



June 6, 2014

Dr. Burl Haar  
Minnesota Public Utilities Commission  
121 Seventh Place East  
Suite 350  
St. Paul MN 55101-2147

**Re: Request to Expand Route Width to Accommodate Potential Woad Hill Substation Designs**  
*In the Matter of the Route Permit Application for the Odell Wind Farm HVTL Project in Cottonwood, Jackson, and Martin Counties*  
**MPUC Docket No. IP6914/TL-13-591**

Dear Dr. Haar:

Odell Wind Farm, LLC (“Odell”) is providing supplemental information regarding potential designs of the proposed Woad Hill Substation and requests a change to the route width previously requested by Odell in its Route Permit Application filed on December 12, 2013 in the above-mentioned Docket. The change in route width is being requested to accommodate a potential new substation configuration being considered in response to new design information provided to Odell by Xcel Energy.

Odell originally proposed to construct the proposed Woad Hill Substation directly adjacent to Northern States Power Company’s d/b/a Xcel Energy (“Xcel Energy”) planned switchyard in the southeast quarter of the intersection of County Road 150 (230<sup>th</sup> Street) and 30<sup>th</sup> Avenue in Section 16, Township 104, Range 33, Martin County, Minnesota (the “Original Configuration”). A preliminary engineering design of the Original Configuration is provided in the attached Exhibit 1. In the Original Configuration the Woad Hill Substation and Xcel Energy switchyard would be located north of the existing Xcel Energy 345 kilovolt (“kV”) electrical transmission line to which the Odell electrical transmission line would interconnect. A variation on the Original Configuration would co-locate the Woad Hill Substation and the Xcel Energy switchyard south of the existing Xcel Energy 345 kV electrical transmission line to which the Odell electrical transmission line would interconnect (“Second Configuration”). A preliminary engineering design of the Second Configuration is provided in the attached Exhibit 2. Odell designed the Original Configuration and Second Configuration using National Electric Safety Code (NESC) as well as other standards publicly available.

As a result of detailed discussions with Xcel Energy on the design of Woad Hill Substation, it was determined that the placement of the Woad Hill Substation in the Original Configuration or the Second Configuration may not be practicable due to Xcel Energy's internal design spacing requirements for substations and switchyards. Ongoing discussions between Odell and Xcel Energy have resulted in the need for Odell to investigate the option of locating the Woad Hill Substation in the northwest quarter of the intersection of County Road 150 (230<sup>th</sup> Street) and 30<sup>th</sup> Avenue in Section 16, Township 104, Range 33, Martin County, Minnesota (the "Third Configuration"). A preliminary engineering design of the Third Configuration is provided in the attached Exhibit 3. In the Third Configuration the Woad Hill Substation would be located northwest of the intersection of County Road 150 and 30<sup>th</sup> Avenue and the Xcel Energy switchyard would be located southeast of the same intersection. The Woad Hill Substation and the Xcel Energy switchyard would be connected by a new 345 kV electrical transmission line that would be less than 1,500 feet long and would be permitted by Martin County.

Odell continues to coordinate with Xcel Energy to determine whether the Original Configuration, Second Configuration, Third Configuration or some other combination thereof will be the configuration that best suits the needs of Xcel Energy and the Odell transmission line project. However, the timing of determining the best configuration is unknown at this time due to Xcel Energy's design schedule. In order to ensure the impacts of the potential designs are fully developed in the record, Odell is requesting that route be widened to include sufficient area to encompass the land that may be necessary to accommodate the Original, Second, or Third Configurations (see attached Exhibit 4). Since the originally proposed route includes enough room to accommodate the Original Configuration, the Second Configuration, and part of the Third Configuration, Odell is requesting that the proposed route width be modified only slightly to widen the area included in the northwest quadrant of the intersection of County Road 150 (230<sup>th</sup> Street) and 30<sup>th</sup> Avenue. The additional route area is approximately 480 feet wide by 950 feet long.

