

**From:**  
**To:** ; [Environment Assessment Web Account](#); [@strum.com](#)  
**Cc:**  
**Subject:** Higgins Mountain Wind Farm 2023 EA - March CLC meeting  
**Date:** March 28, 2023 4:22:31 PM

---

\*\* EXTERNAL EMAIL / COURRIEL EXTERNE \*\*

Exercise caution when opening attachments or clicking on links / Faites preuve de prudence si vous ouvrez une pièce jointe ou cliquez sur un lien

Hello,

I've been scrambling to get questions together as you requested. As a volunteer working on this as I can it has been difficult especially considering you released your EA during Spring Break, a significant event in the ski community, has impacted my response times.

Since the EA is now open I thought it would be appropriate to share my questions with EA office as well.

- 1) Is there still a non-compliance directive against the Higgins Mountain wind partners related to their 2006 EA Terms and Conditions?
- 2) Why did the EA share high quantity of "location sensitive species" location data throughout the EA Registration documents especially related to bats and moose, as this location information is a direct threat to their survival?
- 3) EA appears to made a number of obvious mis-identifications such as Boreal Felt Lichen, Tuckerman's Sedge, Tender Sedge, eutrochium purpureum, and large/small purple fringed orchids. Does Strum stand by their research?
- 4) Wetlands assessments used old (2000 & 2004) non-peer reviewed science regarding wetlands when many, much better, and very current peer reviewed articles discuss Forested Wetlands/treed swamps in NS/Atlantic appear to be avian biodiversity hotspots for species known to be in the Project Area?
- 5) See 4. Why doesnt EA consider the significant carbon sink potential of treed swamps, fens and bogs in project area and record stored carbon/GHG that will be lost during wetland alterations?
- 6) Why apparently no field work completely in Roaring Brook when 6 turbines and some related infrastructure sit along its headwaters, and when Roaring Brook and Hants Brook had Significant Habitat identified in the 2006 Higgins Mountain Road wind project EA? There appears to be no information about this in the 2023 EA.
- 7) Why was there little field work around Carters Lake when it is clearly identified in the ACCDC reports to be full of vascular flora? Was the fen or wetland west of Carter Lake assessed considering there may be overstay removal for connector route?
- 8) Will proposed connector route over Rockland Brook require overstore removal? If so, how wide? Does it go through the section of old-growth forest your field assessments discovered on crown land?

CLC member

Folly Lake, NS

**From:** @gmail.com  
**To:** [Environment Assessment Web Account](#)  
**Subject:** Proposed Project Comments  
**Date:** March 29, 2023 11:07:10 AM

---

**\*\* EXTERNAL EMAIL / COURRIEL EXTERNE \*\***

Exercice caution when opening attachments or clicking on links / Faites preuve de prudence si vous ouvrez une pièce jointe ou cliquez sur un lien

Project: higgins-mountain-wind-farm Comments: My biggest concern is the life cycle of this Wind Capture Project 35 years is not even enough time to pay off a mortgage what really is the Life Cycle Carbon Footprint of this endeavor? Totally misleading is the emphasis of wind being free, renewable energy. It is NOT free. The materials to construct components, transport, erect, connect, maintain, and replace in 35 years IS NOT free. The renewable part is the commitment to reconstruction. All energy is renewable if we plant trees and re-harvest the Carbon we put in the ground. A farm reaps what it sows. There is NO farm in wind capture. What is the life cycle carbon footprint of this Higgins Mountain Wind Capture project? Consider turbine construction including the production of raw materials elaborate factories producing fiberglass, epoxy, resin, carbon fiber, paint, cement, gravel, water and harvested balsawood etc., transporting raw materials to the component assembly sites e. g. elaborate factories to construct just the blades what of the other components the towers, nacelles, the concrete base etc. and transportation of components to the erection site. All of this replacing tree planting sites trees capture Carbon and are harvestable after 20 years and their progeny do the job again for free if left alone! with turbine towers and roads. Does the Carbon off set match the Carbon emissions and long term financial burden of the Higgins Mountain Wind Capture Project? Name: Email: @gmail.com Address:

