

## SECTION 11: ENERGY

The MD of Willow Creek recognizes that energy development, including conventional oil and gas and renewable or alternative energy development, will continue to be an important component of the Municipality's evolving economy. The Municipality supports a balanced approach to energy development that encourages investment, innovation, and infrastructure reliability while protecting environmental resources, maintaining rural quality of life, and safeguarding the long-term sustainability of the community. In considering such development, this Plan affirms the continued importance of agriculture and energy developments should be directed to appropriate locations where potential impacts can be effectively avoided, minimized, or mitigated.

### 11.1 CONVENTIONAL ENERGY DEVELOPMENT AND ULILITY CORRIDORS

The MD of Willow Creek recognizes that conventional oil and gas development and related energy infrastructure continue to play an important role in the local and regional economy. These developments contribute to employment, municipal assessment, energy reliability, and investment within the Municipality. It is important that such development occur in a planned and responsible manner that balances economic benefits with the long-term interests of the community. The MGA also requires the Municipal Development Plan to include policies that align with provincial regulation and the Alberta Energy Regulator (AER) setbacks concerning the type and location of land uses adjacent to sour gas facilities.

#### Objectives:

- To support economic growth, investment, and employment opportunities created by conventional energy development.
- To promote the safe and efficient development of energy infrastructure, including facilities, pipelines, transmission lines, substations, and storage systems in corridors to minimize landscape disruptions.
- To protect environmental resources, water systems, wildlife habitat, and environmentally sensitive areas from unnecessary impacts.
- To protect public health and safety in areas affected by sour gas facilities and related infrastructure.

#### Policies:

11.1.1 All subdivision and development applications located within the applicable notification, consultation, or planning radius of an oil, sweet gas or sour gas well or facility shall be:

- (a) reviewed for compliance with the setbacks set out in the *Matters Relating to Subdivision and Development Regulations 84/2002*, or

(b) referred to the Alberta Energy Regulator (AER) or other appropriate approving authority for review and comment.

11.1.2 The Municipality discourages the location of transmission lines and major utility infrastructure within municipal road rights-of-way where alternative routing options exist and supports the use of privately negotiated routes on private lands to reduce constraints on future roadway improvements, preserve municipal infrastructure function, and minimize cumulative impacts within transportation corridors.

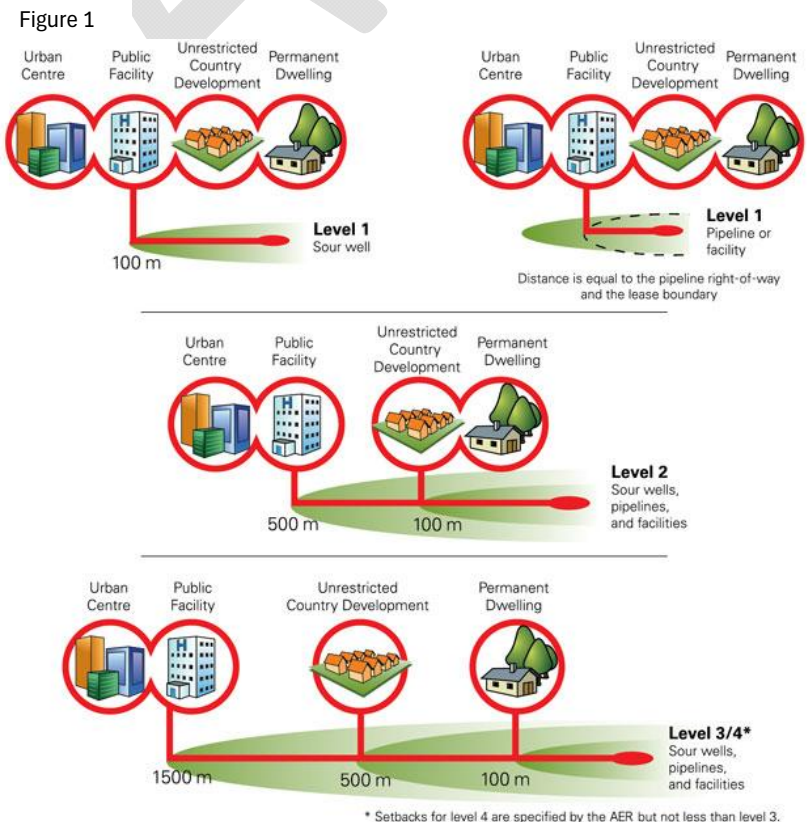
11.1.3 The Municipality shall not approve subdivision or development within legislated setbacks, emergency planning zones, or other restricted areas established for sour gas facilities, unless otherwise authorized by the applicable provincial regulator.

