

## CYPRESS COUNTY

### BYLAW 2005/03

A Bylaw of Cypress County in the Province of Alberta to amend Bylaw 94/13, being the Cypress County Municipal Development Plan and Bylaw 95/19, being the Cypress County Land Use Bylaw.

PURSUANT TO the provisions of the Municipal Government Act, being Chapter M-26 of the Statutes of Alberta, 2000, and amendments thereto, the Council of Cypress County in the Province of Alberta, duly assembled, ENACTS AS FOLLOWS:

1. Whereas the Cypress County Municipal Development Plan and the Land Use Bylaw require provisions for the regulation of Wind Energy Facilities (WEF).
2. Having held a Public Hearing on the matter, sub-section 3.11 Wind Energy Facilities, as shown in Schedule "A" is hereby added the Cypress County Municipal Development Plan Bylaw 94/13 as amended.
3. Having held a Public Hearing on the matter, the following additions are adopted as part of Land Use Bylaw 95-19 as amended:
  1. A definition of Small Scale Wind Energy Conversion System as shown in Schedule "B" is added to the list of Definitions contained in Part 1 sub-section 6 of the bylaw.
  1. Small Scale Wind Energy Conversion System as shown in Schedule "B" is added to Part V General Land Use Regulations of the bylaw.
  2. Small Scale Wind Energy Conversion System is added to the list of permitted uses in the Agriculture and Urban Fringe Agriculture Districts of the bylaw.
  3. Small Scale Wind Energy Conversion System is added to the list of Class 1 Discretionary Uses in the Country Residential and Country Residential 2 Districts of the bylaw.
  4. The list of definitions relating to Wind Energy Facilities as shown in Schedule "C" is added to the list of Definitions contained in Part 1 sub-section 6 of the bylaw.

Cypress County  
Bylaw 2005/03

5. Wind Energy Facility District (WEF) as shown in Schedule "C" is added to the list Districts shown in Part VI Land use Districts and Regulations of the bylaw.
6. This bylaw shall take effect on the date of final passage thereof.

Read a first time this  1<sup>st</sup>  day of  March ,2005.

Read a second time this  17<sup>th</sup>  day of  May ,2005.

Read a third time and finally passed this \_\_\_\_\_ day of \_\_\_\_\_,  
2005.