Municipality: Lower Onslow email\_message: Privacy-Statement: agree

x: 58 y: 20

**From:**  
**To:** [Environment Assessment Web Account](#); [MacPhail, Helen](#); [andrea.fairclough@novascotia.ca](mailto:andrea.fairclough@novascotia.ca)  
**Subject:** Higgins Mountain Wind Farm EA professional work question  
**Date:** March 29, 2023 2:14:02 PM

---

**\*\* EXTERNAL EMAIL / COURRIEL EXTERNE \*\***

Exercice caution when opening attachments or clicking on links / Faites preuve de prudence si vous ouvrez une pièce jointe ou cliquez sur un lien

Hello,

I've been a member of the Higgins Mountain Wind Farm CLC for three years and I am principal and operations staff at Ski Wentworth.

At the Tuesday, March 28th CLC EA meeting I learned that [Strum Consulting staff was on Ski Wentworth property conducting professional work, \(Drawing 10.2F & 10.2J\)](#), without reaching out to Ski Wentworth first.

I was happy to assist the industrial Higgins Mountain wind group back in October 2021 when I escorted then project partners/staff (3G and others) and (Elemental) around Ski Wentworth to various locations for photo references for their simulations.

Yet the environmental consultants working for Elemental Energy nor any other Higgins Mountain wind project partners never reached out related to their April 12th, 2022 unauthorized access to our property related to professional work.

Does this violate any professional standards related to environmental consulting work, professional work for Environmental Assessments?

At March 28th, 2023 CLC I asked Strums if this was standard practice for environmental consultants, I believe only of Elemental Energy mused something about general public seems welcome so no problem.

Environmental Consulting work is very different than general public hiking and biking on our trails.

I agreed normally his statement is 100% true, but because of our new chairlift installation in 2022, trails and access near traditional ski area operations zones were closed to public from April until our annual Fall Festival of Colours in October. Traditional ski operations area was gated and marked "closed, work site, do not enter" April through October 2022 and shared as such in our online communications.

We still offered public access to another hiking and mountain biking zone April until Hurricane Fiona through most of the fall.

At the time in April 2022, and in various emails, and at CLC meeting I requested 4 specific visual impact assessments for a few of our 20 plus properties that make up our approximately 600 ha (1500 acres) of destination tourism and recreation facilities and trails. Specifically;

- 1) Ski Wentworth lounge deck area,
- 2) historic site of the first ski lift east of Quebec, a 90 year favourite big view of the Wentworth Valley
- 3) top of the Canada Winter Games Mogul site made possible by Government of Canada funding.
- 4) scenic lookoff on one of the regions most popular hiking trails, called The Ridge Trail

Strum Consulting provided one visual simulation from Ski Wentworth lounge deck area.  
Drawing 10.2F

The only other [simulation they produced was Drawing 10.2J they shared was below the top of the mountain, half obscured behind a chairlift and trees, adjacent to various more significant views](#). It appears the photo location is located at a busy no-stopping trail intersection flow-through area. Not one of the many nearby natural stop and admire the view kind of locations.

[Figures Part 9 Drawing 10.2F \(lounge\) & 10.2J \(obscured behind chairlift\)](#)

Was this unauthorized private business operations area access for professional environmental consulting work for a Nova Scotia Environmental Assessment?

Does Nova Scotia Environment compliance, EA office or professional consulting/engineering standards association have rules around this?

How does one file a formal complaint related to this Environmental Assessment issue?

Sincere thanks,

## Pollock, Meaghan Elizabeth

---

**From:** @gmail.com  
**Sent:** March 30, 2023 2:17 PM  
**To:** Environment Assessment Web Account  
**Subject:** Proposed Project Comments

**\*\* EXTERNAL EMAIL / COURRIEL EXTERNE \*\***

Exercise caution when opening attachments or clicking on links / Faites preuve de prudence si vous ouvrez une pièce jointe ou cliquez sur un lien

Project: higgins-mountain-wind-farm Comments: I have zero issue with wind projects. We need more. I take serious issue with this proponent. They have left their previous equipment abandoned, not cleaned up after multiple storm events, and in some cases as a hazard to others with wires down on roads. They removed one turbine in what I can only describe as one of the worst examples of a series of safety violations I have ever seen. There are obviously very little planning, and there was no cleanup for some time after they dropped it. The existing project is a blight and has been for a number of years now with nothing but promises from the proponent to finally do something about their eyesore. I have no trust or faith in them to carry out the task without cutting corners and ultimately leaving the province on the hook financially. They have held useless engagements sessions where they proved they were not remotely interested in feedback. They were not prepared. They are not sincere. Name: Email: @gmail.com Address: Municipality: Westchester Station email\_message: Privacy-Statement: agree x: 64 y: 17

