

**ITEM: Recommendation to Rice County Planning Commission on Carleton Wind Turbine Project in County Urban Reserve**

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**ACTION REQUESTED:**

**Proposed Motion for Consideration:** \_\_\_\_\_ **Motion** \_\_\_\_\_ **Second**

*The City Council of the City of Northfield hereby finds that the Rice County Conditional Use permit request for the Carlton wind turbine is consistent with the principles expressed in Northfield's Comprehensive Plan and does not pose evident obstacles to achieving future planning objectives. The City Council also requests that Rice County initiate an inter-governmental dialogue with all appropriate jurisdictions (county, city, township) to jointly review the uses and other regulations found in the Urban Reserve District of the County Zoning ordinances and also investigate best practices and research with regard to Wind Turbines to determine mutually agreeable policies regarding setbacks as well as other standards relating to the siting and operation of wind turbines.*

**SUMMARY:**

The City Council is being asked to give a recommendation to the Rice County Planning Commission on a request by Carleton College to seek approval of a conditional use permit from Rice County that would enable the college to construct a wind turbine in an area outside of the City in the County Urban Reserve.

Carleton College is proposing to install, own and operate a wind turbine on a parcel of property located in Northfield Township northeast of the City of Northfield. The subject parcel is owned by Hazel Peterson and is proposed to be leased by Carleton College for a period of time up to 40 years in length (See location map, Attachment #1). Zoning and development authority for this parcel is under the jurisdiction of Rice County. The parcel is zoned "Urban Reserve" by Rice County and wind turbines of the size proposed by Carleton College require approval of a Conditional Use Permit (See Attachment #2, selected portions of the Conditional Use Permit application). For a review of the entire Conditional Use Permit application by Carleton College go to the following link on the city's web site  
[http://www.ci.northfield.mn.us/meetings/council/2010/12/07/city\\_council\\_meeting120](http://www.ci.northfield.mn.us/meetings/council/2010/12/07/city_council_meeting120).

The City Council directed that the Planning Commission review this request and report back to the Council with findings and a recommendation. The Planning Commission conducted a public meeting on Monday evening November 29, 2010. As part of the meeting process, the Commission

considered information provided by Staff, heard testimony from the applicant, Carleton College, and numerous interested property owners and citizens. The Planning Commission evaluated the following information.

Staff Background Information:

The wind turbine as proposed by Carleton College is to be located on a parcel of property that is and has been used for agricultural purposes primarily devoted to row crop production. The size of the wind turbine proposed will range in height from 410 to 420 feet with the full vertical extension of the wind turbine blade. For comparison purposes, the existing wind turbines at both Carleton and St. Olaf Colleges are approximately 370 feet in height. The proposed wind turbine will generate between 1.8 megawatts to as much as 2.5 megawatts depending on the final wind turbine model acquired by Carleton College.

The parcel in question is outside the Northfield City limits but within the Urban Expansion Boundary as illustrated on the Conservation and Development Map and the Framework Map of the Comprehensive Plan (See Attachment #3). Existing land use of the subject parcel and surrounding parcels are:

- Subject parcel - agricultural crop production
- East of subject parcel - agricultural/poultry production
- West of subject parcel - agricultural crop production
- North of subject parcel - residential Dakota County
- South of subject parcel – agricultural and rural residential

The existing zoning is Rice County Urban Reserve which provides for wind turbines of this size through the issuance of a Conditional Use Permit.

The proposed wind turbine location is approximately 5,500 feet from the nearest point of the existing City limits which is an existing vacant residential lot within a larger residential subdivision referred to as the Rosewood Addition.

Review of Comprehensive Plan:

As stated previously, the proposed location is located within the Urban Expansion Boundary as indicated in the Comprehensive Plan of the City of Northfield. Further, the Conservation and Development Map of the Comprehensive Plan guide the subject property as Conservation Development while the Framework Map guides the subject property as Rural.