\_\_\_\_\_  
Reeve

\_\_\_\_\_  
Designated Officer

## **Schedule A**

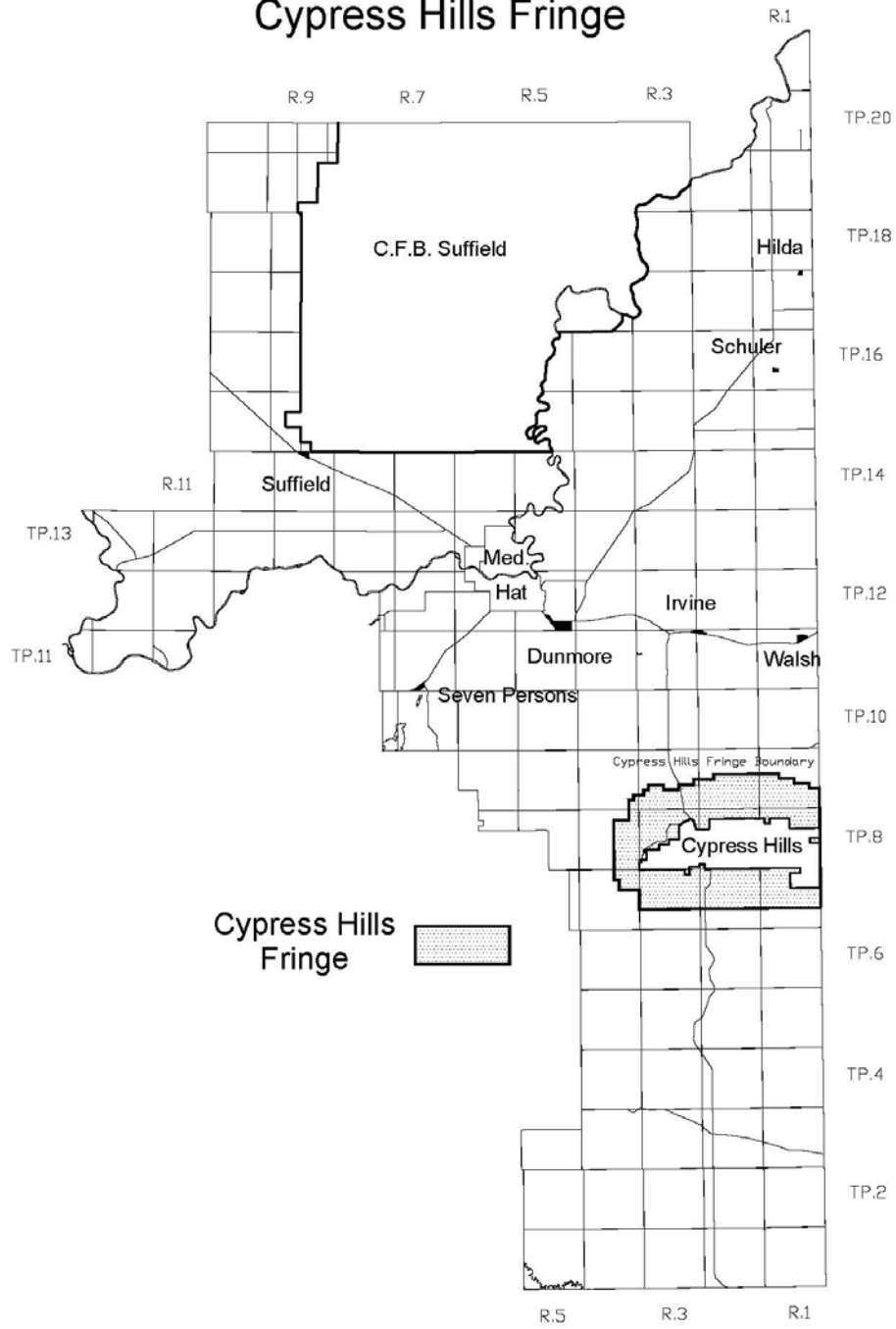
(To be inserted in Section 3 of the Municipal Development Plan)

### **3.11 Wind Energy**

- (a) The municipality shall encourage the integration of renewable wind energy with other land uses in the County.
- (b) The County may designate areas where Wind Energy Facilities are to be encouraged or excluded.
- (c) Except as indicated in sub-section 3.11(g), the Wind Energy Facility (WEF) District shall take the form of an overlay district in which the requirements of the existing Land use District will continue in effect for all uses other than Wind Energy Facilities and associated uses.
- (d) All Land Use Amendment applications for a WEF District shall be accompanied by:
  - i) an accurate site plan showing and labeling the location of the site, the projected number of towers, the location of overhead utilities and access roads on or abutting the subject lot or parcel, and the contours of the land;
  - ii) a visual representation of the proposed WEF, including scale elevations, photographs and/or digital information showing total height, tower height, rotor diameter, colour and the impact on the landscape;
  - iii) the manufacturer's specifications indicating:
    - 1. the approximate rated output of each WEF in kilowatts,
    - 2. safety features and sound characteristics,
    - 3. type of material used in tower, blade, and/or rotor construction;
  - iv) a report regarding any public information meetings or other process conducted by the developer;
  - v) any impacts to the local road system including required approaches from public roads having regard to County standards;
  - vi) preliminary reclamation/decommissioning plans;
  - vii) Other information as required by the Approving Authority.
- (e) Prior to making a decision on a Land Use Amendment application for a WEF, the Council shall refer and consider the input from the following:
  - a) an adjacent jurisdiction if its boundaries are located within 2 km (1.2 miles) of the proposed WEF,
  - b) County landowners within a 2 km (1.2 mile) radius.
- (f) Prior to a decision being made, the Council shall hold a public hearing in order to solicit the views of the public in regard to the application.