## Pollock, Meaghan Elizabeth

---

**From:** @gmail.com>  
**Sent:** March 31, 2023 2:51 PM  
**To:** @strum.com; Environment Assessment Web Account  
**Cc:** @strum.com; ; Minister, Env  
**Subject:** Re: Higgins Mountain Wind Farm 2023 EA - March CLC meeting

**\*\* EXTERNAL EMAIL / COURRIEL EXTERNE \*\***

Exercise caution when opening attachments or clicking on links / Faites preuve de prudence si vous ouvrez une pièce jointe ou cliquez sur un lien

Hello,

wrote;

Since you have provided these questions in response our CLC meeting agenda and request for discussion topics, I have removed the NS EA office from this email thread.

As this is directly related to your professional EA work during the open 30-day comment period, I have re- Cc'ed EA office. And I ask EA office this email be part of the received comments.

wrote;

...we will do our best to answer these questions ( I have just sent them to ) at our meeting this afternoon. If there are questions that Strum is unable to answer, we will endeavour to provide more fulsome answers to your questions as a follow-up to the CLC meeting.

Thank you. When can we expect the follow-up answers? Please have ready prior to Easter weekend.

The following were not answered at the March CLC meeting

1) ~~Is there still a non-compliance directive against the Higgins Mountain wind partners related to their 2006 EA Terms and Conditions?~~

2) Why did the EA share high quantity of "location sensitive species" location data throughout the EA Registration documents especially related to bats and moose, as this location information is a direct threat to their survival?

GW asked if sharing this information was a professional or good idea. I asked if this information should be removed from EA ASAP and re-submitted. Not sure it was answered.

3) EA appears to have made a number of obvious mis-identifications such as Boreal Felt Lichen, Tuckerman's Sedge, Tender Sedge, eutrochium purpureum, and large/small purple fringed orchids. Does Strum stand by their research?

GW asked if she professionally stood by this research in the EA document. Did not get an answer. stepped in but did not answer specific question.

4) Wetlands assessments used old (2000 & 2004) non-peer reviewed science regarding wetlands when many, much better, and very current peer reviewed articles discuss Forested Wetlands/treed swamps in NS/Atlantic appear to be avian biodiversity hotspots for species known to be in the Project Area?

Time running short, did not get an answer from

5) See 4. Why doesn't EA consider the significant carbon sink potential of treed swamps, fens and bogs in project area and record stored carbon/GHG that will be lost during wetland alterations?

Time running short, did not get an answer from

6) Why apparently no field work in Roaring Brook when 6 turbines and some related infrastructure sit along its headwaters, and when Roaring Brook and Hants Brook had Significant Habitat identified in the 2006 Higgins Mountain Road wind project EA? There appears to be no information about this in the 2023 EA.

Did not have time to ask this question.

7) Why was there little field work around Carters Lake when it is clearly identified in the ACC DC reports to be full of vascular flora? Was the fen or wetland west of Carter Lake assessed considering there may be overstay removal for connector route?

Time running short, made this a quick comment when spoke of visual assessment regarding Turbines 15,16. Did not receive an answer.

8) Will proposed connector route over Rockland Brook require overstore removal? If so, how wide? Does it go through the section of old-growth forest your field assessments discovered on crown land?

Did not have time to ask this question. New related question, why so few transects in the large steep rugged part of Rockland Brook when clearly so much unique, rugged topography that has helped protect it from previous industrial development.

Elemental Energy Higgins Mountain Wind Farm 2023 EA Drawings 10.2F, 10.2J indicate Strum's professional staff was on Ski Wentworth property engaging in professional work without our knowledge or permission during in April 2022.

first suggested since Ski Wentworth is open to public hiking, etc that Strum didn't need to reach out.

