

**JONES**

CONSULTING GROUP LTD.

PLANNERS, ENGINEERS, SURVEYORS

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## **Executive Summary of Draft Utilities & Renewable Energy Policies**

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The following brief summary of the proposed Utility and Renewable Energy Policies has been drafted for the purposes of public and agency comment. A copy of the full report has been posted on the Township's website at [www.amaranth-eastgary.ca](http://www.amaranth-eastgary.ca)

The proposed Utility and Renewable Energy Policies represent the culmination of background research, professional planning experience and direction from Council. The policies as proposed will be reviewed in light of public and agency comments and finalized for Council adoption and Provincial approval.

The following is an executive summary of the proposed Official Plan policies and it is recommended that the full text be reviewed for a complete understanding.

### **6.7.1 Objectives:**

Proposed Official Plan objectives are essentially to provide opportunities for renewable energy systems that are compatible with the Township's characteristics through responsible siting, construction and operation. There are eight specific objectives that seek to balance environmental, social and economic benefits with any potential land use impacts.

### **6.7.2 Definitions:**

A number of definitions are proposed to be added to the Township Official Plan to assist in the understanding and implementation of new policies.

### **6.7.3 General Renewable Energy System & Utility Policies**

The following general policies apply to all new or expanded renewable energy facilities:

**6.7.3.1 Agency Approvals** – Outlines approval requirements of relevant provincial and federal agencies.

**6.7.3.2 Amenity Agreements** – Introduces the concept of amenity agreements for amenities and assurances for compensation for potential land use impacts.

**6.7.3.4 Below Grade Infrastructure** – New transmissions and distribution lines will be located below grade except where physical and environmental constraints dictate otherwise.

- 6.7.3.5 Preliminary Consultation** – Requirement for all new medium and large scale projects to pre-consult with Township and key agencies before any planning or environmental assessment process.
- 6.7.3.6 Cultural Heritage, Built Heritage and Archeological Resources** – Requirement for the conservation of significant cultural heritage landscapes and consideration of other heritage resources.
- 6.7.3.7 Dispute Resolution** – Requirement for projects to establish a dispute resolution process in the event of future land use impacts/complaints.
- 6.7.3.8 Holding By-law** – Mechanism for certain aspects of a project to be finalized before the land use can occur.
- 6.7.3.9 Integration with Environmental Assessment (EA) Processes** – Policies to avoid duplication between EA and planning approval processes by providing for a more integrated and concurrent process. No township planning approvals for a project until completion of EA process.
- 6.7.3.10 Management Areas** – Introduces the concept of Management Areas and Schedule "C".
- 6.7.3.11 Aggregate Resources** – Specific requirements for projects near areas of high potential aggregate resources.
- 6.7.3.12 Monitoring & Township Review** – Requirement for a comprehensive Township review of policies after the first large scale project is commissioned with an option for a further review after the construction of 50 large or medium scale turbines.
- 6.7.3.13 Natural Heritage** – Protection of natural heritage features consistent with Provincial policy.
- 6.7.3.14 Peer Reviews** – All supporting studies are to be peer reviewed at the applicant's cost.
- 6.7.3.15 Processing of Planning Applications** – Clarification is provided with respect to policy interpretation, together with a requirement for actual turbine locations to be approved. Each turbine will require a site specific zoning application with each application being processed concurrently with all others forming the entire project area.
- 6.7.3.16 Provincial Greenbelt Plan** – Direction provided with respect to applicable Provincial policy.
- 6.7.3.17 Siting, Buffering & Cumulative Impacts** – General requirement to minimize adverse effects and risk to public health and safety. New projects in the Township must consider the cumulative effects of any existing projects.
- 6.7.3.18 Site Plan Control** – All projects are subject to site plan control.

**6.7.3.19 Vacant Lots & Severances** – Requirement for renewable energy projects to consider vacant lots of record when assessing potential land use impacts. Conversely, any new severances in the vicinity of a renewable energy system shall consider any potential land use impacts.

#### **6.7.4 Wind energy Systems**

Scales for wind energy systems are proposed as follows:

*Micro Scale* – less than 1 kilowatt or 13.5 metres in height.

*Small Scale* – Less than 50 kilowatts and between 13.5 metres and 36 metres in height.