- (g) Within the Cypress Hills Fringe Plan Area shown in Figure No. 4, all land use designations for Wind Energy Facilities shall take the form of a Wind Energy Facility (Direct Control) WEF(DC) District with all decisions to be made by Council.
  - (a) The development standards for each WEF(DC) District shall be attached as a separate schedule to the Land Use By-law.
  - (b) There will be no appeals on any WEF(DC) decisions within the Fringe area. In making their decision on WEF applications within the Fringe Area, Council shall act in a quasi-judicial manner, hearing evidence from both sides of the issue, and issuing written reasons for their decision.
  - (c) The requirements of the existing Land use District will continue in effect for all uses other than Wind Energy Facilities and associated uses. Development approvals shall be undertaken by the normal Development Authority, and on matters of law and jurisdiction, appeals may be heard by the Subdivision and Development Appeal Board.
  - (d) As part of their submission for the land use amendment application within the fringe, all applicants shall submit an environmental review of the WEF, and a digital terrain model that assesses the visual impact on the natural scenery, landscape character, and cultural landscape of the Cypress Hills Fringe Area and adjacent lands.
  - (e) In making their decision, Council will have due regard to the policies, guidelines and intent of the Cypress Fringe Area Structure Plan.
  - (f) WEF should not be permitted in those portions of the fringe area that in the opinion of Council are prominent for their scenic character and natural values, but may be considered in less sensitive areas of the fringe area.
  - (g) WEF must be designed and located to minimize the impact on the environment and be consistent with the objectives of the Cypress Hill Fringe Area Structure Plan.

Figure 4  
Cypress Hills Fringe



**SCHEDULE “B” - SMALL SCALE WIND ENERGY FACILITY**  
(To be inserted in Part I and V of the Land Use Bylaw)

**DEFINITION**

**SMALL SCALE WIND ENERGY FACILITY(SWEF)**

A wind energy facility of one structure that produces less than 25 Kw and generates electricity only for the property owner, therefore not connected to the grid. The system and supporting structure is less than 20 m (65.6 ft.) In height.

**GENERAL LAND USE REGULATIONS**

**57. SMALL SCALE WIND ENERGY FACILITY(SWEF)**

1. An application for a SWEF shall be accompanied by:
  - a) manufacturers information on power generation and the tower;
  - b) appropriate letter or approval of Navigation Canada;
  - c) in land use districts where the use is discretionary, noise data;
  - d) provide an analysis for noise to any residences that may be located on adjacent properties;
  - e) other information that may be required by the Development Authority.
2. A SWEF shall have a minimum setback of 4 times the total height of the system from any adjacent residence.

# Schedule “C”

(To be inserted in Part I and VI of the Land Use Bylaw)

## WIND ENERGY FACILITY DEFINITIONS

Blade	An element of a WEF rotor which acts as a single airfoil, thereby extracting kinetic energy directly from the wind.
Blade Clearance	In reference to a horizontal axis rotor, the distance from grade to the bottom of the rotor’s arc.
Horizontal Axis Rotor	A wind energy conversion system, typical of conventional or traditional windmills.
Rotor’s Arc	The largest circumferential path travelled by a WEF blade.
Total Height	The height from grade to the highest vertical extension of a WEF. In the case of a WEF with a horizontal axis rotor, total height includes the distance from grade to the top of the tower, plus the distance from the top of the tower to the highest point of the rotor’s arc.
Towers	The structure which supports the rotor above grade.
Vertical Axis Rotor	A wind energy conversion system where the rotor is mounted on an axis perpendicular to the earth’s surface.
Wind Energy Facility (WEF)	A wind energy generator is one or more structures designed to convert wind energy into mechanical or electrical energy.

## WIND ENERGY FACILITY DISTRICT (WEF)

### PURPOSE

These purpose of this district is to provide for the development of wind power generators which feed power into the provincial grid. It shall take the form of an overlay district in which the requirements of the existing Land use District will continue in effect for all uses other than Wind Energy Facilities and associated uses. In addition to the requirements of the General Land Use Regulations and Schedules, the following Regulations shall apply to any Wind Energy Facility Application.

### A. PERMITTED USES

1. Accessory buildings and uses
2. Small Scale Wind Energy Facilities

### B. CLASS 1 DISCRETIONARY USES

None

### C. CLASS II DISCRETIONARY USES

1. Wind Energy Facilities
2. Transformers and Transmission towers
3. Other Uses consistent with the Definition or General Purpose of the Land Use District as approved by the Municipal Planning Commission

### A. MINIMUM LOT AREA

Existing title, or an unsubdivided quarter section

### E. MINIMUM YARD REQUIREMENTS

Front	Side	Flankage	Rear
See Section 46	7.5 metres (25 feet)	See Section 46	7.5 metres (25 feet)

### F. SETBACKS

- a) Where, in the opinion of the Development Authority, the setbacks referred to in section E are not sufficient to reduce the impact of a WEF from a public roadway or a primary highway, the

Development Authority may increase the required setback.