I pointed out I previously worked with project partner ( ) and Elemental staff ( ) to assist their assessments and freely gave half of my day to them. At that time, I stressed to he should not use location 10.2J because it was in a no stop zone, and buried behind a chairlift and trees when I saw him taking photos from there. I specifically requested Visual Simulation for the top of the oldest ski trail and oldest ski lift in Atlantic Canada and or the top of the Canada Games Moguls site given the federal dollars that supported the construction of that trail. took pictures from moguls site, yet Elemental and Strum chose not to use that area for a visual simulation. Why?

I also pointed out all of our 'inbounds' ski area property was closed and clearly "Do Not Enter, Construction Site" and gated closed from April until October due to installation of our new chairlift. This information was also shared on our social media and communication channels. We were however still able to keep other hiking and biking trails open on a separate northern section of our mountain and saw thousands of people use them during the time.

joined our PWV online community EA meeting the following day. I asked him again if he thought the general public hiking our property was an equivalent as a professional, completing professional work on our property. He said something to the effect, that it was unprofessional or should not have happened and blamed Strum.

Since Strum stamped the work and Elemental hired Strum to complete the work, I would like an explanation why this happened.

Ski Wentworth would like a public apology from Strum and Elemental for this unprofessional action.

Thank you,

On Mar 28, 2023, at 4:58 PM, [@elementalenergy.ca](#)> wrote:

– Thanks for your questions below.

Since you have provided these questions in response our CLC meeting agenda and request for discussion topics, I have removed the NS EA office from this email thread.

will be attending the CLC meeting as a Strum representative ay and

Given the short notice regarding your questions we will do our best to answer these questions ( I have just sent them to at our meeting this afternoon. If there are questions that Strum is unable to answer, we will endeavour to provide more fulsome answers to your questions as a follow-up to the CLC meeting.

Thanks for taking time to review the Higgins Mountain EA in advance of our CLC meeting, and we look forward to the discussions this afternoon.

Elemental Energy

---

**From:** [@gmail.com](#)>  
**Date:** Tuesday, March 28, 2023 at 12:22 PM  
**To:** [@elementalenergy.ca](#)>, [ea@novascotia.ca](mailto:ea@novascotia.ca) <[ea@novascotia.ca](mailto:ea@novascotia.ca)>, [@strum.com](#)>  
**Cc:** [@mmfi.ca](#)>  
**Subject:** Higgins Mountain Wind Farm 2023 EA - March CLC meeting

Hello,

I've been scrambling to get questions together as you requested. As a volunteer working on this as I can it has been difficult especially considering you released your EA during Spring Break, a significant event in the ski community, has impacted my response times.



Since the EA is now open I thought it would be appropriate to share my questions with EA office as well.

- 1) Is there still a non-compliance directive against the Higgins Mountain wind partners related to their 2006 EA Terms and Conditions?
- 2) Why did the EA share high quantity of "location sensitive species" location data throughout the EA Registration documents especially related to bats and moose, as this location information is a direct threat to their survival?
- 3) EA appears to have made a number of obvious mis-identifications such as Boreal Felt Lichen, Tuckerman's Sedge, Tender Sedge, eutrochium purpureum, and large/small purple fringed orchids. Does Strum stand by their research?
- 4) Wetlands assessments used old (2000 & 2004) non-peer reviewed science regarding wetlands when many, much better, and very current peer reviewed articles discuss Forested Wetlands/treed swamps in NS/Atlantic appear to be avian biodiversity hotspots for species known to be in the Project Area?
- 5) See 4. Why doesn't EA consider the significant carbon sink potential of treed swamps, fens and bogs in project area and record stored carbon/GHG that will be lost during wetland alterations?
- 6) Why apparently no field work completely in Roaring Brook when 6 turbines and some related infrastructure sit along its headwaters, and when Roaring Brook and Hants Brook had Significant Habitat identified in the 2006 Higgins Mountain Road wind project EA? There appears to be no information about this in the 2023 EA.
- 7) Why was there little field work around Carters Lake when it is clearly identified in the ACCDC reports to be full of vascular flora? Was the fen or wetland west of Carter Lake assessed considering there may be overstorey removal for connector route?
- 8) Will proposed connector route over Rockland Brook require overstorey removal? If so, how wide? Does it go through the section of old-growth forest your field assessments discovered on crown land?