*Medium Scale* – Between 50 and 500 kilowatts and less than 100 metres high.

*Large Scale* – One or more turbines with a combined capacity of greater than 500 kilowatts using turbines greater than 100 metres in height.

#### **Management Areas:**

**Management Area 1** consists of natural heritage features, the Grand River Valley, Settlement Areas and Estate Residential designations. All wind energy systems (except micro scale mounted to an existing structure) are prohibited from Management Area 1.

**Management Area 2** consists of areas within 1 km of settlement areas, and the Grand River valley. Large and Medium projects in these areas require a project specific official plan and zoning by-law amendments addressing specific tests. Small and Micro scale projects are permitted in Management Area 2 subject to a project specific zoning by-law amendment.

**Management Area 3** is the underlying management area for all of the Township. Approvals for projects are the same as Management Area 2 except that Official Plan amendments do not have to satisfy defined tests and information requirements of Management Area 2.

General policies are included in Section 6.7.4.3 relating to wind testing facilities, maximizing wind resources, decommissioning, advertising signs, setback from all roads of 1.25 times the height of the turbine, limiting shadow flicker to 30 hours per year and 30 minutes per day, and public notification requirements.

Specific policies are included for the various scale of wind energy systems:

#### **Micro scale:**

- a) Generally permitted in all Management Areas subject to a site specific rezoning in all Management Areas.
- b) Encouraged to co-locate on existing buildings.
- c) General setback of the turbine height from any side or rear lot line.
- d) Ancillary to permitted use.
- e) Generally not exceed 40 dBA at the property line.

### **Small Scale:**

- a) Generally permitted in Management Areas 2 and 3 only, subject to a site specific rezoning.
- b) General setback of the turbine height from any side or rear lot line.
- c) Generally not exceed 40 dBA at the property line with exceptions consistent with Ministry of Environment Noise Guidelines.

### **Medium Scale:**

- a) Requirement for site specific official plan and zoning by-law amendment.
- b) General setback of 450 metres to a Point of Reception or Sensitive Land Use.
- c) General setback of 500 metres to a Rural Residential Cluster.
- d) General setback of the turbine height from any side or rear lot line.

### **Large Scale:**

- a) Requirement for site specific official plan and zoning by-law amendment.
- b) Zero metre setback to properties containing a wind turbine as part of the project.
- c) General setback of 4 times turbine height or 450 metres to a Point of Reception/ Sensitive Land Use, whichever greater.
- d) General setback of 4.5 times turbine height or 500 metres to a Rural Residential Cluster, whichever greater.
- e) General setback of the turbine height from any side or rear lot line.

Wind Projects will require the following studies for all large scale projects. Smaller scale projects will have these studies scoped as part of pre-consultation.

Scoped Environmental Impact Assessment  
Noise Report  
Shadow Flicker Report  
Risk Assessment Report  
Electromagnetic Interference Report  
Wake Modeling & Assessment  
Visual Impact Assessment  
Management Plan  
Mineral Aggregate Resource Assessment  
Archaeological Assessment  
Heritage Impact Assessment  
Agricultural Impact Assessment  
Site Plan

### **6.7.5 Solar Energy Systems**

Scales for solar energy systems are proposed as follows:

*Small Scale* – Any system mounted to an existing building or any ground installed facility occupying a maximum of 10% of the site area up to a maximum of 1 hectare.

*Large Scale* – Any ground installed system occupying more than 1 hectare of land or 10% of the site area.

## Management Areas:

**Management Area 1** consists of natural heritage features, the Grand River Valley, Settlement Areas and Estate Residential designations. All ground mounted and large scale solar energy systems are prohibited from Management Area 1. Small scale systems on existing building/structures are generally permitted with a site specific zoning by-law amendment.

**Management Areas 2 and 3** consist of areas within 1 km of settlement areas, the Grand River valley and all underlying areas of the Township. Large scale systems will require an Official Plan amendment. All solar systems will require a site specific zoning by-law amendment.

General policies are included in Section 6.7.5.3:

- a) Large scale systems are not permitted in the Provincial Greenbelt Plan.
- b) Small scale systems are encouraged.