Similar to the route area for the Original Configuration and the Second Configuration, the new route area for the Third Configuration is also in agricultural fields and

- is not expected to create any new wetland impacts;
- is not expected to impact native prairie;
- is not expected to impact Minnesota County Biological Survey Sites; and
- is not expected to require additional tree clearing;

Moreover, Odell has contacted a landowner located at 206 230<sup>th</sup> Street, Trimont, MN 56176, that lives directly adjacent to the area that would be occupied by the Original Configuration and the Third Configuration about the three configurations described in this letter and has not received any negative comments or concerns. Odell has sufficient land rights to accommodate any of the three configurations. In addition, Martin County and Cedar Township have also been contacted about the Third Configuration and, as of the date of this letter, neither has expressed concern about any of the three configurations.

Thus, Odell respectfully requests the original route width be widened for the Third Configuration of the Woad Hill Substation as depicted in Exhibit 4. To ensure full development of the record, Odell requests that the Department of Commerce Energy Environmental Review Analysis unit consider the additional area and the three configurations described in this letter in its environmental assessment of the proposed route.

Please contact me with any questions about the proposed configurations or the additional route area.

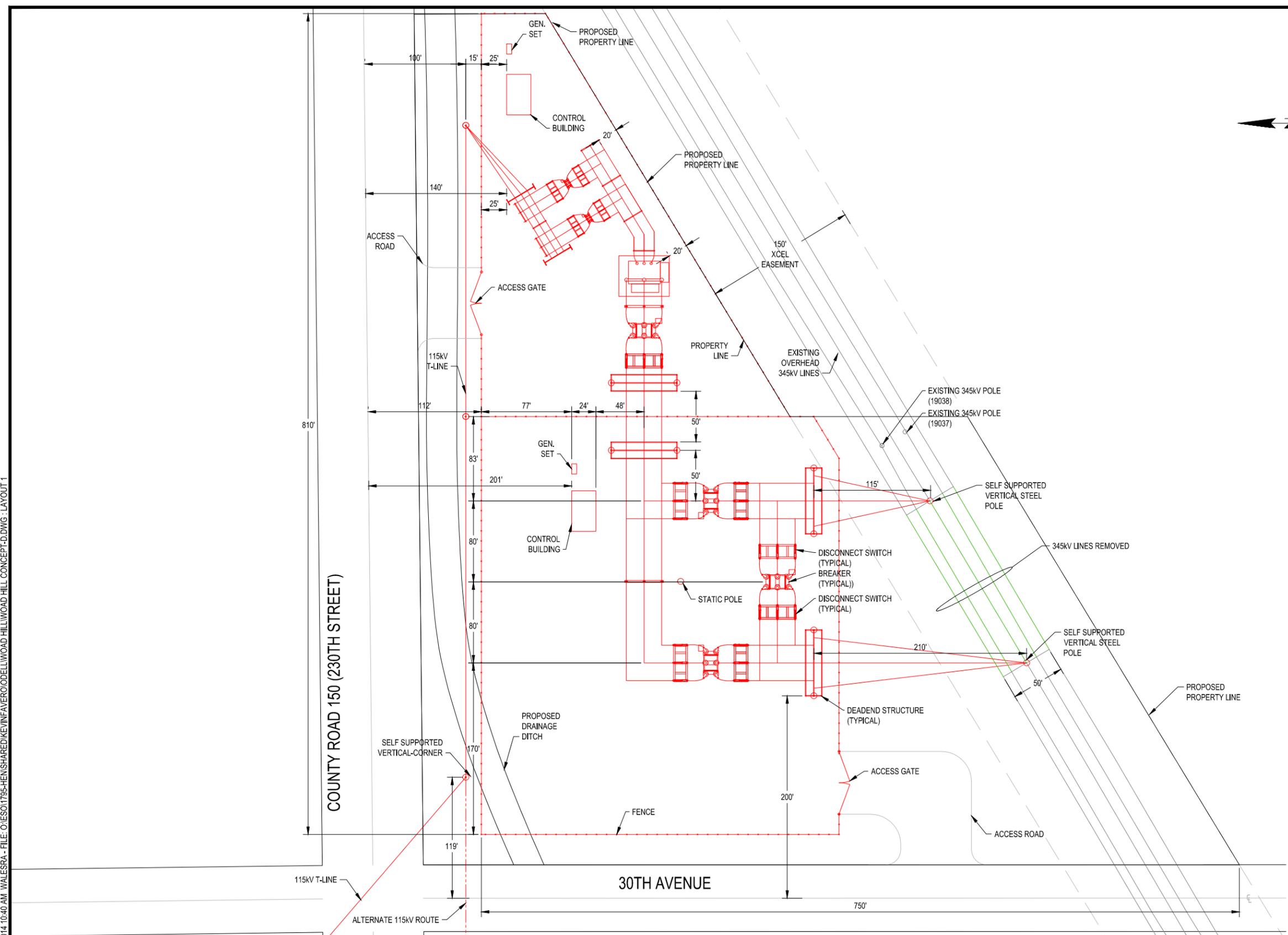
Sincerely,



Patrick Smith  
Dir. of Environmental Planning  
952.988.9000  
[patrick@geronimowind.com](mailto:patrick@geronimowind.com)

c: Ms. Deborah Pile  
Mr. Richard Davis  
Service List

PLOT: WALESRA - SAVED: 04/09/2014 10:40 AM WALESRA - FILE: O:\ES01795-HENSHARED\KEVIN\FAVERO\DELLWOOD HILL\WOD HILL CONCEPT-D.DWG - LAYOUT 1



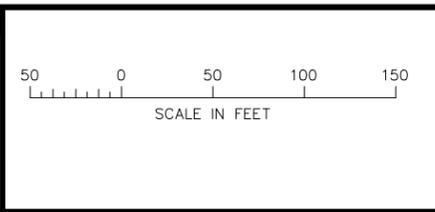
- NOTES:
1. NORMAL SETBACK FOR ANY STRUCTURE TO CENTERLINE OF PUBLIC RIGHT-OF-WAY IS 200' FT. NORMAL REAR AND SIDE SETBACKS ARE 30' FT FROM PROPERTY LINE. COUNTY VARIANCE IS REQUIRED FOR PROPOSED REDUCED SETBACKS.
  2. EXISTING 345KV OVERHEAD TRANSMISSION LINE HAS AN 150' FT EASEMENT.
  3. PER PAGE 3 OF THE DECEMBER 5, 2012 XCEL FACILITY STUDY (INCOMPLETE STUDY PUBLISHED ON DECEMBER 12, 2013), THE TWO POLES NEEDED TO TURN THE EXISTING 345 KV TRANSMISSION LINE INTO THE RING BUS SUBSTATION WILL BE SELF-SUPPORTING VERTICAL-CORNER STEEL POLES. THE FIRST EXISTING WOOD POLES TO THE EAST AND THE WEST OF THE NEW VERTICAL-CORNER STEEL POLES WILL BE REPLACED WITH SELF-SUPPORTING STEEL H-FRAME DEADEND STRUCTURES.
  4. LAYOUT REQUIRES REVIEW BY XCEL ENERGY AND REVIEW FOR CONSTRUCTABILITY.

