



PLANNING

TO:	Council Development Authority	DIVISION: 6
DATE:	May 31, 2022	APPLICATION: PRDP20214577
FILE:	03314001/2/ - 03311001/2/3/6	
SUBJECT:	Development Permit: Solar Farm / Listed Direct Control Use, with no Variances	

APPLICATION: Development permit application for installation of a Solar Farm and ancillary uses (including a substation, community garden, portable buildings, and over height fencing).

GENERAL LOCATION: Located approximately 3.23 kilometres (± 2.01 miles) north of Indus; located at the northeast junction of Range Road 282 and Township Road 232.

LAND USE DESIGNATION: Direct Control District 166 Bylaw C-7996-2020 (DC 166) under Land Use Bylaw C-8000-2020.

EXECUTIVE SUMMARY: The proposal is for development permit approval of a Solar Farm. The farm would consist of a maximum of 550,000 solar panels and a control substation over a development area of ± 326.93 hectares (± 807.88 acres). The farm would include between 20 to 30 full-time employees. Within the substation area, portable buildings would be placed onsite, for operations and ancillary storage purposes.

A land use application was approved by Council on February 12, 2019, to add the subject lands to the Solar Farm discretionary use under the previous Land Use Bylaw C-4841-97 zoning of Ranch and Farm District. Upon adoption of the County's current Land Use Bylaw C-8000-2020, the subject lands were redesignated from Ranch and Farm to DC 166. Administration and the Municipal Planning Commission perform the functions of the Development Authority except where Council is specifically designated as such. These lands are regulated under DC 166, wherein Council is identified as the Development Authority responsible for deciding on Development Permits for Solar Farms. As a Solar Farm is the principal use onsite, this application is being presented for Council's consideration.

The subject lands are located in an area of the county that is primarily agricultural, with the hamlet of Indus located directly southeast.

The development would include multiple types of fencing. Substation perimeter chain-link fencing, 1.80 m (5.90 ft.) high and 2.43 m (7.97 ft.) high with a barb-wire topper, site perimeter & wetland areas paige wire fencing, 1.83 m (6.00 ft.) high with 150.00 mm openings, and three-trail wood fencing, 1.20 m (3.93 ft.) high for the proposed community garden entryways. The fencing would be primarily buffered by landscaping (in single and cluster tree plantings) and a topsoil berm, 1.50 m (4.92 ft.) in height. No business signage or site servicing is proposed.

The Alberta Utilities Commission (AUC) would regulate renewable power plant/generation facilities including solar and wind farms. The Applicant has applied to AUC and the Alberta Energy System Operator (AESO) for the required grid connection process. Additionally, the Applicant submitted the required application and supporting technical documents for Water Act approval under Alberta Environment and Parks in March 2022, and it is in processing.

The application was assessed against all relevant policy. The application appears to align with the overlying regional and County policies, which support renewable energy strategies and initiatives. Additionally, the application aligns with the vision and intent of DC 166, which is to accommodate a

