



Québec, June 15<sup>th</sup>, 2018

Ms. Lissa Deslandes  
Raisin River Conservation Authority

**Subject: Barlow Solar Energy Centre – Stormwater Management Plan and Erosion and Sediment Control Measures – Additional Justifications**

Dear Madam,

Please find in this letter a response to a question that you sent to EDF on May 25<sup>th</sup>.

- 1 Q: *The justification for not using the 1:100-year storm in culvert sizing is not completely accurate. The memo, Response Letter to MOECC, states that “the entire site will be flooded under the 100-yr flood, which makes sizing the culverts and swales for the 100-yr event irrelevant”. This statement does not consider that the 1:100-year flood is a statistical measurement of high-water on the property and is different from the statistical likelihood of intense rain (i.e. 1:100-yr storm).***

A: It is true that the statistical recurrence periods of rainfall and flood levels do not necessarily coincide but the argument still stands that the site is flood prone. It should also be noted that the level of service for the conveyance system (swales and culverts) is the Promoter's responsibility. The purpose of this conveyance system is to collect surface sheet flow on the upstream side of the access roads and to convey the water to the downstream end of the site. Considering that this specific site is flat and that water velocities are generally low, swales and culverts overtopping during exceeding return period would result in ponding at localized areas for short periods of time, where surface sheet flow would probably resume towards downstream. Thus, it was decided that the level of service for such access roads would not be the 100-year event.

We trust this response adequately address any concerns regarding the Stormwater Management Plan and Temporary Sediment Control measures and we look forward to your reply.

If you require any additional information or which to discuss the above responses in greater detail, please do not hesitate to contact the undersigned.

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Yours Truly,

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