

**STARK COUNTY, NORTH DAKOTA
FLOODPLAIN DEVELOPMENT PERMIT APPLICATION
NON-BUILDING SITUATION**
(Attach additional information as necessary)

1. GENERAL INFORMATION:

Community: Rural Stark County

PERMIT # 0517201601 DATE: May 2, 2016

Applicant: John DiDonato, NextEra Energy
Address: 700 Universe Boulevard, Juno Beach, FL 33408
Telephone #: 561-304-5244

Contractor: Chris Ansari, Tetra Tech, Inc.
Address: 350 Indiana Street, Suite 500, Golden, CO 80401
Telephone #: 303-217-5700

Estimated Cost of project: \$ 270,500,000

Description and location of proposed development:

Brady Wind Energy Center (Project). Field surveys were completed October through February 2016. The Project includes the construction of wind turbines and an associated transmission line in Stark County, North Dakota.

Brady Wind, LLC (Brady Wind), a wholly-owned, indirect subsidiary of NextEra Energy Resources, LLC (NEER), is proposing to construct the Brady Wind Energy Center (Project) in southern Stark County, North Dakota (**Attachment 2 Map Sheets**). The Project area is the location within which Brady Wind has negotiated easements with landowners, and encompasses approximately 30,213 acres (47 square miles).

The Project will have a nameplate capacity of approximately 150 megawatts (MW), consisting of up to 87 wind turbines using both General Electric (GE) 1.715 MW Xle and GE 1.79 MW Xle wind turbine generators. Additional facilities include access roads, underground electrical collection systems and cabling, a collection substation, an operation and maintenance (O&M) building, meteorological towers, a construction laydown area, and a temporary turbine storage area. The Project also includes an approximately 19-mile, 230-kilovolt (kV) overhead transmission line and a switchyard to connect the Project to the Belfield to Rhame 230-kV transmission line, in Section 29 of Township 137 North, Range 98 West, approximately 19 miles southwest of the city of Dickinson and will transmit power into the Basin Electric Power Cooperative (Basin) transmission system. The switchyard will include a microwave tower, a control building, and four new transmission poles to interconnect to Basin's existing Belfield to Rhame Transmission Line. Temporary crane paths will be used to transport construction cranes in the Project area to erect turbines during construction.

Project infrastructure will have temporary impacts to floodplains in rural Stark County. Table 1 below lists the infrastructure type, temporary impact acreage, and the location on the Map Sheets (Attachment 2).

Table 1. Temporary Floodplain Impacts

Infrastructure Type	Temporary Impact acreage	Latitude	Longitude	Map Sheet ¹	FIRM Map Panel ²
Collection Line	0.35	46.63726526450	-102.68286023600	1	725
Crane Path/Collection Lines	1.20	46.63803324390	-102.68356314900	1	725
Collection Lines	1.42	46.64427377160	-102.79958424200	2	700
Transmission Pole 23	1.43	46.64507753960	-102.79925969600	2	700
Turbine Storage Area	0.03	46.64934266710	-102.79988159800	2	700
Transmission Pole 59	0.66	46.63734465930	-102.89563199500	3	675
Collection Line	0.34	46.63843770650	-102.88936436900	3	675
Access Road to Turbine 15	0.08	46.64228376200	-102.89465791800	3	675
Crane Path/Collection Line	0.60	46.64862665250	-102.89535271300	3	675
Crane Path/Collection Line	0.72	46.63292532320	-102.93926707200	4	675
Collection Line	< 0.01	46.64263661200	-102.92736405500	4	675
Collection Line	0.26	46.64256288060	-102.92575364000	4	675
Crane Path	0.57	46.64559232110	-102.92426997000	4	675
Collection Line	0.37	46.64667997620	-102.92281271400	4	675
Transmission Pole 98	0.28	46.63721388820	-103.02557655600	5	650
Transmission Pole 99	0.05	46.63758064240	-103.02683467000	5	650
Transmission Pole 87	0.23	46.63686756970	-102.99048416500	5	650
Transmission Pole 118	0.74	46.64515716640	-103.07078468000	6	650
Transmission Pole 117	0.67	46.64517429990	-103.06799495600	6	650
Transmission Pole 116	1.13	46.64494044690	-103.06408269400	6	650
Transmission Pole 115	0.72	46.64510114660	-103.06042905000	6	650
Transmission Pole 120	0.87	46.64634815060	-103.07283776500	6	650

¹ Map Sheets are located in Attachment 2.

² FIRM Maps are located in Attachment 3.

2. FLOODPLAIN DETERMINATION: (fill-in the appropriate information)

Map information:

FIRM Date: Attachment 3 FIRM maps

FIRM Zone: All floodplains in Project are Zone A

Project is located in:

100-year floodplain (Flood Fringe): yes

*Regulatory Floodway: Not applicable

(*a hydraulic analysis is needed by a registered professional engineer unless determined otherwise by the community, please explain.)

