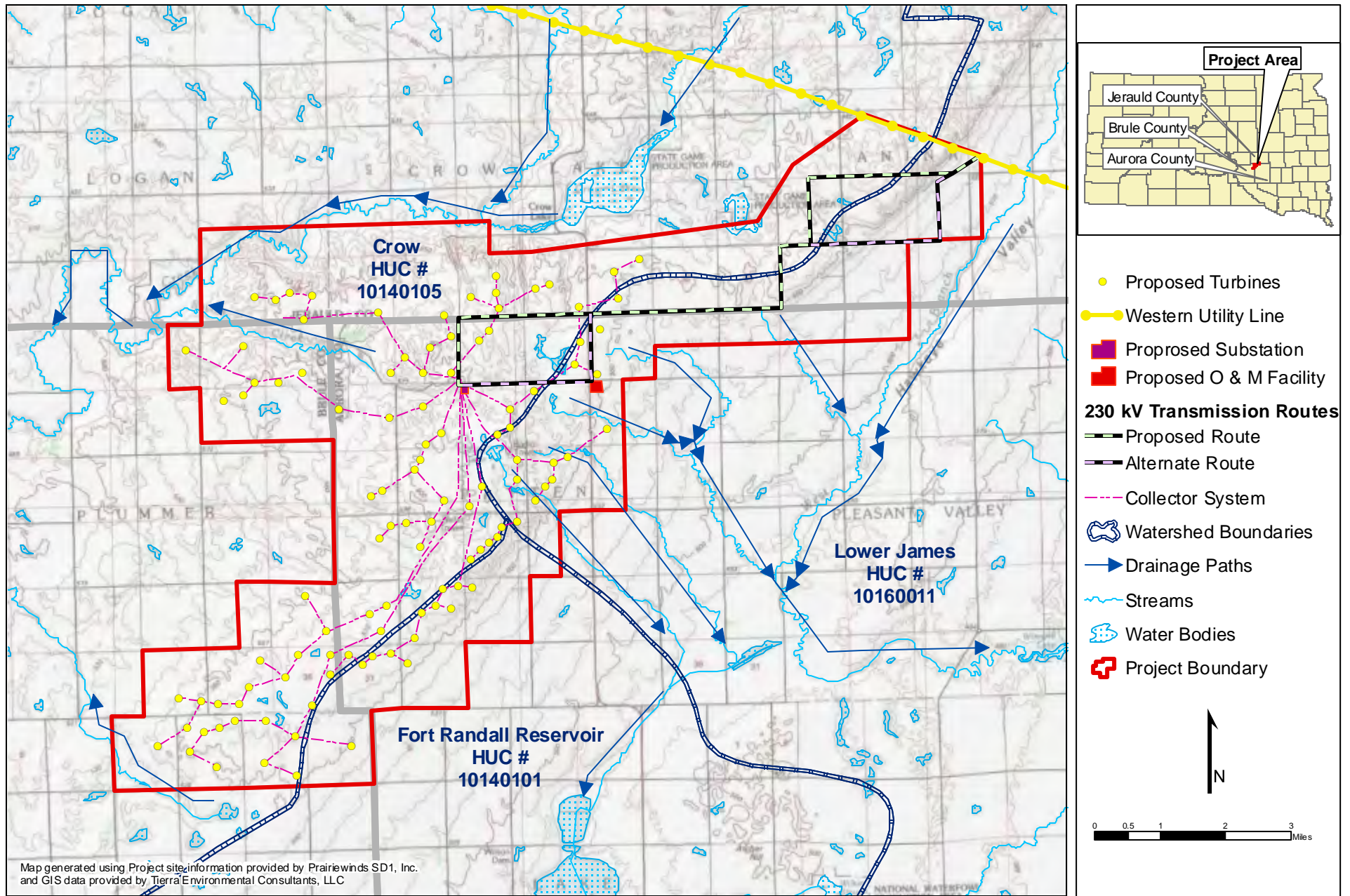
Prairiewinds SD1 Wind Farm Project

Date: 11/10/2009

Aurora, Brule, and Jerauld Counties, South Dakota

Author: KCS

Figure 11a - Water Resources



Public Utilities Permit Application

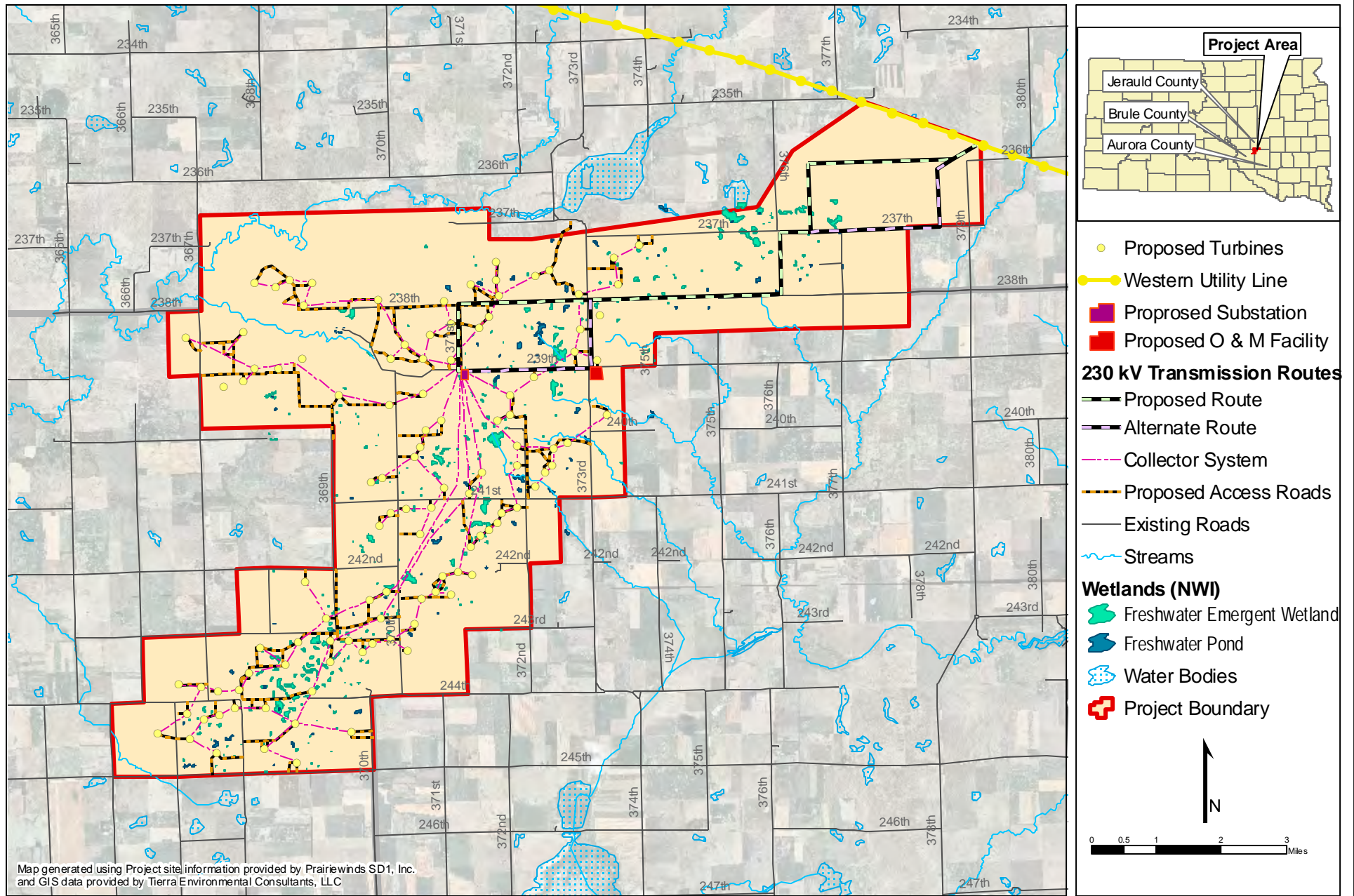