- Property located within the Urban Expansion Boundary is of lower priority for annexation and urban development due to the distance from existing infrastructure.
- Property that is guided as Conservation Development is of greatest value for open space but is subject to development because County zoning provides for a degree of development.
- Properties guided as Rural on the Framework map are to be primarily devoted to agricultural uses with some limited residential uses associated with agricultural production
- A review of the Land Use principles of the Comprehensive Plan does not directly address the request by Carleton College to install a wind turbine other than the principle that relates

to environmentally sensitive and sustainable practices. Principle #6 indicates the high awareness that exists in Northfield with respect to environmental issues and the recognition of the value of the existing alternative energy choices that have been made.

- A review of Chapter 5 of the Comprehensive Plan Environmental Resources indicates that there are no known or identified environmental resources on the subject property. The property immediately to the west of the subject property contains semi-natural planted prairie resources.
- Chapter 5 also stresses the value of sustainable practices and the need to assess opportunities for the development of local clean energy projects which the installation of the wind turbine as proposed by Carleton would represent.
- One of the objectives of the Environmental Resources section of the Comprehensive Plan indicates that the recommendations of the Energy Task Force should be evaluated:
  - A review of the Energy Task Force Report does not directly speak to a position related to a wind turbine other than to suggest the City should strive to reduce the carbon footprint by a suggested amount.
  - The report from the Energy Task Force has been submitted to the City but no formal position with respect to the Energy Task Force report has been taken.
- The installation of the wind turbine has no immediate or long term impact on the water and sanitary sewer or surface water management infrastructure of the City.
- The proposed wind turbine is located relatively close to a future major collector street corridor which is approximately the southerly extension of Canada Avenue.
- The proposed wind turbine location does not affect existing or planned park, open space or trails resources. One of the options for the future Mill Towns Trail extension is near the proposed turbine location but is no closer than approximately ¼ mile.
- No existing or planned community facilities are affected by the proposed wind turbine.
- The proposed wind turbine does not affect economic development initiatives of the City. Identified infill and redevelopment locations as well as future Greenfield expansion locations are very distant from the proposed turbine.
- Existing and planned housing resources are not affected by the proposed wind turbine location. As stated, the nearest possible residential development location is approximately one mile west of the proposed wind turbine.

The Planning Commission considered the information as provided by staff and also considered comments from the applicant and interested individuals and established the following findings and conclusions.

#### Findings:

The Northfield Planning Commission finds that the Conditional Use permit for the Carlton wind turbine is consistent with the principles expressed in Northfield's Comprehensive Plan and does not pose evident obstacles to achieving future planning objectives.

Chapter 5 of the Comprehensive Plan stresses the value of sustainable practices and the need to assess opportunities for the development of local clean energy projects which the installation of the wind turbine represents.

The Planning Commission recognizes that the wind turbines as proposed by Carleton College are within the Urban Expansion Boundary but the distance of the proposed turbines to the existing City limits and the limited potential for future development as designated by the Comprehensive Plan leads the Commission to the conclusion that the proposed turbines will have no effect on future planning initiatives.

Planning Commission Conclusion and Recommendation:

The Planning Commission recommends that the Mayor/Council inform Rice County that the Carlton College application is consistent with the City’s Comprehensive Plan.

The Northfield Planning Commission encourages the City Council to initiate an inter-governmental dialogue with all appropriate jurisdictions (county, city, township) to jointly review best practices and research with regard to Wind Turbines to determine mutually agreeable policies regarding setbacks as well as other standards relating to the siting and operation of turbines.