Administration Resources

Jacqueline Targett, Planning & Development Services



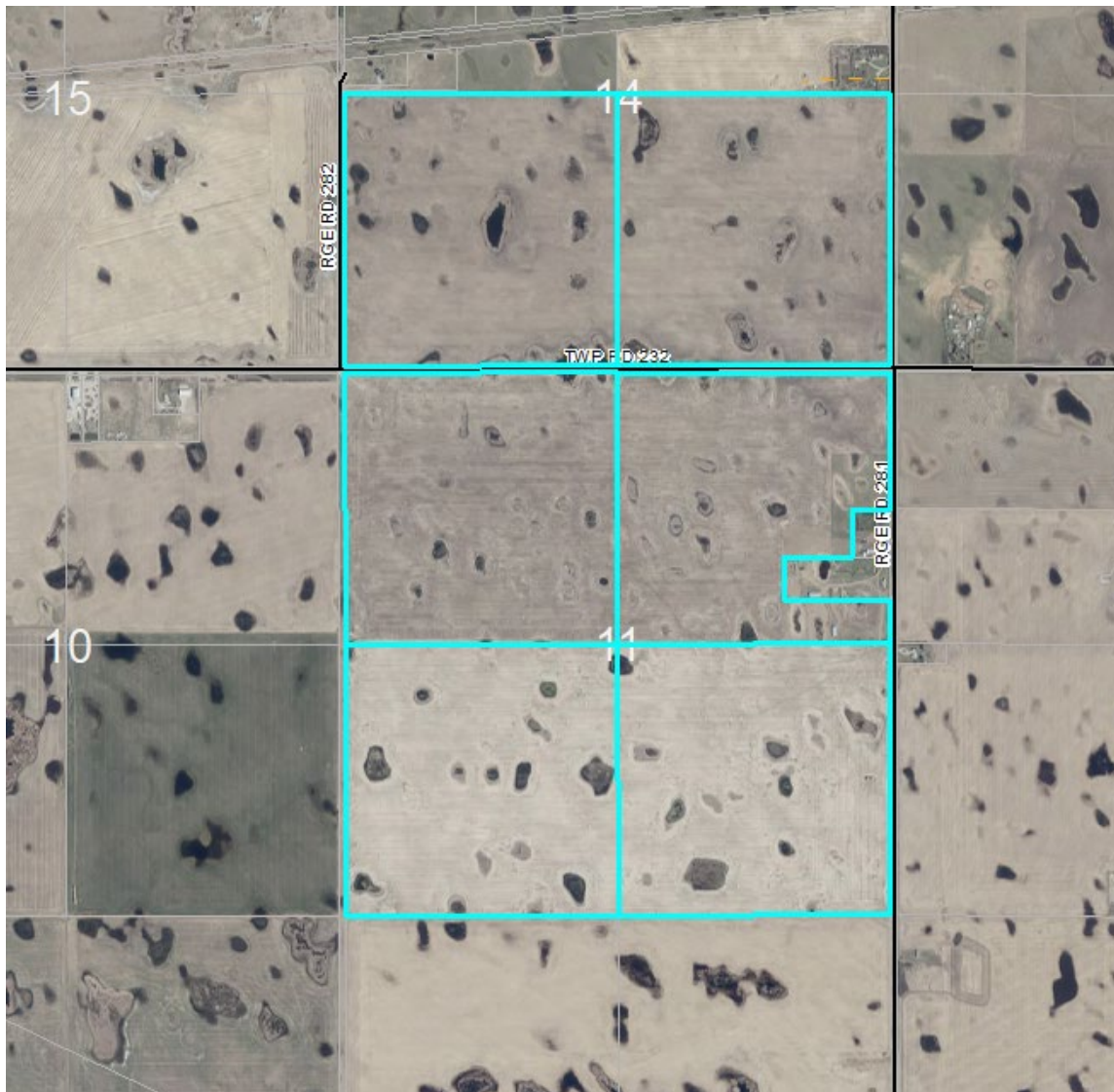
ROCKY VIEW COUNTY

Solar Farm and agricultural uses. As such, Administration is recommending approval in accordance with Option #1.

ADMINISTRATION RECOMMENDATION: Administration recommends approval in accordance with Option #1.

OPTIONS:

- Option #1: THAT Development Permit Application PRDP20214577 be approved with the conditions noted in Attachment 'A'.
- Option #2: THAT Development Permit No. PRDP20214577 be refused as per the reasons noted.
- Option #3: THAT alternative direction be provided.

AIR PHOTO & DEVELOPMENT CONTEXT:



APPLICATION EVALUATION:

The application was evaluated based on the application submitted and the applicable policies and regulations.

APPLICABLE POLICY AND REGULATIONS:	TECHNICAL REPORTS SUBMITTED:
<ul style="list-style-type: none"> • South Saskatchewan Regional Plan • <i>Municipal Government Act</i>; • Subdivision and Development Regulations; • Municipal Development Plan (County Plan); • Direct Control District 166 C-7996-2020 (DC 166) • Land Use Bylaw C-8000-2020; (LUB) • County Servicing Standards. 	<ul style="list-style-type: none"> • Application Development Drawings: Overall Site Plan, #1.0; Substation Site Layout, #4.0; Electrical Substation Plan, #5.0, as prepared by IBI as prepared by IBI Group, Project No. 110011, dated September 24, 2021, rev. May 13, 2022. • Biophysical Impact Assessment, as prepared by Sage Ecological Solutions, "Indus Solar Project," dated December 2021 • Construction Plan, version 4. as prepared by Indus Solar Plant Inc., dated October 2021. • Constraint Map (Wetlands), as prepared by IBI Group, Project No. 110011, dated August 5, 2021; rev. May 13, 2022 • Decommission Plan, as prepared by Indus Solar Plant Inc., dated October 2021 • Emergency Response Plan, as prepared by IBI Group, dated September 30, 2021. • Electrical Equipment Technical Specification, as prepared by TMEIC Corporation, dated January 25, 2018 • ESC Plan, as prepared by IBI Group, File No. 110011.5.2, dated October 15, 2021; rev. May 13, 2022 • ESC Plan During & Post Construction, Dwg: ESC1, as prepared by IBI Group, Project No. 110011, dated October 14, 2021, rev. May 13, 2022 • Geotechnical Report, as prepared McIntosh Lalani Engineering Ltd., File: 02118608.001, dated October 26, 2021 • Landscape Drawing Package, #L1.2. L1.3, L1.4a, L1.4b, L1.5, as prepared by IBI Group, Project No. 110011, dated October 12, 2021; rev. May 13, 2022
	TECHNICAL REPORTS SUBMITTED:



ROCKY VIEW COUNTY

	<ul style="list-style-type: none"> • Landscape Maintenance Plan, as prepared by IBI Group, Project No. 110011, dated March 07, 2022 • Landscape Plan Cover Sheet L1.0 & Landscape Plan L1.1, as prepared by IBI Group, Project No. 110011, dated March 07, 2022; rev. May 13, 2022 • Noise Impact Assessment, as prepared by dBa Noise Consultants, #V.19.484, dated April 10, 2019. • Parametric Solar Glare Study, as prepared by IBI Group, dated October 14, 2021. • Stormwater Management Review Memo, as prepared by IBI Group, dated October 15, 2021; rev. May 13, 2022 • Transportation Study, as prepared by IBI Group, dated September 30, 2021; rev. May 13, 2022 • Weed Management Plan, as prepared by Sage Ecological Solutions, "Indus Solar Project," dated January 2022. • Wildlife Renewable Energy Referral Report, as prepared by SAGE Ecological Solutions Inc., dated April 2022 (<i>AUC Report; pending Administration review</i>)
LISTED DIRECT CONTROL USES: <ul style="list-style-type: none"> • <i>Solar Farm</i> • <i>Accessory Buildings</i> 	DEVELOPMENT VARIANCE AUTHORITY: <ul style="list-style-type: none"> • Not applicable

Payments and Levies

APPLICABLE FEE/LEVY	AMOUNT OWING (ESTIMATE)
TRANSPORTATION OFFSITE LEVY <ul style="list-style-type: none"> • <i>Base Area Levy \$4,595.00 / acre</i> on the total area of the roads / parking area(s) / buildings / landscaping / substation area <ul style="list-style-type: none"> ○ Excludes: the solar panel area, wetland areas, gas line and well site area; 	\$201,306.95 Development Area: 43.81 acres

Additional Review Considerations

This application was assessed in accordance with the above policy and complies with the minimum and maximum requirements noted below including setbacks and building heights.

LUB Definitions:



ROCKY VIEW COUNTY

Solar Farm means an installation or area of land in which a large number of solar panels are set up in order to generate electricity.

DC 166 (Bylaw C-7996-2020):

- *2.1. Unless otherwise specified, the rules and provisions of Parts 1, 2, 3, 4, 5, 6, 7, and 8 of Bylaw C-8000-2020 apply to this Direct Control District Bylaw.*
- *6.1. Notwithstanding Section 5.1 of this Direct Control District, the following shall be additional discretionary uses where Council is the Development Authority.*
 - *6.1.1. Solar Farm*
- *9.1. For Solar Farms and related infrastructure:*
 - *9.1.1. 15.00 m from any property line*
 - Administration Comment: The application includes a 15.00 m (49.21 ft.) buffer area around the subject lands
- *9.2. Notwithstanding 9.1, the Development Authority may require a greater setback for a Solar Farm if, in the opinion of the Development Authority, the proposed development may unduly interfere with the amenities of the neighbourhood or materially interfere with or affect the use, enjoyment, or value of neighbouring parcels of land.*
 - Administration Comment: The application includes the minimum setback area, and a detailed landscaping plan that features buffering, mixture of tree/shrub clusters, agricultural design buffering and increased setbacks from all wetland areas, therefore an additional setback area is not deemed necessary.
- *10.1. Prior to a Solar Farm development permit being issued on the subject lands, the following technical assessments and/or plans may be required at the discretion of the Development Authority:*
 - *10.1.1. Biophysical Impact Assessment*
 - *10.1.2. Noise Impact Assessment*
 - *10.1.3. Erosion and Sediment Control Plan*
 - *10.1.4. Decommissioning Plan*
 - *10.1.5. Emergency Response Plan*
 - *10.1.6. Construction Management Plan*
 - *10.1.7. Landscaping Plan*
 - Administration Comment: At the time of application, the Applicant submitted the above noted documents. See Attachment 'B' Application Information for a completed list of technical submissions.
- *10.2. Landscaping for Solar Farms shall be provided in accordance with a Landscape Plan, to be submitted to the Municipality upon application for a Development Permit. The Landscape Plan shall identify the location, type, and extent of all landscaping proposed for the lands.*
 - *10.2.1. The Landscape Plan contemplated herein shall identify the location and extent of the landscaping areas, the plant material proposed, and the methods of irrigation and maintenance of landscaped areas to the satisfaction of the Development Authority.*
 - *10.2.2. Additional landscaping may be required when fronting or abutting a developed or undeveloped road and or acreage/ residence, to the satisfaction of the Development Authority.*