BFE at Development Site: _____ (MSL)

Development will be elevated to: _____ (MSL)

3. DEVELOPMENT ACTIVITIES: (check all that apply)

- Fill placement (fill brought in from outside the floodplain)
- Excavation (where subgrade fill is removed from the floodplain)
- Landscaping (cut and fill, fill borrow and placement)
- Construction or maintenance of a dike/levee/floodwall
- Removal of fill, embankment, or dikes
- Watercourse alterations (river, stream, lake - channel modifications, rip-rap)
- Road, street or bridge construction (new, repair or replacement, realignment)
- Drainage improvements (including culvert work)
- Mining (removal of gravel, rock, fill or other natural materials)
- Installation of utilities (water sewer, pipeline, gas, electric, communications)
- Tower construction (communications tower, antennae etc.)
- Pipeline construction (temporary construction activity)
- Well drilling (water, oil, natural gas etc.)
- Subdivision (new or expansion of existing subdivision)
- Other (please specify) _____

4. ADDITIONAL INFORMATION, PERMITS OR NOTIFICATION:

(Attach additional information)

See **Attachment 1** for additional information

- Comments or further explanation of work:
- Copies of project description, plans, blueprints, etc.
- Wetlands - will the activity impact identified wetlands? Notify U.S. Army Corps of Engineers?
- Will the development aggravate flooding elsewhere? Notify Water Resource District and/or Neighboring political entity?

5. ELEVATION INFORMATION:

Attach information about the completed project elevations(s) with registered professional engineer or registered land surveyor certifications if part of the project.

The project is anticipated to have minimal impacts to the associated floodplains.

6. ACTION / APPROVAL:

The proposed development is in conformance with applicable community floodplain standards.

Comments or Conditions of the permit: All suggested revisions have been met.

PERMIT IS APPROVED (Conditioned on receiving as-built information/certification)

Signature



(Floodplain Administrator)

Date:

05/17/16

PLEASE SUBMIT COMPLETED APPLICATION TO:
STARK COUNTY DEPARTMENT OF EMERGENCY SERVICES
BILL FAHLSING
66 MUSEUM DRIVE WEST
DICKINSON, ND 58601
BFAHLSING@STARKCOUNTYND.GOV

**Attachment 1:
Supplement for Section 4. Additional
Information, Permits, or Notification**

4. Additional Information for the Floodplain Permit

- a. Comments or further explanation of work:

Transmission Line Pole Construction

Temporary impacts from the installation of the transmission line poles are associated with the installation of the pole and associated construction equipment. **All temporary disturbance will be returned to the original contour and grade once construction is completed.** No change in base elevation is anticipated from the installation of the transmission line poles.

Collection Line Construction

Collection lines are the conduits for distribution of power between the wind turbines and the switchyard. Collection lines are installed **below the surface** typically with the use of trenching equipment. The equipment typically requires a 50 foot right-of-way (ROW) to install the lines. **Once the lines are installed, the temporary disturbance will be returned to the original contour and grade.** No change in base elevation is anticipated from the installation of the collector lines.

Crane Paths

Crane Paths are temporary overland travel used for accessing the wind turbine locations during installation. The paths typically require an 80 foot ROW. The equipment using the crane path can cause temporary disturbances to the land. **Crane paths will be returned to the original contour and grade after use.** No change in base elevation is anticipated from the use of the crane paths.

Access Road

Temporary disturbance associated with the installation of a permanent access road will be required for this project. **A floodplain permit for the permanent disturbance associated with this access road is being submitted separately.** Once construction of the access road is completed, the area will be returned to the original contour and grade. No change in base elevation is anticipated from the installation of the access road.

- b. Copies of project description, plans, blueprints, etc.

The project description is provided in Section 1 of the permit application. Attached are figures and FIRM maps of the project area.