CLC member

Folly Lake, NS

## Pollock, Meaghan Elizabeth

---

**From:** @gmail.com  
**Sent:** March 31, 2023 5:39 PM  
**To:** Environment Assessment Web Account  
**Subject:** Proposed Project Comments

**\*\* EXTERNAL EMAIL / COURRIEL EXTERNE \*\***

Exercise caution when opening attachments or clicking on links / Faites preuve de prudence si vous ouvrez une pièce jointe ou cliquez sur un lien

Project: higgins-mountain-wind-farm Comments: I think it would be a serious mistake for the NS Government to approve the Higgins Mountain Wind Farm. The project is going to do irreparable harm to the important ecosystem of the area and the many species at risk in that zone. It will disrupt an area important to the mainland moose. That disruption may be so great that it prevents the moose from passing through the area. The construction phase and ensuing elimination of important wetlands and tree cover will negatively affect the struggle to combat climate change. We need more forest cover and more wetlands, not less. The project document deliberately offers a misleading presentation of the visual impacts of the 600 ft turbines. The Protect Wentworth team have developed what the visual impact will really be. The turbines will take away some of the appeal of what has always been a scenic tourist area. There will almost certainly be negative economic impacts and a decrease in some land values. The NS Government needs to find better areas for industrial wind farms. They should not be put in areas of beauty and ecological importance like the Wentworth Valley / Folly Lake area. Name: Email: @gmail.com  
Address: Municipality: Halifax email\_message: Privacy-Statement: agree x: 7 y: 31

## Pollock, Meaghan Elizabeth

---

**From:** @gmail.com  
**Sent:** April 1, 2023 10:37 AM  
**To:** Environment Assessment Web Account  
**Subject:** Proposed Project Comments

**\*\* EXTERNAL EMAIL / COURRIEL EXTERNE \*\***

Exercise caution when opening attachments or clicking on links / Faites preuve de prudence si vous ouvrez une pièce jointe ou cliquez sur un lien

Project: higgins-mountain-wind-farm Comments: It is opinion that development of the above noted project will play a vital role in the provinces commitment to a green energy Nova Scotia. The fact that the project utilizes existing logging roads for access greatly reduces any and all aspects related to environmental impact. Cheaper clean power is a goal worldwide. We have a chance to be a leader. Name:                      Email:                      @gmail.com Address:                      Municipality: Halifax email\_message: Privacy-Statement: agree x: 63 y: 22

## Pollock, Meaghan Elizabeth

---

**From:** yahoo.ca  
**Sent:** April 2, 2023 7:47 AM  
**To:** Environment Assessment Web Account  
**Subject:** Proposed Project Comments

**\*\* EXTERNAL EMAIL / COURRIEL EXTERNE \*\***

Exercise caution when opening attachments or clicking on links / Faites preuve de prudence si vous ouvrez une pièce jointe ou cliquez sur un lien

Project: higgins-mountain-wind-farm Comments: We have great trail systemâ??s for ATVâ?? S and Snowmobileâ??TS that is a popular sport in the area with a lot of volunteer effort invested . The existing windmills on Higgins mountain do not even run majority of the time , destruction of wildlife habitat , totally against more windmills Name:

Email: @yahoo.ca Address: Municipality: Londonderry email\_message: Privacy-Statement:  
agree x: 81 y: 28

## Pollock, Meaghan Elizabeth

---

**From:** @gmail.com>  
**Sent:** April 2, 2023 3:47 PM  
**To:** EA@novascotia.ca  
**Cc:** minister.environment@novascotia.ca; Rushton, Tory; Protect Wentworth Valley;  
**Subject:** proposed Higgins Mountain wind farm

**\*\* EXTERNAL EMAIL / COURRIEL EXTERNE \*\***

Exercice caution when opening attachments or clicking on links / Faites preuve de prudence si vous ouvrez une pièce jointe ou cliquez sur un lien

Good day,

I am writing to comment on the industrial wind farm proposed for the Higgins Mountain area in Wentworth, Nova Scotia.

Firstly, it seems obvious to anyone who has been in the area for any length of time that the project should not ever have got to this stage. Public meetings, community meetings, council meetings, citizens chatting informally, public advertising to protect the valley and its environs all demonstrated a huge amount of opposition to this project. And yet it seems that citizen concerns fall on deaf ears and are ignored.