Specific policies are included for the various scale of wind energy systems:

### Small scale:

- a) Allowed in any designation.
- b) Generally mounted to existing structures in "Community" designations.
- c) Generally, minimum height of 1 metre above the existing roofline or maximum permitted building height, whichever is less.
- d) Maximum height of ground mounted systems shall generally be 10.5 metres.
- e) Setbacks generally in accordance with comprehensive zoning by-law.

### Large Scale:

- a) Only permitted in "Rural" and "Agricultural" designations.
- b) Generally, maximum lot coverage of 95% and height of 10.5 metres.
- c) General setbacks of 30 metres from right-of-ways and 10 metres to all other property lines. A 0 metre setback is permitted between participating properties

Solar Energy Systems will require the following studies for all large scale projects. Small scale systems will have these studies scoped as part of pre-consultation.

Scoped Environmental Impact Assessment  
Agricultural Impact Assessment  
Mineral Aggregate Resource Assessment  
Growth Management Assessment  
Noise Report  
Reflectivity analysis  
Stormwater Management Report  
Management Plan  
Site Plan

## **6.7.6 Biomass Energy Systems**

Scales for biomass energy systems are proposed as follows:

*Small Scale* – Any system not exceeding 250 kilowatts associated with a principal permitted land use.

*Large Scale* – Any system generating more than 250 kilowatts.

### **Management Areas:**

**Management Area 1** consists of natural heritage features, the Grand River Valley, Settlement Areas and Estate Residential designations. No biomass facilities are permitted in Management Area 1.

**Management Areas 2 and 3** consist of areas within 1 km of settlement areas, the Grand River valley and all underlying areas of the Township. All systems are required to have a site specific zoning by-law amendment. Large scale systems require an Official Plan amendment meeting specific tests.

General policies are included in Section 6.7.6.3:

- a) All systems shall be generally sited using the comprehensive zoning by-law.
- b) Biomass policies apply to those systems principally for the generation of electricity.
- c) Study requirements to minimize adverse effects.
- d) Establishment of general siting policies:
  - i) Maximum lot coverage of 10% (5% for storage areas);
  - ii) Maximum height of 6 metres for storage areas;
  - iii) Screening of storage areas from public view;
  - iv) Lighting;
  - v) Site surfaces;
  - vi) Stormwater
  - vii) Application of MDS setbacks, where appropriate;
  - viii) Reference to applicable provincial regulations
- e) Servicing compatibility;
- f) Management requirements;
- g) Large scale facilities adjacent to County and arterial roads;

Biomass Systems will require the following studies for all large scale projects. Small scale systems will have these studies scoped as part of pre-consultation.

Scoped Environmental Impact Assessment  
Mineral Aggregate Resource Assessment  
Noise Report  
Agricultural Impact Assessment  
Haul Route analysis and Traffic Impact Assessment  
Emissions analysis  
Site plan

### **6.7.6 Transmission/Distribution and Transformers**

Policies that apply to new or expanded transmission/distribution facilities and transformers include (these policies do not apply to below grade infrastructure related to new or expanded renewable energy systems):

- a) Encouragement of Hydro One to consider local policies in their approval processes;
- b) New transmission lines to be co-located on existing or consolidated infrastructure.
- c) Preference for future Bruce to Milton expansion plans to consider alternative routes.
- d) New or upgraded transmission infrastructure is subject to visual impact assessment.
- e) Consideration required for cultural heritage landscapes.
- f) Avoid adverse effects as defined by Provincial Policy.
- g) Transformers to comply with Ministry of Environment noise guidelines/standards.
- h) Transformers to be sited to maximize separation distances.
- i) Transformers to be designed to reflect existing background noise levels and not rely on external mitigation measures.

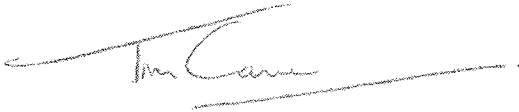
**Summary:**

The policy development process for renewable energy facilities within the Township of East Garafraxa represents a proactive and comprehensive planning study process. The results of this process are to create a set of policies to encourage renewable energy facilities in a responsible manner that balances potential land use impacts.

Please do not hesitate to contact me if you have any questions.

Sincerely,

**THE JONES CONSULTING GROUP LTD.**



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