ROCKY VIEW COUNTY

- 10.2.3. *Elevated mounding may be required when adjacent to an acreage/ residence, to the satisfaction of the Development Authority*

Administration Comment:

- The landscaping plan submitted identifies and details all planting breakdowns. Irrigation details have been included within the submitted Landscaping Maintenance plan.
- The landscaping berm will be composed of 3,225.00 cu. m of topsoil from the substation and site areas.
- No fill material would be required to be imported or exported off the subject lands. Minor gravel material may be required to establish final surface areas for the substation.

Additional Details:

The estimated number of solar panels is 500,400 but until final numbers and details are confirmed with the provincial decisions, 550,000 panels are being requested. The solar panels would be ground-mounted in a fixed style and would be arranged in arrays, facing south. Per array (skid), there would be 9,504 panels. The panels would include aluminum bracing and would consist of four (4) rows of nine (9) modules for a total of 36 panels/table.

The solar farm is projected to have a 20 year operating lifespan, with the option to 25 years. Once at its end of life, the farm would be decommissioned, with all in-ground and above-ground components removed. The site would be returned to pre-development stage and would be used for agricultural purposes.

Substation

Within the substation area, portable buildings called “Ehouses” are proposed. The buildings are temporary in nature and would be located on a concrete pad. The total footprint would be 170.30 sq. m (1,833.16 sq. ft.) in area.

Employee parking would be located on the east side of the substation area, within a gravel parking area. A total of 20 parking stalls, with ancillary overflow has been proposed.

Transportation & Access

Access to the parcel is currently through a gravel approach off Range Road 282, north of Range Road 232. A second approach is proposed off Range Road 282, south of Range Road 232, to access the substation for internal maintenance purposes. With the proposed vehicle access for development construction and daily operation, the development would create an insignificant amount of traffic on the road network. The applicant submitted a Transportation Study, which identified a traffic increase of average 32 vehicles per day, which would have minimal impacts on the surrounding area. Engineering has reviewed the memo and has no further concerns at this time.

The subject development would be required to submit payment of the Transportation Offsite Levy in accordance with Bylaw C-8007-2020 for the total gross acreage of the lands proposed to be developed. The required levy payment is \$201,306.95 (43.81 acres x \$4,595.00 per acre). Onsite parking is provided in a gravel area, within the substation area.

Pipeline Rights-of-Way (ROWs)

The subject lands include multiple operating and discontinued oil and gas pipeline ROWs. All ROWs have been identified on the overall site plan and have been avoided.



ROCKY VIEW COUNTY

Stormwater Management

A Stormwater Management Review memo was submitted with the associated redesignation application and an updated Stormwater Management Review memo with the development permit application. The development would utilize low-lying areas within the subject lands to contain development runoff. There would be limited grading proposed and any runoff would travel across the existing farmland to the natural existing low-lying areas to where the water would naturally dissipate and evaporate. Engineering has reviewed the memo and has no further concerns at this time.

Environmental

The subject lands include multiple intact wetlands. The applicant submitted a Biophysical Impact Assessment, which concludes that residual impacts of the project on existing biophysical conditions, as proposed, is considered not significant. The subject lands have also obtained clearance from Alberta Culture & Tourism under the Historical Resource Act. Engineering has reviewed the memo and has no further concerns at this time.

The applicant completed a Wildlife Renewable Energy Referral Report as a requirement of the AUC permitting process, which identified additional wetland setback areas and wildlife mitigation measures to be implemented within the subject development. The report has not been reviewed by County administration but has been accepted by AUC.

Lastly, the applicant also provided a Noise Impact Assessment assessing the noise generated by the proposed development. The assessment took into consideration the ambient noise level in the area (agricultural setting both day and night) and determined the project noise levels would be within acceptable levels. Engineering has reviewed the memo and has no further concerns at this time.

Community Gardens

As part of the overall plan, four community garden areas are proposed, with access off Township Road 232, outside of any secured areas. The gardens would be community-driven, with no retail sales onsite.

Servicing

No servicing is proposed for this development. If proposed in the future, the County would require the use of sewage holding tanks and water cisterns and/or acceptable temporary portable methods.

CONCLUSION:

Subject to the proposed conditions of approval, the application is recommended for approval.

Respectfully submitted,

“Brock Beach”

Acting Executive Director
Community Development Services

JT/rp

Concurrence,

“Dorian Wandzura”

Chief Administrative Officer