# EXHIBIT 1

REV	DATE	CHK'D	APP'D	REVISION DESCRIPTION

DESIGNED	RJN
DRAWN	RW

**PRELIMINARY  
CONCEPT REQUIRES  
REVIEW FOR  
CONSTRUCTIBILITY**

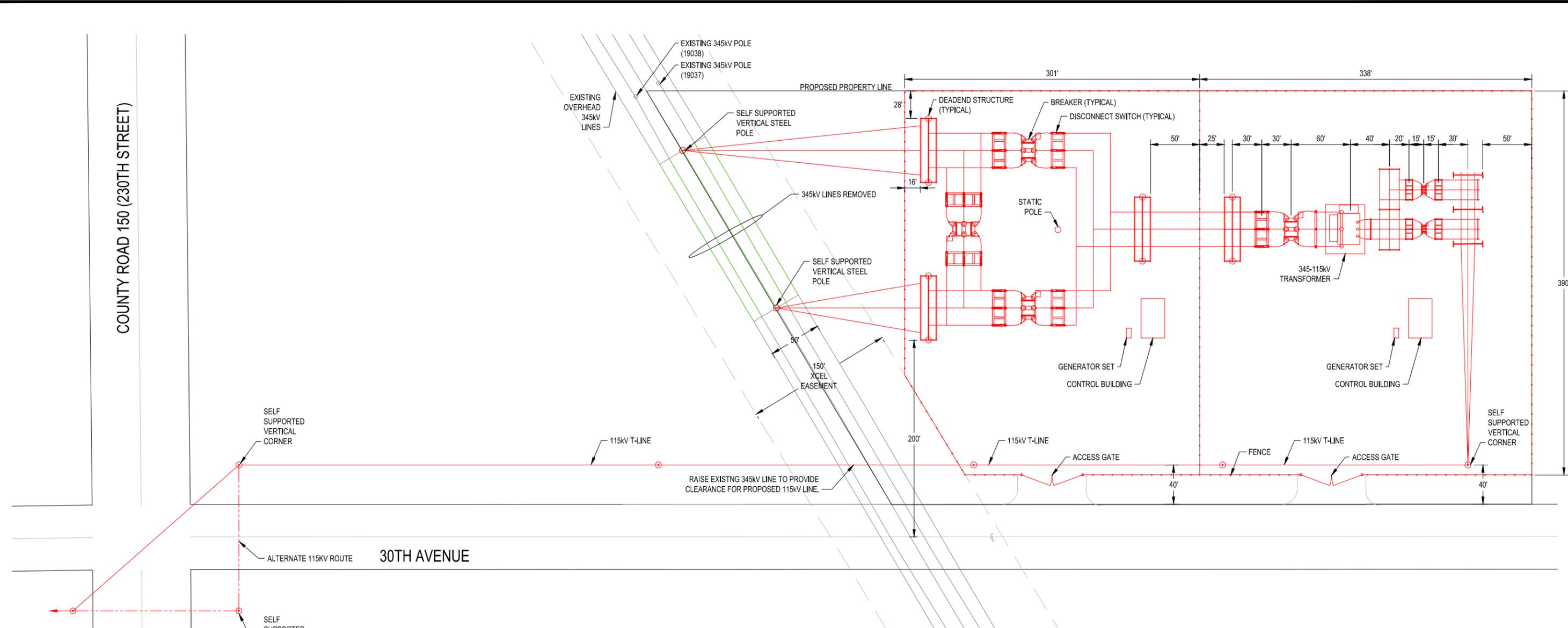


Leidos Engineering, LLC | 999 Third Avenue, Suite 500  
Seattle, WA 98104-4042 | phone 206.695.4700

GERONIMO ENERGY, ODELL WIND PROJECT  
WODAD HILL 345/115KV INTERCONNECTION SUBSTATION  
SECTION 16, T 104, R 33, MARTIN COUNTY, MN  
CONCEPTUAL GENERAL ARRANGEMENT  
APRIL 8, 2014

PROJECT NUMBER:	3101301001-4000
SHEET OF:	1 1
DRAWING NUMBER:	CONCEPT D.

PLOT: WALESSA - FILE: 04/10/2014 9:29 AM WALESSA - FILE: 01ES01795-HENISHARED\KVINFAVER\ODELL\WOD HILL\WODAD HILL CONCEPT.E.DWG - LAYOUT 1



- NOTES:
1. NORMAL SETBACK FOR ANY STRUCTURE TO CENTERLINE OF PUBLIC RIGHT-OF-WAY IS 200' FT. NORMAL REAR AND SIDE SETBACKS ARE 30' FT FROM PROPERTY LINE. COUNTY VARIANCE IS REQUIRED FOR PROPOSED REDUCED SETBACKS.
  2. EXISTING 345KV OVERHEAD TRANSMISSION LINE HAS AN 150' FT EASEMENT.
  3. PER PAGE 3 OF THE DECEMBER 5, 2012 XCEL FACILITY STUDY (INCOMPLETE STUDY PUBLISHED ON DECEMBER 12, 2013), THE TWO POLES NEEDED TO TURN THE EXISTING 345 KV TRANSMISSION LINE INTO THE RING BUS SUBSTATION WILL BE SELF-SUPPORTING VERTICAL-CORNER STEEL POLES. THE FIRST EXISTING WOOD POLES TO THE EAST AND THE WEST OF THE NEW VERTICAL-CORNER STEEL POLES WILL BE REPLACED WITH SELF-SUPPORTING STEEL H-FRAME DEADEND STRUCTURES.
  4. LAYOUT REQUIRES REVIEW BY XCEL ENERGY AND REVIEW FOR CONSTRUCTABILITY.