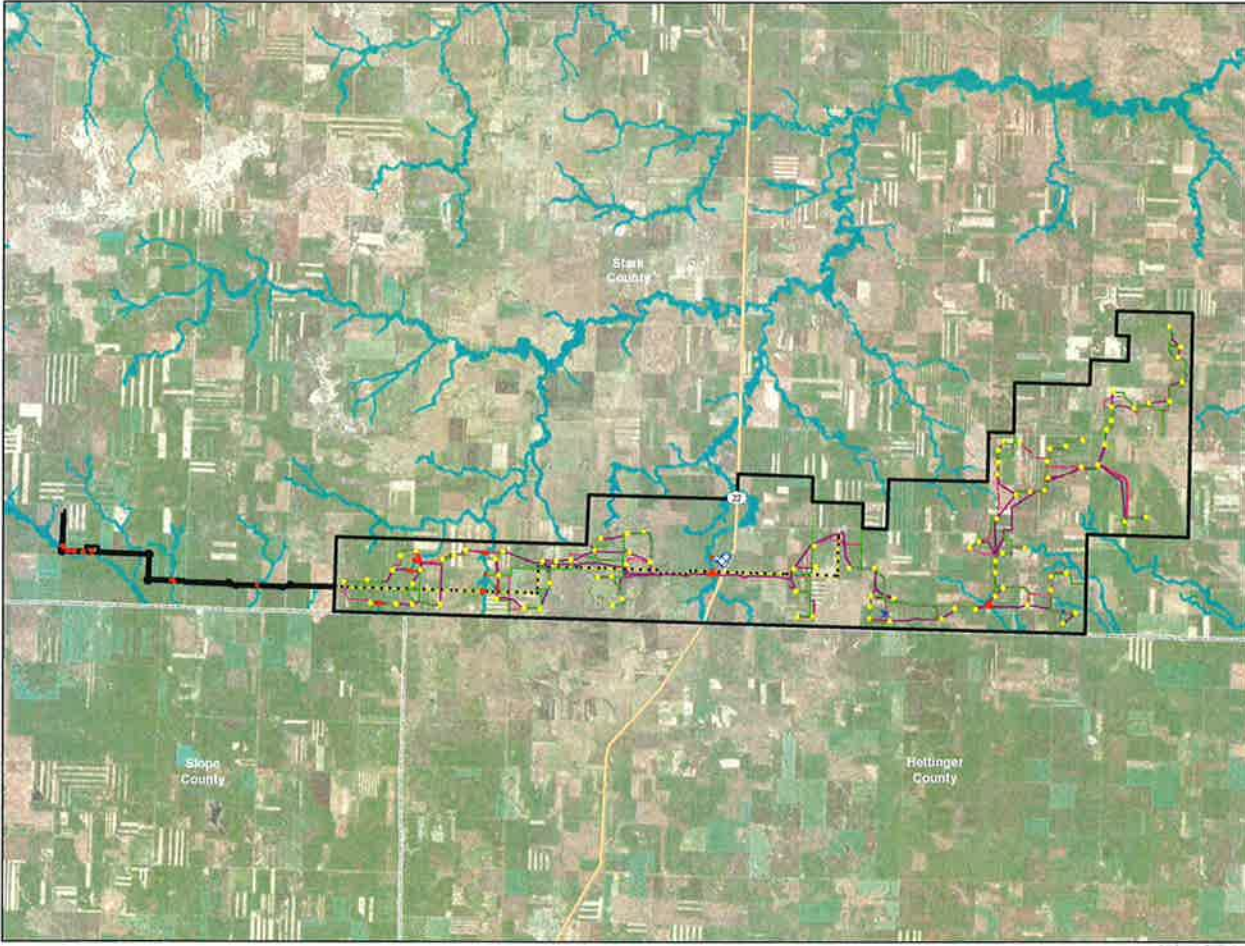
- c. Wetlands – Will the activity impact identified wetlands? Notify the U.S. Army Corps of Engineers?

The Project is anticipated to have temporary impacts associated with transmission line poles, collector lines, access roads, and crane paths. A separate permit application is being submitted for the minimal permanent impacts to the floodplains. The temporary and permanent impacts from the Project would be less than the minimum permitting requirement from the U.S. Army Corps of Engineers. The Project has had several informal discussions with the USACE regarding permitting requirements for the Project resulting in a no formal permit requirement determination. The Project will be operating under the USACE Nationwide Permit 12 – Utility Lines and have agreed to abide by the general and regional conditions of the permit.

- d. Will the development aggravate flooding elsewhere? Notify Water Resource District and/or Neighboring political entity?

The Project is anticipated to have very minimal impacts on flooding. Cumulatively, the project will have 0.0135 acres (588.06 square feet) of permanent impact to floodplains. Notification of neighboring water resource districts or political entities has not been requested.