For a community that has over the years fought to keep an enormous power line and a four lane highway out of the valley, who has had to fight against clear cutting the sides of the valley this wind farm is another insult and another onslaught against a part of Nova Scotia that is recognized as a premier recreation destination. We have a ski hill, multiple use trails, mountain, gravel and road biking, a pristine river where salmon still spawn, snowmobile clubs with extensive trail networks, a provincial picnic park, a vibrant, active community. Furthermore, because of all these attributes, people continue to move to the area and build homes and cottages at a significant rate. So as far as economic benefit goes, a steady growth of tax paying citizens must surely outweigh the paltry financial offering of the proponent.

The Environmental Assessment (EA) data provided is very "thin". And how can a proper, in-depth assessment of all the points listed in the document be done in time for a decision by May 4. That is ridiculous and insulting.

I note that there is no archeological plan in the EA. Considering the involvement of a First nation band and the significant findings at Debert a few years ago, why would there not be an archeological assessment of the area undertaken by experts in this field?

We know the mainland moose is endangered and we also know that there is a population of said moose in the construction area. Why would the province break its own laws and destroy the habitat of an endangered species?

This is a huge area and there are several species of plants, fungi, birds, insects and animals that inhabit the area. All of their habitat and breeding grounds will be wiped out with this massive construction. How can that be allowed to happen?

The area is also the headwaters of the Wallace River, the aforementioned salmon river. Construction in the proposed area would have a deleterious effect of the water supply of the Wallace and affect all the tributaries that feed into the river harming the river itself and the spawning grounds.

As far as an economic impact there will certainly be one as land values fall. Wentworth, as mentioned, is a prime area for all sorts of recreation and people who come to live and play here will not if there is an industrial wind farm that will detract from the natural beauty and recreational possibilities of the area.

The most distressing aspect of this whole project is that any power generated will not be for the benefit of anyone anywhere local. It will undoubtedly be sold to the US to benefit the shareholders of Nova Scotia Power.

I would ask the Minister to reflect on all of the reasons why an industrial wind farm should NOT be allowed to be built in this fabulous, natural, recreation area and deny the project permission. Surely the health and well-being of all the people who live and visit in this area is more important than the destruction of an entire ecosystem. We all admit the move to "green energy" is important but not when an entire area will be destroyed. There are other places for wind farms.

Thank you.

Wentworth Station

April 3, 2023

Good morning,

Please accept my personal comments in response to the Higgins Mountain Wind Project - Environmental Assessment.

The Environmental Assessment provides the evidence as to why Minister Halman and Minister Rushton should protect the project area as formally requested by the community group Protect Wentworth Valley. Please see the asks of the Nova Scotia Government outlined in the Protect Wentworth Valley petition that was presented in the legislature in April 2022 by <https://www.protectwentworthvalley.com/sign-our-petition>

I would like to provide a few quotes to support why I am opposed to industrialization of this unique area in Nova Scotia, my home province and what I thought was supposed to be “Canada’s Ocean Playground”. I have also lived in Ontario, British Columbia, and New Brunswick, and have chosen to come back to live permanently at Folly Lake, Nova Scotia, to enjoy this beautiful and unique, biodiverse area of Nova Scotia, and am now spending my time trying to convince the Nova Scotia Government to protect the area from further industrialization and devastation. This is an area to be protected as wilderness not an area for clear cutting, large roads, massive trucks and traffic, blasting, tons of concrete being poured into the ground, 50-60 story turbines onto of the highest mountain in the province. The impacts highlighted in the EA are significant!

<https://www.canada.ca/en/services/environment/our-environment/nature-based-climate-solutions.html> :

Nature-based solutions are one of the powerful tools we have to mitigate and adapt to climate change, while at the same time these solutions can provide benefits for biodiversity. For example, large amounts of carbon dioxide are stored in the soil and plant life of forests, wetlands, grasslands and in the oceans. Conserving these carbon-rich ecosystems allows carbon to be absorbed and prevents carbon from releasing into the atmosphere, while simultaneously supporting biodiversity.