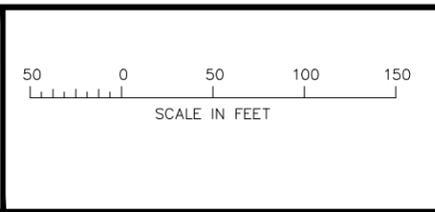
# EXHIBIT 2

REV	DATE	CHK'D	APP'D	REVISION DESCRIPTION

DESIGNED  
RJN

DRAWN  
RW

PRELIMINARY



Leidos Engineering, LLC | 999 Third Avenue, Suite 500  
Seattle, WA 98104-4042 | phone 206.695.4700

GERONIMO ENERGY, ODELL WIND PROJECT  
WODAD HILL 345/115KV INTERCONNECTION SUBSTATION  
SECTION 16, T 104, R 33, MARTIN COUNTY, MN  
CONCEPTUAL GENERAL ARRANGEMENT  
APRIL 10, 2014

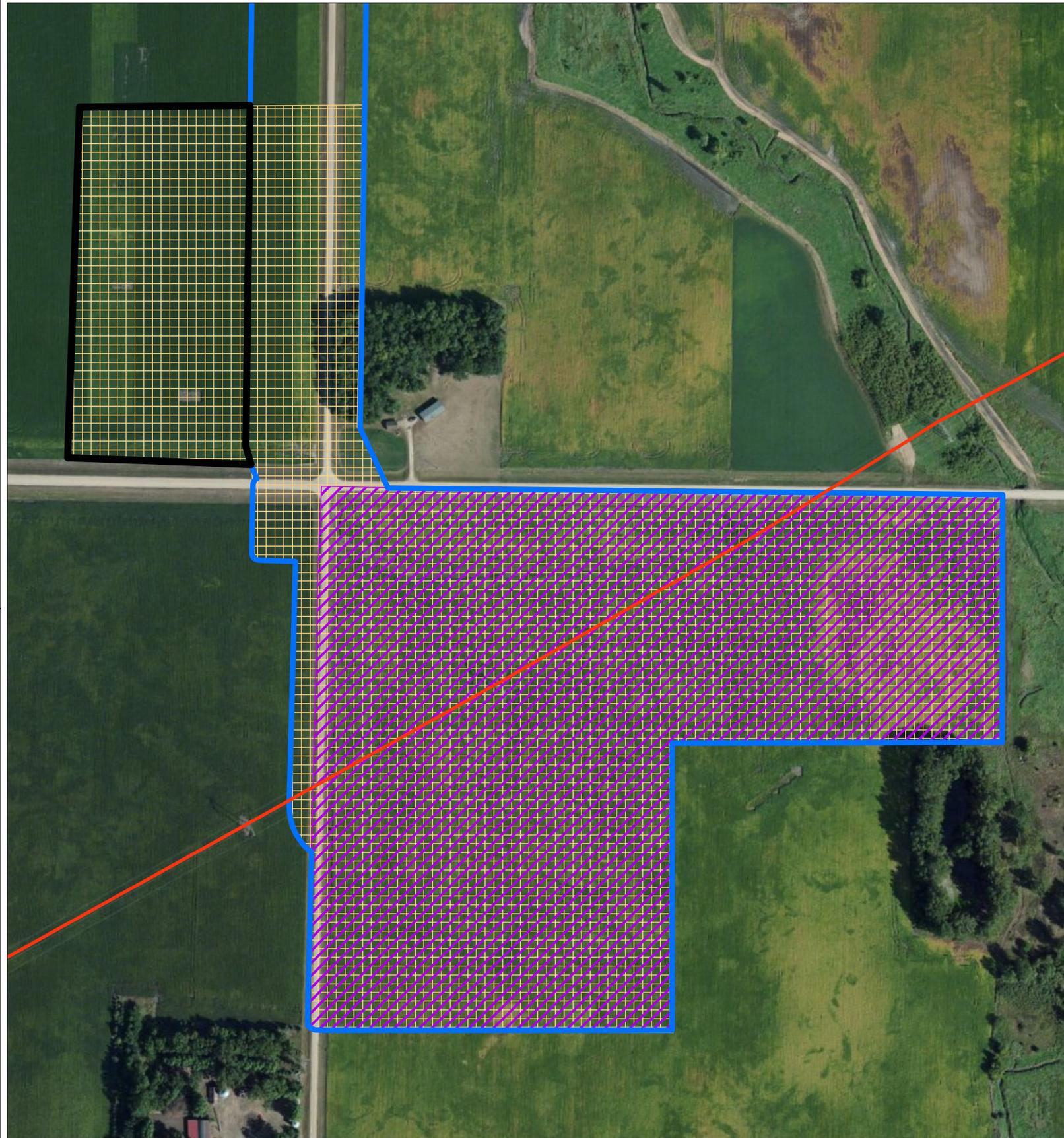
PROJECT NUMBER:  
3101301001-4000

SHEET OF:  
1 1

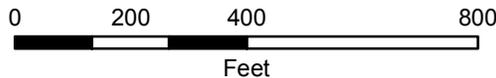
DRAWING NUMBER:  
CONCEPT E.



# Woad Hill Substation Route Modification



- Xcel Energy's Lakefield to Wilmarth 345kV Transmission Line
- Route Expansion Area
- Odell Transmission Route as Proposed in Route Permit
- Woad Hill Sub Area as Proposed in Route Permit
- Revised Woad Hill Sub Area





First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Julia	Anderson	Julia.Anderson@ag.state.mn.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota St St. Paul, MN 551012134	Electronic Service	Yes	OFF_SL_13-591_Official CC Service List
Christina	Brusven	cbrusven@fredlaw.com	Fredrikson & Byron, P.A.	200 S 6th St Ste 4000  Minneapolis, MN 554021425	Electronic Service	No	OFF_SL_13-591_Official CC Service List
Jeremy	Duehr	jduehr@fredlaw.com	Fredrikson & Byron, P.A.	200 South Sixth Street Suite 4000  Minneapolis, Minnesota 55402-1125	Electronic Service	No	OFF_SL_13-591_Official CC Service List
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 500  Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_13-591_Official CC Service List
Burl W.	Haar	burl.haar@state.mn.us	Public Utilities Commission	Suite 350 121 7th Place East St. Paul, MN 551012147	Electronic Service	Yes	OFF_SL_13-591_Official CC Service List