Attachment 2: Map Sheets



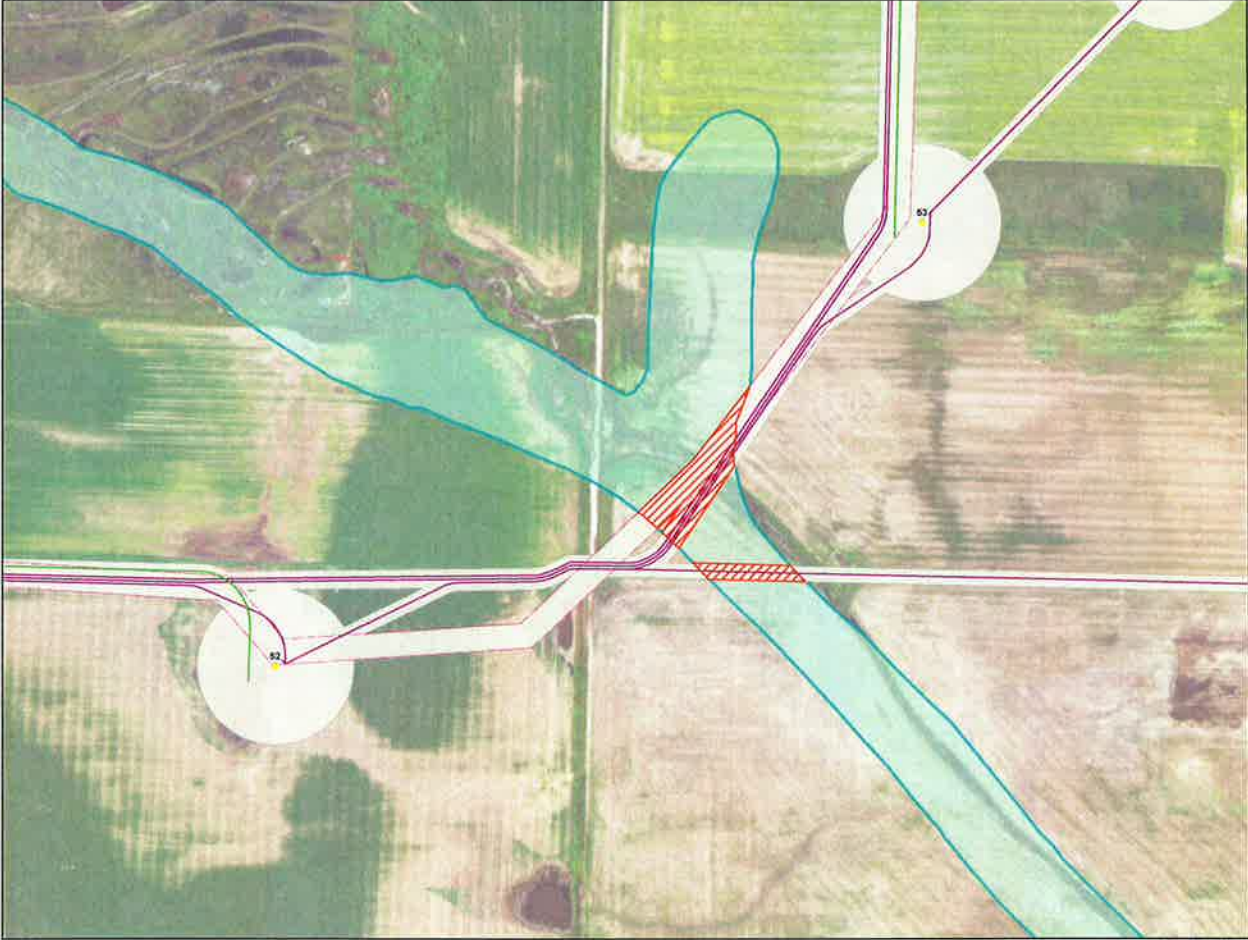
Temporary Project Impacts In 100-year Floodplain

Brady Wind Energy Center
Stark County, North Dakota

Legend

-  Project Area
-  Proposed Turbine
-  Proposed Transmission Poles
-  Proposed Transmission Line
-  Proposed Service Roads
-  Proposed Collection Line
-  Proposed Turbine Storage Area
-  Proposed Crane Paths
-  Temporary Impact Footprint
-  100-year Floodplain (Zone A)
-  Delineated Wetland
-  Temporary Impacts In Floodplain















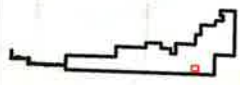
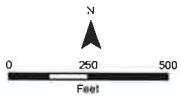


**Temporary Project Impacts in
100-year Floodplain
Sheet 1 of 6**

Brady Wind Energy Center
Stark County, North Dakota

Legend

-  Project Area
-  Proposed Turbine
-  Proposed Transmission Poles
-  Proposed Transmission Line
-  Proposed Service Roads
-  Proposed Collection Line
-  Proposed Turbine Storage Area
-  Proposed Crane Paths
-  Temporary Impact Footprint
-  100-year Floodplain (Zone A)
-  Delineated Wetland
-  Temporary Impacts In Floodplain