**Through the use of nature-based solutions we can work to mitigate and adapt to the effects of climate change while supporting biodiversity.**

#### **Canada's action**

Protecting and restoring nature are important parts of Canada’s efforts to mitigate and adapt to climate change. Plants absorb and store greenhouse gases, vegetation helps stop floodwaters from reaching homes, and trees provide shade and lower the surrounding air temperatures during the summer.

Canada is committed to protecting 30 % of its lands and 30 % of its oceans by 2030, using nature-based solutions to fight climate change, and reaching net-zero greenhouse gas emissions by 2050.

Quotes:

**"Nova Scotia's protected areas are critical for our economic growth, the health of our environment, and quality of life. They help us adapt to climate change while providing healthy ecosystems for many diverse species. We've committed to protecting 20 percent of our land and waters by 2030, which will contribute toward the national goal of protecting 30 percent of Canada's land and water mass by 2030. Together, this will help ensure a sustainable, cleaner, and healthier future."**

– The Honourable Timothy Halman, Nova Scotia Minister of Environment and Climate Change

"In addition to all that we enjoy about nature, protecting more land in Nova Scotia is critically important for our sustainable and prosperous future. It supports biodiversity and helps with carbon capture which are key as our climate changes. That's why we're committed to reaching our protected area goals and grateful to all our partners for helping us achieve them." *Tory Rushton, Minister of Natural Resources and Renewables*

"Conserving old-growth forests is an important part of our conservation efforts, our approach to ecological forestry, and our fight against climate change. We've updated our old-growth forest policy to strengthen the protection it offers. This work, coupled with the support from our federal partners to treat important stands against hemlock woolly adelgid, means we'll be able to support biodiversity and increase opportunities for carbon storage in Nova Scotia."

– The Honourable Tory Rushton, Nova Scotia Minister of Natural Resources and Renewables

**These and all of the comments below regarding the EA are why I am asking Minister Halman and Minister Rushton to protect the area before it is too late! Please help get the area protected.**

Mitigation for each adverse residual effect.

Monitoring recommendation for each residual effect and mitigation measures.

Cumulative effects of the 17 turbines / construction and ongoing operation is immense!

26.6 km existing road network – widening required – how much clearing of trees / grubbing?

7.50 km new road construction – how much clearing of trees / grubbing?

Access roads will have a 6-12 meter wide road surface and including ditching and grading will be 17 – 20 metres wide! Wider roads (12 metres wide) will be required for the crane to crawl from turbine to turbine



and narrower (6 metres wide) will be utilized if the crane is mobilized via a float truck. How much clearing / grubbing?

Traffic – excavators and/or backhoe, dump trucks, bull dozers, rollers, graders, crushers, light trucks, concrete trucks and pumper trucks, assembly cranes, bucket trucks, light cranes, hydroseeders! EA says there could be up 100 trucks per day!

Turbine laydown areas – how much clearing trees / grubbing?

Turbine pad construction (foundations will each be 30 metres in diameter; depth of 5 -7 metres below grade) - how much clearing of trees / grubbing? Blasting? Tons of concrete?

Each turbine pad and laydown area are expected to be approximately 100 metres x 100 metres!

Temporary wind turbine laydown areas may be up to 250 metres x 100 metres (qty 2)!

A new point of interconnection to the grid will be established – how much clearing of trees / grubbing?

Construction of collection system and substation – how much clearing of trees / grubbing?

Turbine sections to be delivered by several flatbed trucks; cranes for removal at each of the prepared turbine laydown areas!

Lifespan of the project is 35 years. Is this devastation to a biodiverse area worth it?

Vegetation Management Plan to ensure that access roads and turbine locations remain clear of vegetation – how is this done? Effect on biodiversity and health?

Hazards associated with being in close proximity to the turbines (i.e. biodiversity, Ice throw; wildlife and human health and well being)

Maintenance work – use of a variety of cranes; light/medium pickup trucks

Environmental Protection Plan (EPP) – to ensure mitigation is implemented to avoid potential environmental effects that might otherwise occur from construction activities – who will monitor this and what will the consequences be? Will it be too late once the damage is done?

Combustion residuals and or exhaust tailpipe emissions!

Sources of Greenhouse Gas Emissions from the project...

Carbon Dioxide (CO<sub>2</sub>) – use of heavy equipment, light duty vehicles and equipment, light plants, generators, land clearing, including decay of cut foliage (which releases CO<sub>2</sub> slowly), cement production .