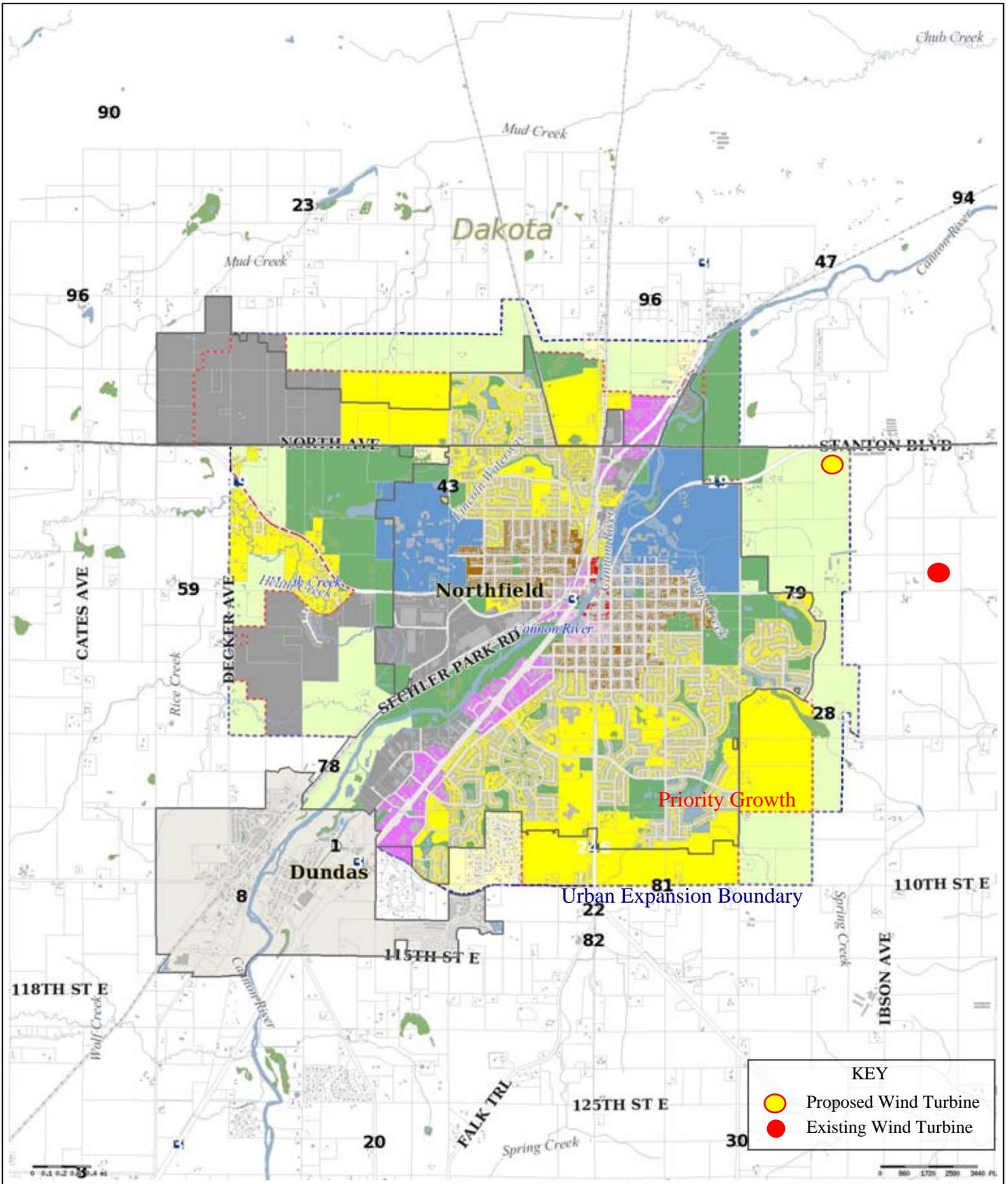
<b>Y</b>	<b>N</b>	<b>Checklist</b>
<b>X</b>		Does this project fit within the identified Council goals, objectives, and priorities?
	<b>N/A</b>	Does the project fit within the estimated budget & resource parameters?
<b>X</b>		Is the public process identified consistent with the scope and implications of the project?
<b>X</b>		Have the pertinent boards and commissions been identified for providing review, recommendations, or input?
<b>X</b>		Is this decision consistent with current city plans (Comp Plan, Transportation Plan, Park Plan, etc)?
	<b>N/A</b>	Have the future costs to city operations been calculated and identified?
<b>X</b>		Are there measurable criteria to aid with the decision-making and have they been identified?
<b>X</b>		Have the suitable timelines and schedules been identified?