11.1.4 Setback distances, risk assessment criteria, and development restrictions relating to sour gas facilities shall be in accordance with the standards, directives, and requirements established by the Alberta Energy Regulator, as amended from time to time.

11.1.6 Where appropriate, the Municipality may include development permit conditions, or other measures to advise landowners and occupants of the presence of nearby energy facilities and associated restrictions.

11.1.7 The Municipality shall encourage early communication between proponents, landowners, residents, and the Alberta Energy Regulator where proposed development may be affected by energy infrastructure.

11.1.5 Applicants for subdivision or development proposed near a sour gas facility may be required to demonstrate compliance with AER requirements, including any required setbacks (as shown in Figure 1), consultation, emergency planning, or technical review processes.



## 11.2 INDUSTRIAL-SCALE WIND DEVELOPMENT

The MD of Willow Creeks recognizes that industrial scale wind energy projects can contribute to economic diversification, energy security, agricultural viability, and provincial emissions reduction goals. At the same time, such developments must be carefully planned to respect the rural character of the Municipality, protect the health, safety, and quality of life of residents, and minimize impacts on agricultural operations, environmental features, transportation networks, and existing land uses. It is the intent of this Municipal Development Plan to provide a clear, predictable, and balanced policy framework for the consideration of industrial scale wind energy projects. Wind energy development shall be evaluated in a manner that supports responsible investment while ensuring compatibility with surrounding land uses and the long-term interests of the community.

### Objectives:

- Encourage development in locations with suitable wind resources, access to transmission infrastructure, and minimal conflict with existing residences, agricultural activities, and environmentally sensitive areas.
- Ensure meaningful and early engagement with affected landowners, residents, and other stakeholders throughout project planning and approval processes.
- Support the continued use of agricultural lands by minimizing fragmentation and disturbance, and by encouraging co-existence between wind energy infrastructure and farming operations where feasible.

### Policies:

- 11.2.1 Industrial-scale wind energy developments shall be evaluated on a site-specific basis and shall not be considered an automatically supported land use within the Municipality. The MD of Willow Creek may support industrial-scale wind energy development where proposals are carefully sited, appropriately designed, and demonstrated to be compatible with agricultural operations, neighbouring land uses, and the long-term objectives of this Plan.
- 11.2.2 The MD of Willow Creek recognizes that certain lands within the municipality are subject to the Electric Energy Land Use and Visual Assessment Regulation (EELUVA), Alberta Regulation 203/2024, which may affect the future development of wind energy projects.
- 11.3.3 The MD of Willow Creek should explore the preparation of a Municipal Land Use Suitability Tool Project for the municipality or in partnership with adjacent rural municipalities to identify areas in the municipality which may be more suitable for the development of industrial scale wind projects.
- 11.2.4 Wind energy development shall be evaluated on a site-specific basis, having regard for local conditions, cumulative impacts, and the potential benefits and impacts of the proposal. Support for one project shall not be interpreted as support for future projects in other locations.

- 11.2.5 The MD of Willow Creek recognizes agriculture as a priority land use and economic driver. Wind energy development shall be planned to minimize the loss or fragmentation of productive agricultural land and to avoid undue interference with normal farm practices, field access, drainage, irrigation, shelterbelts, and agricultural infrastructure.
- 11.2.6 Proponents shall demonstrate that turbine locations, access roads, collector lines, substations, and ancillary facilities have been designed to reduce land use conflicts and maximize the continued agricultural use of affected lands where feasible.
- 11.2.7 Wind energy proposals shall be directed away from established residential areas, hamlets, country residential clusters, and other sensitive land uses unless it can be demonstrated that potential impacts can be satisfactorily mitigated.
- 11.2.8 In reviewing wind energy proposals, the MD of Willow Creek shall consider:
- (a) cumulative effects of other existing wind projects;
  - (b) proximity to residences and sensitive uses utilizing the setbacks from the Land Use Bylaw;
  - (c) noise, shadow flicker, visual impact, lighting, and vibration;
  - (d) impacts on viewsheds and rural character;
  - (e) impacts on wildlife habitat, migratory pathways, wetlands, and environmentally sensitive areas (Environmentally Significant Areas in the Oldman River Region: Municipal District of Willow Creek, *(Cottonwood Consultants, 1989)*);
  - (f) impacts on agricultural operations and rural infrastructure;
  - (g) impacts to airports and other aviation development;
  - (h) traffic and road use during construction and operation;
  - (i) emergency response and public safety considerations; and
  - (j) reclamation and end-of-life decommissioning requirements.
- 11.2.9 Wind energy development shall comply with all applicable provincial and federal legislation, approvals, setback requirements, environmental regulations, and aviation or telecommunications standards.
- 11.2.10 Where municipal roads may be affected, the MD of Willow Creek may require road use agreements, haul route plans, infrastructure upgrades, financial security, or other measures necessary to address construction and maintenance impacts.