- a) A WEF should not be located less than four times the height of the WEF, as measured from the ground to the highest point of the rotor's arc, from a residential dwelling unit; but in all instances, the minimum setback applied shall be in accordance with AEUB (Alberta Energy and Utilities Board) stipulations or standards.

#### **G. INFORMATION REQUIREMENTS**

All development applications for a WEF shall be accompanied by:

- a) an accurate site plan showing and labeling the information including the location of overhead utilities on or abutting the subject lot or parcel, and contours of the land and access roads;
- b) a visual representation including scale elevations, photographs and/or digital information of the proposed WEF showing total height, tower height, rotor diameter, colour and the landscape;
- c) the manufacturer's specifications indicating:
  - the WEF rated output in kilowatts,
  - safety features and sound characteristics,
  - type of material used in tower, blade, and/or rotor construction;
- d) an analysis of the potential for noise at:
  - the site of the installation,
  - the boundary of the parcel containing development,
  - at any habitable residence within a 2 km (1.2 miles) distance;
- e) a report regarding any public information meetings or other process conducted by the developer;
- f) any impacts to the local road system including required approaches from public roads having regard to County standards;
- a) **detailed** reclamation/decommissioning plans.

#### **H. REFERRALS**

As a condition of approval on a development application for a WEF, the developer:

- a) shall be responsible for providing the appropriate reports and/or obtaining the approvals from the following:
  - Alberta Sustainable Resource Development - Fish and Wildlife Division
  - Alberta Community Development;
  - Transport Canada,
  - Navigation Canada,
  - Alberta Energy and Utilities Board,
- b) may be required to obtain approval from Alberta Environment if the proposal is on crown land or located on or in close proximity to lands identified as environmentally sensitive areas.

#### **I. DECOMMISSIONING**

- a) The development authority shall ensure that there is a plan for obsolete or abandoned wind energy developments to be decommissioned, and may require the developer to post a performance bond or irrevocable letter of credit.
- b) Should a WEF discontinue producing power for a minimum of two years, the WEF operator shall be required to provide a status report. A review of the status report by the Development Authority may result in a request for the WEF to be decommissioned. Failure to comply with a decommissioning request may result in the issuance of a stop order by the designated officer in accordance with the provisions of the Municipal Government Act.

#### **J. MINIMUM BLADE CLEARANCE**

The minimum vertical blade clearance from grade shall be 7.5 m (24.6 ft.) for a WEF employing a horizontal axis rotor unless otherwise required by the Development Authority.

#### **K. TOWER ACCESS AND SAFETY**

To ensure public safety, the Development Authority may require that:

- a) a security fence with a lockable gate shall surround a WEF tower not less than 1.8 m (5.9 ft.) in height if the tower is climbable or subject to vandalism that could threaten tower integrity;
- b) no ladder or permanent tower access device shall be located less than 3.7 m (12.1 ft.) from



- grade;
- c) a locked device shall be installed on the tower to preclude access to the top of the tower;
- d) all of the above be provided or such additional safety mechanisms or procedures be provided as the Development Authority considers reasonable and appropriate;
- e) the use of tubular towers, with locked door access, will preclude the above requirements.

**L. DISTRIBUTION LINES**

All power lines from the approved WEF up to the point of interconnection of the grid should be underground except where the Development Authority approves overhead installations.

**M. COLOUR AND FINISH**

- a) Unless otherwise required by the Development Authority, a WEF shall be finished in a nonreflective matte and in a colour which minimizes the obtrusive impact of a WEF to the satisfaction of the Development Authority.
- b) No lettering or advertising shall appear on the towers or blades. In other parts of the WEF, the only lettering will be the manufacturer's and/or owner's identification or municipal symbol

**N. DECISION CRITERIA**

- a) The Development Authority may apply any standards that are provided for in the underlying district.
- b) As WEF are categorized as a discretionary use, the Development Authority may approve WEF on a case-by-case basis having regard for:
  - information provided in the application,
  - proximity to other land uses in the immediate area,
  - consideration of the cumulative effect of all WEF approved or proposed in the immediate area,
  - underlying utilities,
  - information received from the circulation of the application and the public.

**O. TIME EXTENSIONS FOR APPROVALS**

Any portion of a project not completed within two years of approval shall require an application for a time extension. The time extension application shall be considered by the MPC and may be granted in one year increments.