**SUBMITTED BY:** Brian P. O’Connell, Community Development Staff

**ATTACHMENTS:**

1. Site Location Map
2. Excerpts of the Carleton College application
3. Conservation and Development and Framework Maps

# Carleton Wind Turbine



Disclaimer: This information is to be used for reference purposes only. Property data from Dakota & Rice Counties is approximate and not legally binding. Contact the appropriate county with property corrections.

Map created on Nov 24, 2010 11:36.  
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**ITEM: Recommendation to Rice County Planning Commission on Spring Creek Wind LLC Wind Turbine Project in County Urban Reserve**

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**ACTION REQUESTED:**

**Proposed Motion for Consideration:** \_\_\_\_\_ **Motion** \_\_\_\_\_ **Second**

*The City Council of the City of Northfield hereby finds that the Rice County Conditional Use Permit for the Spring Creek Wind LLC in the Urban Reserve District is consistent with the principles expressed in Northfield's Comprehensive Plan. However, the proposed placement of the wind turbines may constrain the growth of the City in order to assure necessary setbacks (distance from turbine to City residential limits). Further, the City Council requests that Rice County initiate an inter-governmental dialogue with all appropriate jurisdictions (county, city, township) to jointly review the uses and other regulations found in the Urban Reserve District of the County Zoning ordinance and also investigate best practices and research with regard to Wind Turbines to determine mutually agreeable policies regarding setbacks as well as other standards relating to the siting and operation of wind turbines.*

**SUMMARY**

The City Council is being asked to give a recommendation to the Rice County Planning Commission on a request by Spring Creek Wind LLC (SCW) to seek approval of a conditional use permit from Rice County that would enable SCW to construct two wind turbines in an area outside of the City in the County Urban Reserve.

Spring Creek Wind LLC (SWC) is proposing to install, own and operate two wind turbines on several parcels of property located in Northfield Township south and slightly east of the City of Northfield. These subject parcels are owned by David and Jacquelyn Hubers and Spring Creek LLC is proposing to lease some of the property from the Hubers for a period of 30 years (See Site Location Map in Attachment #1).

The parcel is zoned "Urban Reserve" by Rice County and wind turbines of the size proposed by SWC requires approval of a Conditional Use Permit (See Attachment #2 for selected portions of the Conditional Use Permit application). For a review of the entire Conditional Use Permit application by Spring Creek Wind LLC go to the following link on the city's web site [http://www.ci.northfield.mn.us/meetings/council/2010/12/07/city\\_council\\_meeting120](http://www.ci.northfield.mn.us/meetings/council/2010/12/07/city_council_meeting120).

The City of Northfield has no permitting authority and is responsible to provide comment and input into the permitting process of the County.

The City Council directed that the Planning Commission review this request and report back to the Council with findings and a recommendation. The Planning Commission conducted a public meeting on Monday evening, November 29, 2010. As part of the meeting process, the Commission considered information provided by Staff, heard testimony from the applicant Spring Creek Wind LLC and numerous interested property owners and citizens. The Planning Commission evaluated the following information.

The wind turbines as proposed by SWC are to be located on parcels of property that have been used for agricultural purposes primarily corn and bean production. The property in question is located on a prominent bluff that overlooks the City from the south. This bluff rises above the surrounding land area currently in the City by approximately 120 feet.

The size of both wind turbines is the same and will have a height of approximately 411 feet with the full vertical extension of the wind turbine blade. The proposed wind turbines will be located on the top portion of the bluff and be located approximately 1,000 feet south of the top bluff line. SWC has indicated that in the event the proposed wind turbine that is described in this report is not available or is not price competitive, other wind turbine models may be pursued that will be of a lesser height. For comparison purposes, the existing wind turbines at both Carleton and St. Olaf Colleges are approximately 370 feet in height.

The proposed wind turbines will generate between 1.8 megawatts to as much as 2.0 megawatts depending on the final wind turbine model acquired by SWC.

The parcels in question are outside the Northfield City limits and are outside of the Urban Expansion Boundary as illustrated on the Conservation and Development Map and the Framework Map of the Comprehensive Plan (See Attachment #3). Existing land use of the subject parcel and surrounding parcels are:

- Subject parcel - Agricultural and rural farmstead residence
- East of subject parcel - Agricultural
- West of subject parcel - Agricultural and rural residential
- North of subject parcel - Agricultural and rural residential
- South of subject parcel - Agricultural

The existing zoning is Rice County Urban Reserve which provides for wind turbines of this size through the issuance of a Conditional Use Permit.