- 11.2.11 The MD of Willow Creek may require technical studies or supporting information, including but not limited to noise assessments, environmental studies, agricultural impact assessments, visual simulations, traffic impact assessments, drainage studies, and emergency response plans to be submitted for review as part of a redesignation or development permit process.
- 11.2.12 The MD of Willow Creek shall encourage meaningful consultation between proponents, affected landowners, residents, and relevant agencies prior to and during the review of wind energy proposals.
- 11.2.13 Where multiple wind energy projects are proposed within the Municipal District or in adjacent municipalities, the MD of Willow Creek may consider cumulative land use, environmental, infrastructure, and community impacts in the response to the proposed project.
- 11.2.14 Approval of wind energy development may be subject to conditions respecting setbacks, landscaping, screening, road maintenance, drainage protection, noise mitigation, monitoring, reclamation, and decommissioning and proponents will be required to enter into and abide by a development agreement.
- 11.2.15 The MD of Willow Creek shall require decommissioning plans and financial assurances, where authorized, to ensure that turbines and associated infrastructure, including roads, are removed and lands are appropriately reclaimed when operations cease.
- 11.2.16 Nothing in this Plan obligates the MD of Willow Creek to support a wind energy proposal where, in the MD's opinion, the proposal would create unacceptable impacts or is inconsistent with the public interest.

### **11.3 INDUSTRIAL-SCALE SOLAR DEVELOPMENT**

The MD of Willow Creek recognizes that industrial-scale solar energy development is an emerging and ever-changing form of utility-scale infrastructure, and the MD does not provide blanket support for such projects. Proposals will be considered on their individual merits, having regard for site-specific impacts, the long-term interests of the community, and the preservation of agricultural land as a foundational land use within the Municipality.

#### **Objectives**

- To ensure industrial solar developments are located and designed to minimize impacts on neighbouring properties, roads, municipal infrastructure, and community interests.
- To protect environmentally sensitive areas, water resources, wildlife habitat, and natural features from unnecessary disturbance.
- To ensure proponents address reclamation, decommissioning, and long-term site restoration.

- To require meaningful consultation with affected landowners, residents, and the Municipality.
- To ensure that municipal costs and infrastructure impacts associated with development are appropriately addressed by proponents.

## **Policies**

- 11.3.1 Industrial solar energy developments shall be evaluated on a site-specific basis and shall not be considered an automatically supported land use within the Municipality.
- 11.3.2 The MD of Willow Creek recognizes that certain lands within the municipality are subject to the Electric Energy Land Use and Visual Assessment Regulation (EELUVA), Alberta Regulation 203/2024, which may affect the future development of wind energy projects.
- 11.3.3 Proponents shall demonstrate that the proposed development is compatible with surrounding land uses and will not create undue adverse impacts on adjacent properties, agricultural operations, residences, or transportation corridors.
- 11.3.4 Proponents should be directed to sites with lower agricultural capability, previously disturbed lands, brownfield sites, or locations where impacts to agricultural productivity can be minimized.
- 11.3.5 Development on lands containing high-value agricultural capability shall be discouraged unless the proponent can demonstrate that long-term agricultural productivity will be maintained or restored.
- 11.3.6 Proponents shall be required to submit technical studies, including but not limited to agricultural impact assessments, drainage studies, glare or noise studies, environmental evaluations, water availability, traffic impact assessments, servicing plans, vegetation management, emergency response and reclamation plans.
- 11.3.7 Where industrial scale solar development may impact municipal roads, bridges, drainage works, or other infrastructure, the MD of Willow Creek shall require road use agreements, development agreements, servicing agreements, or other arrangements satisfactory to the Municipality.
- 11.3.8 Appropriate setbacks, buffering, screening, fencing, landscaping, and access controls may be required to reduce impacts on neighbouring lands and maintain rural character as determined through regulations set in the municipal Land Use Bylaw.
- 11.3.8 The MD of Willow Creek may provide comments, recommendations, or objections to provincial regulators or other approving authorities where a proposal may adversely affect municipal interests or conflict with the objectives of this Plan.