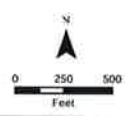


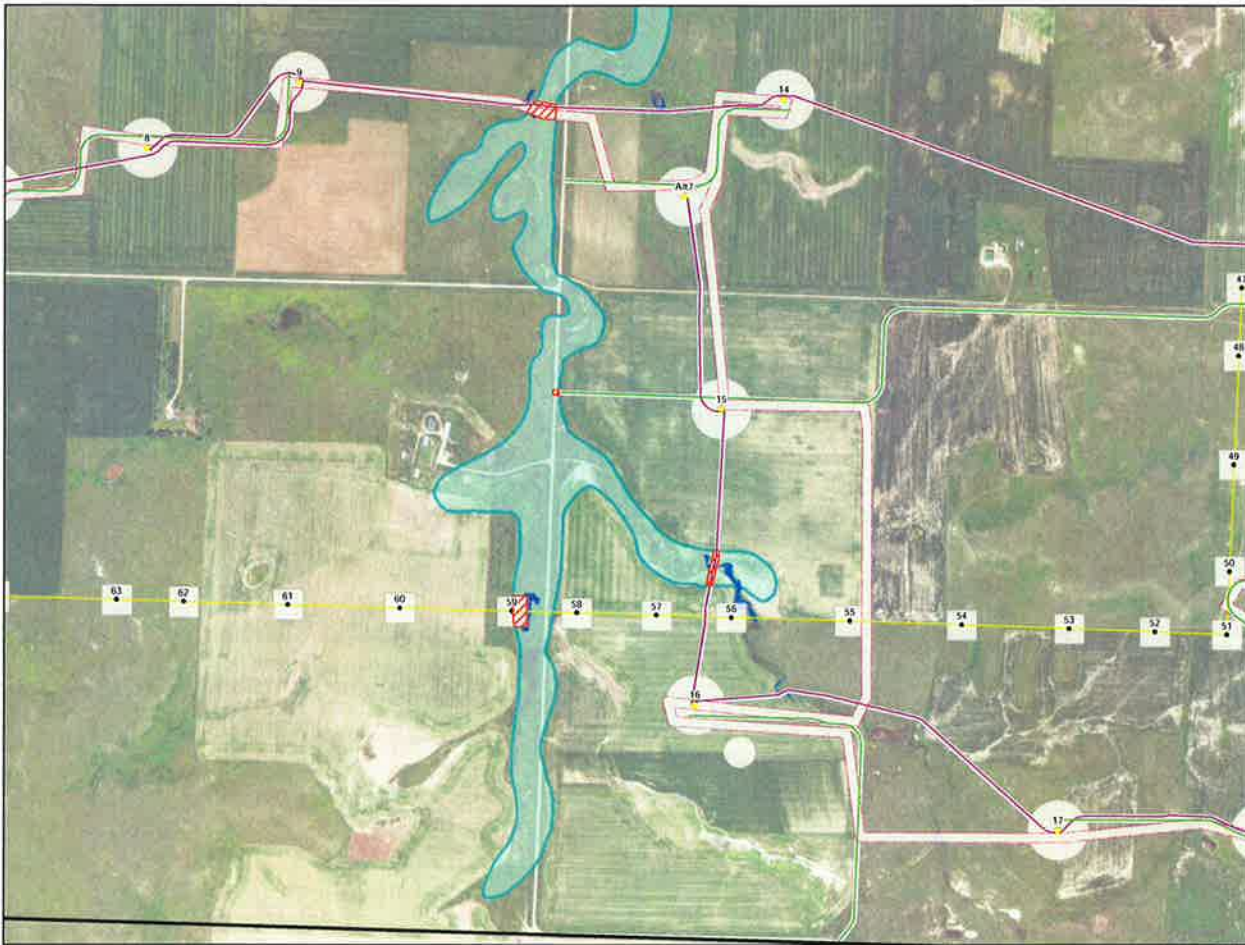
Temporary Project Impacts in
100-year Floodplain
Sheet 2 of 6

Brady Wind Energy Center
Stark County, North Dakota

Legend

-  Project Area
-  Proposed Turbine
-  Proposed Transmission Poles
-  Proposed Transmission Line
-  Proposed Service Roads
-  Proposed Collection Line
-  Proposed Turbine Storage Area
-  Proposed Crane Paths
-  Temporary Impact Footprint
-  100-year Floodplain (Zone A)
-  Delineated Wetland
-  Temporary Impacts In Floodplain