The closest proposed wind turbine location is approximately 2,500 feet from the nearest point of the existing City limits and approximately 3,300 feet from existing developed lots within the City of Northfield. These lots are located in the Fargaze Addition to the City.

#### Review of Comprehensive Plan:

As stated previously, the proposed location is located outside the Urban Expansion Boundary as indicated in the Comprehensive Plan of the City of Northfield. Further, the proposed wind turbines are not guided by either the Conservation and Development Map or the Framework Map with

respect to any future land use designation. This is due to the fact that this area of the Rice County Urban Reserve is outside any planned expansion boundary of the City of Northfield. The Comprehensive Plan of the City provides little guidance with respect to the proposed wind turbines by SWC. A review of the plan results in the following information being important for the Planning Commission to consider when making a recommendation to the Council on the request by SWC.

- Property is not located within the Urban Expansion Boundary. Therefore any potential annexation and resulting urban development is not contemplated by this Plan and is not likely to occur unless an amendment to the Plan of the City is undertaken. The Priority Growth Boundary and the Urban Expansion Boundary extend to County 81 and do not extend south of this existing County Road. The Conservation and Development Map and Framework Map guide the area north of County Road 81 as being a Managed Growth Area to be developed according to the policies and corresponding regulations guided by the Neighborhood General planning policy. This area is currently vacant agricultural land and when developed will be approximately 1,700 feet from the proposed wind turbines.
- A review of the Land Use principles of the Comprehensive Plan do not address the request by SCW since the Land Use Principles are intended to be applicable to areas within the City or within the priority growth boundary or urban expansion boundary that are to develop or redevelop during the planning horizon of the Comprehensive Plan.
- A review of Chapter 5 of the Comprehensive Plan Environmental Resources indicates that there are few identified environmental resources on the subject property other than an area of steep slopes which are north of the actual wind turbine location.
- Object 4 in Chapter 5 Environmental Resources stresses the importance of exploring new technologies and techniques to conserve energy. Although the installation of wind turbines does not, in and of itself, conserve energy, the alternative form of energy production by capturing wind energy is in keeping with this objective of the Comprehensive Plan by reducing the reliance on other fuel sources to produce energy. The wind turbines proposed by SCW will not produce energy that will be directly used by residents or businesses in Northfield but the energy produced will serve to advance the proposal put forth by the Energy Task Force which is to assess opportunities for clean energy production that have local, regional and even a broader benefit.
  - The report from the Energy Task Force has been submitted to the City but no formal position with respect to the Energy Task Force report has been taken.
- The installation of these wind turbines has no immediate or long term impact on the water and sanitary sewer or surface water management infrastructure of the City and the turbines are outside of the area that the City has evaluated with respect to urban infrastructure extension.
- The proposed wind turbines are south of County Road 81 and the City Transportation Plan does not indicate any City street improvements in this area.
- No City park, open space or trail improvements are proposed in the area of the SCW wind turbines.
- No existing or planned community facilities are affected by the proposed wind turbine.
- The proposed wind turbine does not affect any economic development initiative of the City.
- Future housing development is expected to occur north of County 81 during the time horizon of the Comprehensive Plan, but this area is approximately 1,700 feet from the proposed wind turbines.

The Planning Commission considered the information as provided by staff and also considered comments from the applicant and interested individuals and established the following findings and conclusions.

Planning Commission Findings:

The Northfield Planning Commission finds that the Conditional Use Permit for the Spring Creek Wind LLC in the Urban Reserve District is consistent with the principles expressed in Northfield's Comprehensive Plan. However, the proposed placement of the wind turbines may constrain the growth of the City in order to assure necessary setbacks (distance from turbine to City residential limits).

The Northfield Planning Commission finds that the proposed Spring Creek wind turbine project is in accord with the Framework and Conservation Maps from the City of Northfield's 2008 Comprehensive Plan.

