



Date:

September 22, 2018

To:

Bridget Canty

From:

Ed Bowers

Subject:

Prevailing Wind Park Project, Potential House Field Review

Prevailing Wind Park, LLC engaged Burns & McDonnell (Burns) to conduct an independent review of residences within the Prevailing Wind Park project area (Project Area) and within a half-mile of the Project Area (Verification Area). Prevailing Wind Park, LLC directed Burns to evaluate whether there were any occupied residences in the Verification Area that were not included in the 137 occupied residences shown in the Application for a Facility Permit in South Dakota Public Utilities Commission Docket EL18-026. This memorandum describes the verification process and the results of our investigation.

Burns first reviewed aerial imagery to identify potential occupied residences within the Verification Area. Through that process, Burns identified 28 structures that could be residences. The 28 were assigned house numbers XX-1 through XX-28.

The locations of these 28 structures were field reviewed on September 17 and 18, 2018 by Angie Woehler, assistant environmental scientist and Ed Bowers, environmental scientist.

We drove by each of the identified 28 potential residences and visually observed the general appearance for signs that the structure could be considered occupied. Signs of potential occupation included the presence of a mailbox, visible electric or other utility service to the house, condition of the driveway or access to the house (maintained versus tall vegetation), and the overall condition of the house.

Houses with some signs of occupation, but that displayed evidence of long-term structural and property decline (broken out windows, holes and damage to roof, overgrown vegetation, etc.) were classified as non-occupied. In cases where visual observation of the potential house was restricted, we relied upon visual signs to assess whether the house was occupied. In cases where there were some signs of occupancy as well as abandonment, the house was presumed to be occupied.

We recorded notes about our observations and took a photo(s) of each of the houses to support our classification decision. The location and occupation status for each house was also recorded into a geographic information system (GIS) geodatabase using a global positioning system (GPS) enabled laptop computer with ArcGIS 10.4 software. Recording GIS data provides a record of each house that can be viewed and evaluated in relationship to other resources in the project area, particularly the proximity to proposed wind turbines. Using GIS

with GPS also provided us a means of efficiently navigating to each house while documenting our search area.

As part of our field work reviewing the 28 structures, we also looked for any discrepancies in the status of nearby residences previously identified in the Application. No discrepancies were observed.

During the process of classifying the 28 identified structures, we observed an additional potential residence, bringing the total potential residences to 29. The structure had not been identified as a potential residence in the desktop review due to its general appearance.

In the field, we observed a second structure next to XX-22 that appeared to have electric service connected to an electric meter, had what looked like a newer roof installed, and gave the overall appearance it could be occupied. Rather than change the location of XX-22 to this structure, we added it to the geodatabase as XX-22A, and classified it as occupied. We also recorded the location of a few structures that we observed, which were not part of the prior study and not included in the 28 potential houses. These were recorded into the geodatabase in case they are later observed on aerials and their status is brought into question. None of these additional structures was determined to be an occupied residence.

Of the 29 structures evaluated, we classified 20 houses as non-occupied and nine structures as occupied residences. A spreadsheet is attached that provides the house numbers we observed matched with the reference numbers of photos taken of the house and the field notes recorded during our observation.