Michael	Kaluzniak	mike.kaluzniak@state.mn.us	Public Utilities Commission	Suite 350 121 Seventh Place East St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_13-591_Official CC Service List
John	Lindell	agorud.ecf@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	Yes	OFF_SL_13-591_Official CC Service List
Steve	Mihalchick	steve.mihalchick@state.mn.us	Office of Administrative Hearings	PO Box 64620  St. Paul, MN 551640620	Electronic Service	Yes	OFF_SL_13-591_Official CC Service List
Janet	Shaddix Elling	jshaddix@janetshaddix.com	Shaddix And Associates	Ste 122 9100 W Bloomington Fwy Bloomington, MN 55431	Electronic Service	Yes	OFF_SL_13-591_Official CC Service List
Patrick	Smith	patrick@geronimowind.com	Geronimo Wind Energy, LLC	7650 Edinborough Way, Ste 725  Edina, MN 55435	Electronic Service	No	OFF_SL_13-591_Official CC Service List

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Jonathan	Adrian	jnbadrian@frontiernet.net		39045 Co Rd 1  Mountain Lake, MN 56159	Electronic Service	No	SPL_SL_13-591_Geronimo Odell TL Project Contact List
Aaron	Backman	abackman@windom- mn.com	EDA of Windom	444 9th St, PO Box 38  Windom, MN 56101	Electronic Service	No	SPL_SL_13-591_Geronimo Odell TL Project Contact List
Annette	Blair	N/A	Southwest Regional Development Commission	2401 Broadway Ave #1  Slayton, MN 56172-1142	Paper Service	No	SPL_SL_13-591_Geronimo Odell TL Project Contact List
Larry	Boots	larrywb@frontiernet.net		1967 Willow Ave  Worthington, MN 56187	Electronic Service	No	SPL_SL_13-591_Geronimo Odell TL Project Contact List
Wayne	Hanson	whanson@frontiernet.net	-	66224 361 Lane  Butterfield, MN 56120	Electronic Service	No	SPL_SL_13-591_Geronimo Odell TL Project Contact List
James	Swanson			91868 570th Avenue  Mountain Lake, MN 56159	Paper Service	No	SPL_SL_13-591_Geronimo Odell TL Project Contact List