The Northfield Planning Commission also finds that the proposed Spring Creek Wind Turbine Project is in accordance with the following Comprehensive Plan Land Development Principles:

**“Principle 3: The preference for accommodating future growth is in in-fill locations, then redevelopment opportunities, and then on the edge of existing developed areas.**

The existing pattern of development has been to grow outward at the edge of the City or fringe areas especially for residential development.”

**“Principle 5: Environmentally-sensitive and sustainable practices will be integrated into new developments and redeveloped areas.**

The Community has a high level of environmental awareness, which is reflected in local energy choices. Residents want to continue to employ creative and innovative choices to reflect the Community's commitment to sustainability and healthy living.”

**“Principle 9: Rural character of certain areas of the Community will be protected.**

The rural character is a defining element in creating Northfield's identity. It provides the setting for the “small town” character. The primary elements that make up this character are the rural roads, expansive agrarian views, and rural architectural vernacular.

As part of the deliberation by the Commission on the proposal by Spring Creek Wind, the Commission discussed alternatives with respect to other site location options that could be explored by Spring Creek Wind. The ideas discussed by the Commission included:

- Spring Creek Wind could re-evaluate the precise location of the wind turbines and possibly shift the wind turbine locations towards the southern boundary of the Huber farm without compromising the optimal wind velocity of the project. The current placement of the turbines shown in the Conditional Use permit application packet was selected as equidistant from the several properties on top of the bluff. The applicant indicated that possibly the precise location could be shifted without compromising the wind power of the project. A

shift to the southern edge of the project property would address several of the concerns expressed by the Commission including:

1. It would set up an extra margin of assurance for those residents who are most concerned about the potential health and safety issues relating to the turbines, namely (the residents to the North of the project).
2. It would move the turbines away from the area of greatest population density including both the current and future residential areas immediately north of County Road 81.
3. This would serve to mitigate a substantial visual impact of the wind turbine towers in relation to the horizon and, thus, assure continued harmonious relations with future residents. As part of the Commission’s deliberation, it was suggested that the Council request that the applicant supplement the computer images they have provided of views from the south and the west, with two images of what the project will look like from the North, including one image from Maple and Jefferson Parkway (the entrance of the soccer fields), and a second image from further north on Maple Street, up the hill towards Sibley School.
4. Locating the wind turbines further south could possibly address the concern with respect to the height of the turbine towers that were reported to be approximately three times the height of the 105 foot tall existing grain elevator currently located on the Huber’s property which is visible from the North.

The Planning Commission is aware that the proposed wind turbines by SCW are outside of the Urban Expansion Boundary, but the primary concern that the Commission has relates to the potential impact that these turbines may have on future neighborhoods of the City since they are close to the expansion boundary of the City.

Planning Commission Conclusion and Recommendation:

The Northfield Planning Commission finds that the Conditional Use Permit for the Spring Creek Wind LLC in the Urban Reserve District is consistent with the principles expressed in Northfield’s Comprehensive Plan. However, the proposed placement of the wind turbines may constrain the growth of the City in order to assure necessary setbacks (distance from turbine to City residential limits).

