

Projet de parc éolien Saint-Cyprien à Saint-Cyprien-de-Napierville

6211-24-075



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BY EMAIL

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**Subject: Preliminary Aeronautical Assessment
St-Cyprien Private Aerodrome**

Dear M. Poirier,

The following detailed a preliminary analysis undertaken by WSP regarding a private aerodrome located in St. Cyprien, Quebec. The objective of the analysis is to determine if the subject aerodrome is operated as a private aerodrome as indicated by the owner.

Under the Aeronautics Act, the guiding regulation of aeronautics in Canada, private aerodromes such as the one indicated by the owner, are permitted in non-built up areas without Transport Canada certification. Although Transport Canada regulations including protection surface which extend beyond the airport are not enforceable for private un-registered aerodromes, Transport Canada recommends that all aerodromes adhere to Transport Canada publication per *TP312 – Aerodrome Standards and Recommended Practices*.

Using publically available resources a desktop assessment of the subject aerodrome was undertaken. The assessment undertaken was cursory and did not include site investigations. Therefore the results of this study should be considered preliminary.

The following details key observations of the assessment:

- There is no 'runway' environment visible on Google Earth imagery (present).
- In 2013 there is a cleared area measuring 335m x 15m visible on Google Earth imagery which could have been utilized as a runway.
- At 335m, this 'runway' length would be considered insufficient for most light aircraft on a gravel or turf 'runway'.

- There is a building on the subject property and adjacent to 'runway' with dimensions of approximately 15m x 15m which may be capable of storing a light aircraft.
- There are no aircraft or airport equipment (wind direction indicator) visible on the subject property (Google Earth imagery present or historical).
- At the south end of the 'runway' there is a grain silo approximately 30m in height that would, in all likelihood, penetrate the approach surface of the 'runway'.
- At the mid-point of the 'runway' there is a cluster of mature trees with a gap of only 45m in which the 'runway' is aligned between, that in all likelihood would penetrate the runway strip and transitional surface.

Based on the preliminary assessment undertaken, in our opinion the subject aerodrome is not an active runway environment. It should be noted that this assessment is not final and based only on publically available information. A more detailed assessment would be required to determine, with any certainty, if the subject aerodrome is operational.

Notwithstanding this observation, a preliminary analysis was undertaken to determine the operational impact of the proposed wind-turbine farm on the subject property under the assumption that the aerodrome were operational.

Based on the wind turbine layout provided, the closest turbine would be located approximately 850m west of the 'runway' (including blade radius). In accordance with TP312, were this 'airport' registered or certified, obstructions the height and physical characteristics similar to that of the wind turbines would be permitted, provided that:

- The airport circuit pattern is restricted to the east.
- Circling is restricted to the east side of the airfield.
- The Outer Surface is restricted to the east side of the airfield.

The above noted mitigations are commonplace for airports with obstructions within 4km of the airport and are fully compliant with Transport Canada regulations.

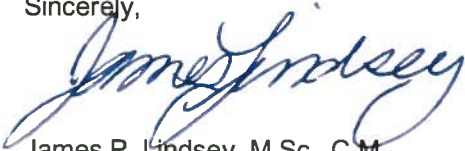
Based on the information provided, the proposed turbines would not impact the approach surface or the transitional surface. Full compliance with these surfaces is required for certified airports and aerodromes which are served by public instrument approach procedures.

Additionally, based on the analysis undertaken, were the 'runway' operational existing obstructions, including the grain silo, the building and vegetation would penetrate these surfaces.

Therefore, based on the foregoing assessment it is unlikely that an active runway is operated on the subject property. Based on current imagery there is no maintained runway environment visible. Furthermore, even if it were an active runway, the on-site obstructions present more of a safety hazard than the proposed wind-turbine farm, which could be mitigated in compliance with Transport Canada standards and recommended practices.

This is however a cursory assessment and should not be taken as a conclusive determination. It is my recommended that a more detailed analysis inclusive of site inspection be undertaken to confirm the validity of the above noted observations.

Sincerely,

A handwritten signature in blue ink that reads 'James P. Lindsey'.

James P. Lindsey, M.Sc., C.M.
Director, Aviation

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