Ed F. Bowers

Enclosure: House Status Classification Spreadsheet

Edward E. Bowers

House			Occupation				Date Field
Number	Photo Number	Field Notes	Status	Property Status	Latitude_DMS	Longitude_DMS	Classified
		Mailbox and gate (locked) both look newer.					
		Electricity present, No access to house, but					
		appears on aerial layer. Landowner had					
XX-01	Photo 032	contacted project team prior to field visit	Occupied	Non-participating	43d 5' 55.232" N	98d 8' 32.940" W	18-Sep-18
XX-02	Photo 028 & 029	No mailbox, no electric, broken windows	Non-occupied	Non-participating	43d 11' 1.833" N	98d 8' 40.131" W	18-Sep-18
		Has electric, several old cars, gate locked. Does					
XX-03	Photos 006 & 007	not appear to be occupied	Non-occupied	Non-participating	43d 10' 35.127" N	98d 3' 6.224" W	17-Sep-18
		Has AC unit, satellite dish, electric, no mailbox.					
XX-04	Photo 005	Looks livable	Occupied	Non-participating	43d 11' 21.356" N	98d 3' 2.897" W	17-Sep-18
		House gone, barn present. No mailbox, no					
XX-05	Photo 003	electric	Non-occupied	Non-participating	43d 12' 5.113" N	98d 0' 40.937" W	17-Sep-18
XX-06	Photo 027	Dog in yard, Overall looks occupied	Occupied	Non-participating	43d 4' 11.480" N	97d 57' 50.740" W	17-Sep-18
		No mailbox, rope gate, no access but driveway					
		mowed and clear, has electric and newer					
XX-07	Photo 025	vehicles outside	Occupied	Non-participating	43d 2' 52.807" N	97d 59' 12.417" W	17-Sep-18
		Satellite dish but very overgrown, no mailbox,					
XX-08	Photos 023 & 024	damage to roof visible	Non-occupied	Non-participating	43d 2' 27.827" N	97d 59' 26.585" W	17-Sep-18
		Chickens and cats in yard, electric, looks					
XX-09	Photo 022	occupied	Occupied	Non-participating	43d 1' 43.601" N	97d 58' 54.005" W	18-Sep-18
		Boarded_up windows, overgrown vegetation					
XX-10	Photo 014	on driveway, does not appear occupied	Non-occupied	Non-participating	43d 1' 32.372" N	98d 4' 50.731" W	17-Sep-18
		Satellite dish, house has decorations for					
XX-11	Photo 041	autumn and appears well kept and occupied	Occupied	Non-participating	43d 2' 34.786" N	98d 9' 46.298" W	18-Sep-18
		No mailbox, no electric, damage to roof, locked					
XX-12	Photo 031	gate	Non-occupied	Non-participating	43d 7' 23.940" N	98d 10' 14.558" W	18-Sep-18
		No mailbox, gate open, but no sign of traffic on					
XX-13	Photo 008	driveway, broken windows	Non-occupied	Leased	43d 8' 11.171" N	98d 4' 12.108" W	17-Sep-18
		Has electric, no mailbox, gate locked with "No					
		Trespassing", Looks like frequently visited, but					
XX-14	Photo 009	not occupied	Non-occupied	Leased	43d 8' 3.304" N	98d 4' 2.772" W	17-Sep-18
		No mailbox, tall vegetation on driveway, roof					
XX-15	Photo 039	damaged	Non-occupied	Leased	43d 5' 5.351" N	98d 6' 15.889" W	18-Sep-18
		Has long driveway, has electric, satellite dish,					
XX-16	Photo 010	dawn-to-dusk light, propane tank	Occupied	Leased	43d 5' 33.462" N	98d 3' 48.488" W	17-Sep-18
		No mailbox, but has electric. Damaged and					
XX-17	Photos 037 & 038	broken windows	Non-occupied	Leased	43d 4' 49.482" N	98d 6' 36.828" W	18-Sep-18
XX-18	Photo 011	Has mailbox, looks livable	Occupied	Leased	43d 4' 55.837" N	98d 4' 8.622" W	17-Sep-18
XX-19	Photo 040	Broken glass, overgrown vegetation	Non-occupied	Leased	43d 2' 43.987" N	98d 5' 21.487" W	18-Sep-18

House			Occupation				Date Field
Number	Photo Number	Field Notes	Status	Property Status	Latitude_DMS	Longitude_DMS	Classified
		Appears abandoned, has electric, but no sign of					
XX-20	Photos 001 & 002	life	Non-occupied	Leased	43d 11' 44.326" N	97d 59' 33.618" W	17-Sep-18
XX-21	Photo 030	No gate, mailbox, electric. Broken windows	Non-occupied	Non-participating	43d 10' 19.688" N	98d 9' 57.741" W	18-Sep-18
		Gate locked, no mailbox. House originally					
		identified is overgrown with trees and					
XX-22	Photos 032- 035	considered unoccupied.	Non-occupied	Non-participating	43d 4' 51.192" N	98d 9' 18.526" W	18-Sep-18
		Located next to potential house XX.22. Gate					
		was locked (In Google Earth photo there is no					
1		gate and a mailbox is present at end of					
		driveway). Has newer roof, has electic meter					
		visible on side of building, driveway appears					
		maintained and used (no tall grass). Could not					
XX-22A	Photos 036	gain closer view, so considered occupied	Occupied	Non-participating	43d 11' 47.88" N	98d 1' 15.89" W	18-Sep-18
		Has mailbox, but overgrown with vegetation,					
XX-23	Photo 026	windows broken. House looks very fragile	Non-occupied	Non-participating	43d 4' 52.288" N	97d 59' 19.726" W	17-Sep-18
XX-24	Photos 012 & 013	Overgrown vegetation, no mailbox, no electric	Non-occupied	Non-participating	43d 3' 57.850" N	98d 4' 12.042" W	17-Sep-18
		Gate locked and way back from road, no					
XX-25	Photo 016 & 017	access, no mailbox, no electric	Non-occupied	Leased	43d 2' 53.592" N	98d 3' 15.406" W	17-Sep-18
XX-26	Photo 018 & 019	Overgrown vegetation, broken windows	Non-occupied	Leased	43d 2' 17.864" N	98d 0' 49.813" W	17-Sep-18
XX-27	Photos 020 & 021	Locked gate, no mail box, no access	Non-occupied	Leased	43d 1' 36.832" N	98d 0' 44.229" W	17-Sep-18
		House and surrounding trees appear to have					
		been removed. Structure in background shows					
		up behind house on aerials and is not believed					
XX-28	Photo 015	to be occupied either	Non-occupied	Non-participating	43d 1' 30.692" N	98d 4' 2.560" W	17-Sep-18