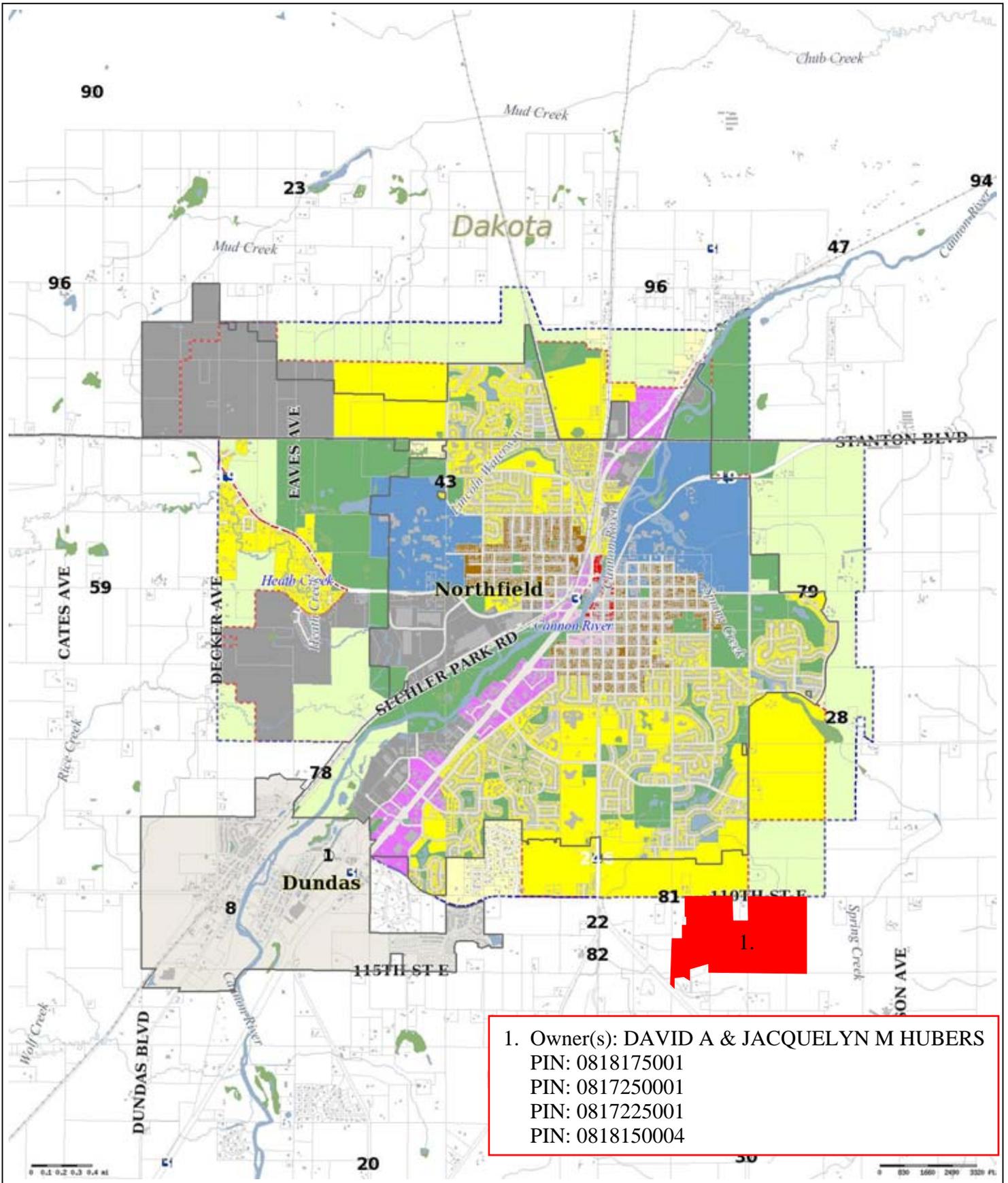
<b>Y</b>	<b>N</b>	<b>Checklist</b>
	<b>X</b>	Does this project fit within the identified Council goals, objectives, and priorities?
	<b>N/A</b>	Does the project fit within the estimated budget & resource parameters?
<b>x</b>		Is the public process identified consistent with the scope and implications of the project?
<b>x</b>		Have the pertinent boards and commissions been identified for providing review, recommendations, or input?
<b>X</b>	<b>X</b>	Is this decision consistent with current city plans (Comp Plan, Transportation Plan, Park Plan, etc)?
	<b>N/A</b>	Have the future costs to city operations been calculated and identified?

<b>Y</b>	<b>N</b>	<b>Checklist</b>
<b>X</b>		Are there measurable criteria to aid with the decision-making and have they been identified?
<b>X</b>		Have the suitable timelines and schedules been identified?

**SUBMITTED BY:**

**ATTACHMENTS:**

1. Site Location Map
2. Excerpts of the Application
3. Conservation and Development and Framework Maps



1. Owner(s): DAVID A & JACQUELYN M HUBERS  
PIN: 0818175001  
PIN: 0817250001  
PIN: 0817225001  
PIN: 0818150004



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