

SECTION FOUR

Specific Uses and Activities

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This section outlines specific regulations that apply to particular types of development within the County.

DATA PROCESSING CENTRE

General Requirements

- a) Applications for Data Processing Centres will only be considered in areas districted for industrial development as a Discretionary Use.
- b) The costs of any third-party expert review required by the County shall be borne by the applicant. These reviews shall be completed by a qualified professional, in the appropriate field who is accredited in Alberta. Submissions shall be signed and stamped accordingly.
- c) Applications for Data Processing Centres require the applicant to hold a public meeting and provide a public consultation report which outlines the concerns raised and how the applicant proposes to address relevant concerns. The meeting shall be advertised publicly, and formal invitations delivered to landowners within 800 metres of the development.

Site Requirements

- d) Data Processing Centres may be powered from the grid and/or make use of on-site power generation.
- e) A Data Processing Centre shall have a minimum separation distance so that the modelled sound level shall not exceed 55dba at the property line of the development.
 - i. This requirement may be reduced by the Development Authority upon consideration of a written agreement of the affected landowner.
- f) A Data Processing Centre shall have a minimum separation distance so that the modelled vibration level shall not exceed 0.2 mm/s RMS at the property line of the development.
 - ii. This requirement may be reduced by the Development Authority upon consideration of a written agreement of the affected landowner.

Development Permit Requirements

- g) In addition to section 2.5, a Development Permit Application for a Data Processing Centre **shall** be required to include:
 - iii. A Site Plan that outlines the location of adjacent or nearby land uses, including agriculture operations, residential dwellings, commercial uses and institutional/educational facilities within 800m of the operating area.
 - iv. Details on power source, including:
 - i. Anticipated Power demand at full build out,
 - ii. Source(s) of power, including confirmation from the provider,
 - iii. Description of backup power, if required,
 - iv. Details on fuel storage, if necessary.
 - v. Description of computing activities
 - vi. Noise and vibration impact assessment report
 - vii. Details on hours of operation, number of employees

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- viii. Planned security measures, including the use of lighting
 - i. Details on water use and source of water and disposal of wastewater
 - ii. A Stormwater Management Plan.
 - iii. An Emergency Management Plan, including fire mitigation
 - iv. Public Consultation Report
 - v. Proof of approval from any provincial or regulatory body if required (AESO, AUC, AER, EPEA, DFO etc...)
- b) In addition to section 2.5, a Development Permit Application for a Data Processing Centre may be required to include:
 - i. Noise attenuation or mitigation plan
 - ii. Landscaping plan to mitigate visual and aesthetic impact
 - iii. Planned architectural controls and features to ensure development complements the site and surrounding land

Land Use Districts

Data Processing Centre will be added as a Discretionary Use in the following Land Use Districts:

- I-GEN, Industrial, General District

SMALL SCALE ENERGY-INTEGRATED DATA CENTRE

General Requirements

- a) No new drilling shall be permitted solely for the purpose of powering a data centre without separate approval
- b) Small-Scale Energy-Integrated Data Centre shall not cause unreasonable off-site noise or vibration.
- c) The costs of any third-party expert review required by the County shall be borne by the applicant. These reviews shall be completed by a qualified professional, in the appropriate field who is accredited in Alberta. Submissions shall be signed and stamped accordingly.
- d) Applications for Small-Scale Energy-Integrated Data Centre may require the applicant to hold a public meeting and provide a public consultation report which outlines the concerns raised and how the applicant proposes to address relevant concerns. The meeting shall be advertised publicly, and formal invitations delivered to landowners within 800 metres of the development.

Site Requirements

- e) A Small-Scale Energy-Integrated Data Centre shall have a minimum separation distance so that the modelled sound level shall not exceed 45dba at the property line of the development.
 - i. This requirement may be reduced by the Development Authority upon consideration of a written agreement of the affected landowner.
- f) A Small-Scale Energy-Integrated Data Centre shall have a minimum separation distance so that the modelled vibration level shall not exceed 0.2 mm/s RMS at the property line of the development.
 - i. This requirement may be reduced by the Development Authority upon consideration of a written agreement of the affected landowner.
- g) If power generation is supplied by existing oil and gas infrastructure, the development should be aligned with existing oil and gas lease footprint.
- h) The footprint of a Small-Scale Energy-Integrated Data Centre shall not exceed 5 acres.

Development Permit Requirements

- i) In addition to section 2.5, a Development Permit Application for a Small-Scale Energy-Integrated Data Centre **shall** be required to include:
 - i. A Site Plan that outlines the location of adjacent or nearby land uses, including agriculture operations, residential dwellings, commercial uses and institutional/educational facilities within 800m of the property line.
 - ii. Details on power source, size, frequency of use and modeled noise at the property line of any generator or stand-alone power source, including back up sources if required
 - iii. Description of computing activities
 - iv. Noise and vibration impact assessment report
 - v. Details on hours of operation, number of employees
 - vi. Planned security measures, including the use of lighting
 - iv. Details on water use, source of water and disposal of wastewater
 - v. An Emergency Management Plan, including fire mitigation
 - vi. Proof of compliance from any provincial or regulatory body if required (AESO, AUC, AER, EPEA, etc...)
- c) In addition to section 2.5, a Development Permit Application for a Small-Scale Energy-Integrated Data Centre **may** be required to include:
 - i. Noise attenuation or mitigation plan
 - ii. Public Consultation Report
 - iii. Landscaping plan to mitigate visual and aesthetic impact
 - iv. Documentation confirming lawful fuel supply agreement
 - v. Proof of compliance with provincial oil and gas regulator requirements

Land Use Districts

SMALL SCALE ENERGY-INTEGRATED DATA CENTRES will be added as a Discretionary Use in the following Land Use Districts:

- A-GEN, Agriculture, General District
- B-HAM, Business, Hamlet District
- B-RUR, Business, Rural District
- I-GEN, Industrial, General District

SECTION SIX

Glossary

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This section provides definitions for terms used within the Land Use Bylaw.

Please note, definitions pertaining to specific uses are **HIGHLIGHTED** below:

DATA PROCESSING CENTRE means a Building, or a group of buildings, used to house computer systems and associated infrastructure and components for the digital transactions required for processing data, and the associated power generation requirements. Typical Uses include centres for artificial intelligence or digital currency

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processing. The Use may make use of a stand-alone electrical energy generator or be connected to the electrical grid system.

SMALL-SCALE ENERGY-INTEGRATED DATA CENTRE means a Building, or part of a Building, containing computing infrastructure and associated equipment used for data processing, storage, digital asset operations, artificial intelligence processing, blockchain operations, or similar digital services, where primary power generation is supplied by either existing oil and gas infrastructure including natural gas wells, pipelines, processing facilities, or associated gas that would otherwise be flared or vented, or by the electricity grid.