Prairiewinds SD1 Wind Farm Project

Date: 11/10/2009

Aurora, Brule, and Jerauld Counties, South Dakota

Author: KCS

Figure 11b - NWI Wetlands & Streams



Public Utilities Permit Application

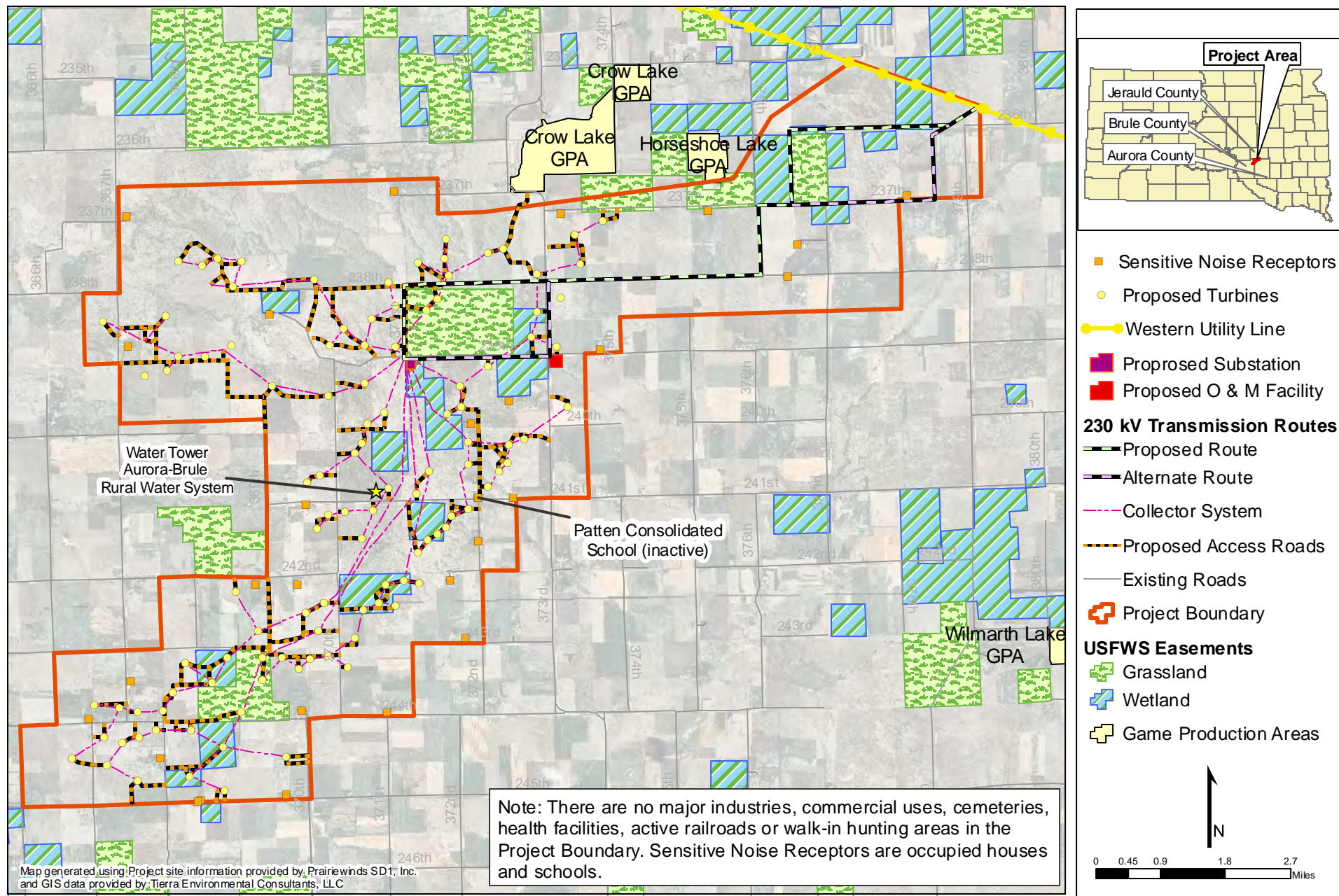
Prairiewinds SD1 Wind Farm Project

Date: 11/10/2009

Aurora, Brule, and Jerauld Counties, South Dakota

Author: KCS

Figure 12 - Land Use and Public Lands



Public Utilities Permit Application

Prairiewinds SD1 Wind Farm Project

Date: 11/10/2009

Aurora, Brule, and Jerauld Counties, South Dakota

Author: KCS

Figure 13 - Cultural Resources