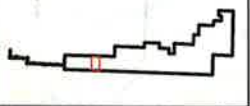


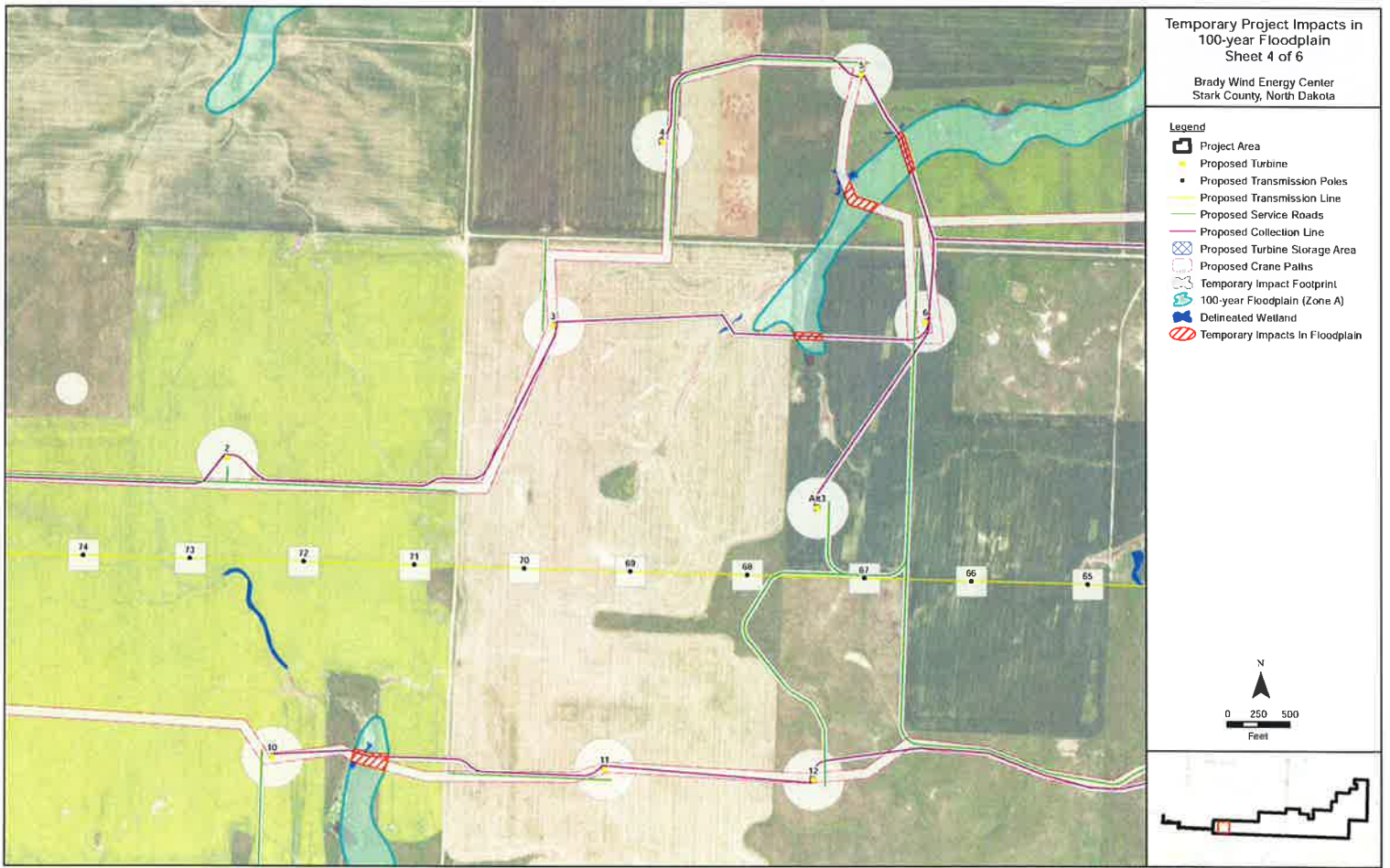


**Temporary Project Impacts in
100-year Floodplain**
Sheet 3 of 6

Brady Wind Energy Center
Stark County, North Dakota

- Legend**
- Project Area
 - Proposed Turbine
 - Proposed Transmission Poles
 - Proposed Transmission Line
 - Proposed Service Roads
 - Proposed Collection Line
 - Proposed Turbine Storage Area
 - Proposed Crane Paths
 - Temporary Impact Footprint
 - 100-year Floodplain (Zone A)
 - Delineated Wetland
 - Temporary Impacts In Floodplain



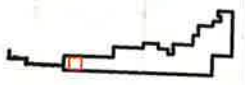


**Temporary Project Impacts in
100-year Floodplain**
Sheet 4 of 6

Brady Wind Energy Center
Stark County, North Dakota

Legend











-  Project Area
-  Proposed Turbine
-  Proposed Transmission Poles
-  Proposed Transmission Line
-  Proposed Service Roads
-  Proposed Collection Line
-  Proposed Turbine Storage Area
-  Proposed Crane Paths
-  Temporary Impact Footprint
-  100-year Floodplain (Zone A)
-  Delineated Wetland
-  Temporary Impacts in Floodplain

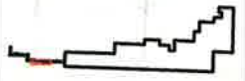
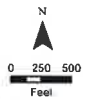