## **11.4 AGRIVOLTAIC DEVELOPMENT**

The Municipality recognizes agrivoltaics as an emerging land use that combines agricultural production with solar energy generation on the same parcel of land. When appropriately planned and managed, agrivoltaic development can support farm viability, diversify rural economies, strengthen local energy systems, and encourage innovation within the agricultural sector. It is the intent of this Municipal Development Plan to provide a policy framework that supports agrivoltaic development where the long-term agricultural capability of the land is maintained and where projects are compatible with surrounding land uses, municipal infrastructure, and the rural character of the Municipality.

### **Objectives:**

- To encourage the co-existence of renewable energy infrastructure and active agricultural uses, including cropping, grazing, and other farm-related activities.
- To protect the long-term productivity and capability of agricultural lands by ensuring agricultural use remains a principal component of the site.

### **Policies:**

- 11.4.1 The MD of Willow Creek will support agrivoltaic developments associated with renewable energy projects as an opportunity for agricultural innovation to ensure the continued agricultural productivity of the land.
- 11.4.2 Agrivoltaic developments should be directed to locations where they are compatible with surrounding land uses, consistent with municipal planning objectives, and supported by available infrastructure capacity, specifically an adequate water supply.
- 11.4.3 Proposals for agrivoltaic developments in conjunction with renewable projects shall demonstrate how agricultural activities, including crop production, grazing, or other farm uses, will be maintained and integrated on the site throughout the life of the project. Proponents shall ensure information is submitted which supports the proposed agrivoltaic project.
- 11.4.4 Any agrivoltaics developments shall be designed and sited to minimize conflicts with neighbouring agricultural operations, residences, and other land uses through the use of appropriate setbacks, buffering, screening, access management, and site design as set out in the Land Use Bylaw.
- 11.4.5 Agrivoltaic developments should be planned and operated in a manner that protects soil capability, maintains natural drainage patterns, conserves water resources, and avoids or mitigates impacts to environmentally sensitive features (Environmentally Significant Areas in the Oldman River Region: Municipal District of Willow Creek, (*Cottonwood Consultants, 1989*)).

## **11.5 OTHER FORMS OF ALTERNATIVE ENERGY**

The Municipality recognizes that advances in technology continue to create new opportunities for alternative energy development beyond wind and solar. Developments such as battery energy storage systems, biofuel and biodiesel production, biomass facilities, waste-to-energy projects, hydrogen production, geothermal systems, district energy systems, and other evolving technologies may become an increasingly important component of the Municipality's economy. The MD of Willow Creek supports alternative energy source development where projects are appropriately located, responsibly designed, and compatible with surrounding land uses.

### **Objectives:**

- To support responsible alternative energy source development within the Municipality.
- To support economic diversification, innovation, and investment opportunities created by emerging energy industries.
- To minimize impacts on neighbouring properties, roads, municipal infrastructure, natural features, and community interests.
- To protect water resources, environmentally sensitive areas (Environmentally Significant Areas in the Oldman River Region: Municipal District of Willow Creek, (Cottonwood Consultants, 1989)), wildlife habitat, and public health and safety.
- To require appropriate decommissioning, reclamation, and site restoration at the end of a project's life.

### **Policies:**

- 11.5.1 The MD of Willow Creek supports innovation and pilot projects involving new energy technologies where potential impacts can be appropriately managed and where projects align with the long-term interests of the community.
- 11.5.2 Alternative energy developments should be located and designed to minimize conflicts with existing or approved agricultural, residential, commercial, industrial, recreational, and environmental land uses.
- 11.5.3 Proponents may be required to provide technical studies, site plans, environmental information, traffic impact information, servicing plans, vegetation management, water availability, emergency management or other supporting documentation to the satisfaction of the Municipality.
- 11.5.4 Where development may impact municipal roads, bridges, drainage works, utilities, or other infrastructure, the MD of Willow Creek may require development agreements, road use agreements, servicing agreements, or other arrangements satisfactory to the Municipality.

- 11.5.5 All developments shall comply with applicable provincial and federal legislation, approvals, permits, and safety standards.
- 11.5.6 All projects shall provide decommissioning, closure, reclamation, or site restoration plans where required by the Municipality or other approving authority.
- 11.5.7 The Municipality may provide comments to provincial or federal regulators on applications where proposals may affect municipal interests, neighbouring landowners, or future growth and development.

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