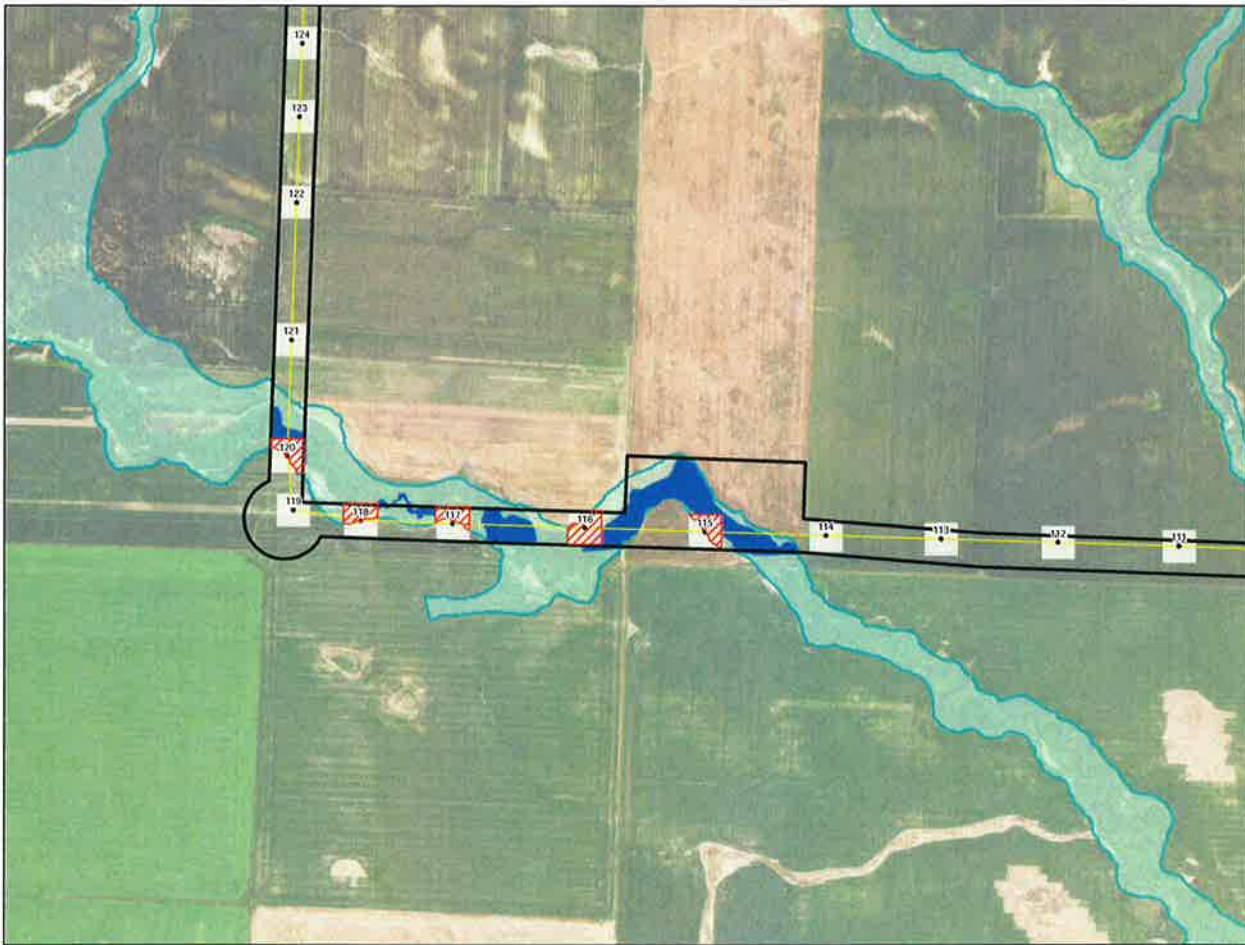


Temporary Project Impacts in
100-year Floodplain
Sheet 5 of 6
Brady Wind Energy Center
Stark County, North Dakota

Legend

-  Project Area
-  Proposed Turbine
-  Proposed Transmission Poles
-  Proposed Transmission Line
-  Proposed Service Roads
-  Proposed Collection Line
-  Proposed Turbine Storage Area
-  Proposed Crane Paths
-  Temporary Impact Footprint
-  100-year Floodplain (Zone A)
-  Delineated Wetland
-  Temporary Impacts In Floodplain



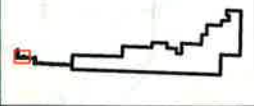
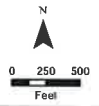


Temporary Project Impacts in 100-year Floodplain
Sheet 6 of 6

Brady Wind Energy Center
Stark County, North Dakota

Legend

- Project Area
- Proposed Turbine
- Proposed Transmission Poles
- Proposed Transmission Line
- Proposed Service Roads
- Proposed Collection Line
- Proposed Turbine Storage Area
- Proposed Crane Paths
- Temporary Impact Footprint
- 100-year Floodplain (Zone A)
- Delineated Wetland
- Temporary Impacts In Floodplain



Attachment 3: FIRM Maps

NOTES TO USERS

The map is for use in determining the National Flood Insurance Program (NFIP) risk rating for a property. The risk rating is based on the Flood Insurance Rate Map (FIRM) and is not a guarantee of the amount of flood damage that will be sustained. The community may determine whether the property is eligible for coverage under the NFIP.

In order to determine whether a property is in a Special Flood Hazard Area (SFHA), the user should refer to the FIRM. The FIRM is a map that shows the areas that are subject to flooding. The FIRM is based on the Flood Insurance Study (FIS) and is the primary source of information for determining the risk rating for a property. The FIRM is available for purchase from the National Flood Insurance Program (NFIP).

General Flood Hazard Information: The map shows the Special Flood Hazard Areas (SFHAs) for the community. The SFHAs are areas that are subject to flooding. The SFHAs are based on the Flood Insurance Study (FIS) and are the primary source of information for determining the risk rating for a property. The SFHAs are available for purchase from the National Flood Insurance Program (NFIP).

Boundaries of the SFHAs were determined from the FIS. The FIS is a study that was conducted by the Federal Emergency Management Agency (FEMA). The FIS is the primary source of information for determining the risk rating for a property. The FIS is available for purchase from the National Flood Insurance Program (NFIP).

Other notes: The map is for use in determining the risk rating for a property. The risk rating is based on the FIRM and is not a guarantee of the amount of flood damage that will be sustained. The community may determine whether the property is eligible for coverage under the NFIP.

Legend: The legend is located on the right side of the map. It provides information about the symbols and colors used on the map. The legend is available for purchase from the National Flood Insurance Program (NFIP).

Contact Information: For more information, contact the National Flood Insurance Program (NFIP) at 1-800-358-3447. The NFIP is available for purchase from the National Flood Insurance Program (NFIP).



LEGEND

- SPECIAL FLOOD HAZARD AREAS (SFHAs) BASED ON THE FIRM (FIRM 17000)**
- Zone A**: Special Flood Hazard Area (SFHA) - Zone A (100-year flood)
- Zone B**: Special Flood Hazard Area (SFHA) - Zone B (500-year flood)
- Zone C**: Special Flood Hazard Area (SFHA) - Zone C (100-year flood)
- Zone D**: Special Flood Hazard Area (SFHA) - Zone D (500-year flood)
- Zone E**: Special Flood Hazard Area (SFHA) - Zone E (100-year flood)
- Zone F**: Special Flood Hazard Area (SFHA) - Zone F (500-year flood)
- Zone G**: Special Flood Hazard Area (SFHA) - Zone G (100-year flood)
- Zone H**: Special Flood Hazard Area (SFHA) - Zone H (500-year flood)
- Zone I**: Special Flood Hazard Area (SFHA) - Zone I (100-year flood)
- Zone J**: Special Flood Hazard Area (SFHA) - Zone J (500-year flood)
- Zone K**: Special Flood Hazard Area (SFHA) - Zone K (100-year flood)
- Zone L**: Special Flood Hazard Area (SFHA) - Zone L (500-year flood)
- Zone M**: Special Flood Hazard Area (SFHA) - Zone M (100-year flood)
- Zone N**: Special Flood Hazard Area (SFHA) - Zone N (500-year flood)
- Zone O**: Special Flood Hazard Area (SFHA) - Zone O (100-year flood)
- Zone P**: Special Flood Hazard Area (SFHA) - Zone P (500-year flood)
- Zone Q**: Special Flood Hazard Area (SFHA) - Zone Q (100-year flood)
- Zone R**: Special Flood Hazard Area (SFHA) - Zone R (500-year flood)
- Zone S**: Special Flood Hazard Area (SFHA) - Zone S (100-year flood)
- Zone T**: Special Flood Hazard Area (SFHA) - Zone T (500-year flood)
- Zone U**: Special Flood Hazard Area (SFHA) - Zone U (100-year flood)
- Zone V**: Special Flood Hazard Area (SFHA) - Zone V (500-year flood)
- Zone W**: Special Flood Hazard Area (SFHA) - Zone W (100-year flood)
- Zone X**: Special Flood Hazard Area (SFHA) - Zone X (500-year flood)
- Zone Y**: Special Flood Hazard Area (SFHA) - Zone Y (100-year flood)
- Zone Z**: Special Flood Hazard Area (SFHA) - Zone Z (500-year flood)

NATIONAL FLOOD INSURANCE PROGRAM

FIRM FLOOD INSURANCE RATE MAP

STARK COUNTY, NORTH DAKOTA

PANEL 608 OF 800

MAP NUMBER: 17000

EFFECTIVE DATE: NOVEMBER 4, 2018

1-800-358-3447