Methane (CH<sub>4</sub>) – use of heavy and light-duty equipment, alteration of wetlands for constructing access roads and wind turbine laydowns, and the decay of waste (i.e. decomposing cleared vegetation, workforce waste production)

Nitrous Oxide (N<sub>2</sub>O) – use of heavy and light-duty equipment, land restoration (soil amendments and reclamation)

Halocarbon emissions – associated with coolants in air conditioning units found in vehicles, portable construction buildings (i.e. trailers), and equipment, and fire-extinguishing agents which may be used in the case of an emergency.

In the quantification of the Green House Gas Emissions from the project:

>Fugitive dust and GHG emissions from the construction of new roads and upgrading of existing roads were not quantified!

>Construction Activities and equipment associated with laydown areas were not quantified!

>Concrete tower foundation and pedestal will be required for each wind turbine. The project will require a significant quantity of concrete to be produced and delivered to each wind turbine location. (1,000+cubic meters; 140+ truckloads per turbine; 2,500 tons of concrete per wind turbine) – Heavy duty diesel concrete trucks will be required to transport the concrete.

>Steel required to produce the 17 wind turbines

>Travel emissions for the wind turbines to be transported from Iowa by land, marine, land

>Project activities will emit Greenhouse Gas emissions during all phases of the project!

>The project is “intended” to have a net positive effect on the Greenhouse Gas environment

>What about the impact of destroying the carbon sink?

>It says “no monitoring programs are required” to the mitigation measures! Look at the mitigation measures on page 69 (printed copy) – are these realistic?

### Geophysical

Cobequid Hills contain Nova Scotia’s highest peak at approximately 360 meters above sea level; contain one of the largest intact Acadian Forests on the mainland; shade-tolerant hardwoods, non-forested landscapes within this Ecodistrict are dominated by grassland, shrubland, and dry sites (i.e. small cliffs, talus slopes, and bedrock outcropping)

Folly Lake (located adjacent to the eastern boundary of the Study Area) has depths of over 30 meters as a result of glacial activity depositing gravel on either end of the river valley.

Cobequid Hills encompass the watershed resulting in the rivers and streams which run north or south and leave the mountain’s ravines and gorges in a series of falls or cascades. There are 20 major river systems within the Cobequid Hills.

Blasting – groundwater wells within 80 meters must undergo an assessment

High Risk Zone for arsenic

Medium Risk Zone for uranium

Disturbance of geological hazards including:

- Sulphide bearing slates (i.e. acid generating rock)
- Karst topography
- Colluvial deposits/talus slopes
- Radon
- Arsenic and/or uranium containing bedrock

Construction activities, primarily blasting, have the potential to impact the quality and quantity of surrounding groundwater supply depending on the proximity to drinking water wells and extent of disturbance.

Disturbance of arsenic and/or uranium containing bedrock can mobilize arsenic/uranium within groundwater, and subsequently degrade nearby groundwater water quality.

It gives mitigation measures but say No monitoring programs are recommended at this time.

It says if blasting is required, groundwater wells within 800 meters of blasting activities will be monitored.  
What about further away?

Conclusion says not significant!

### Aquatic Environment

The alteration of a watercourse or the flow of water within a watercourse is an activity that requires an approval from NSECC (Nova Scotia Environment and Climate Change), or a notification to NSECC if the work will be completed in accordance with the Nova Scotia Watercourse Alterations Standards. There are also federal regulations that impact the management of watercourses. DFO (Department of Fisheries and Oceans) has a responsibility to oversee the protection of fish and fish habitat in accordance with the Fisheries Act and SARA (Species at Risk Act).

There are 21 lakes/ponds, 277 watercourse feature segments, and 1203 feature segments within 5 kilometres of the Study Area.

According to the Significant Species and Habitats Database, Folly Lake is recorded to contain talus slopes!

The largest watercourse flowing through the Study Area is Rockland Brook, a major tributary to the Great Village River, which drains into the Bay of Fundy, and represents the largest watershed source within the Study Area.

Smith Brook and Wallace River are recorded as areas containing significant species and/or their habitat; Smith Brook is recorded to contain talus slopes, and Wallace River is recorded to contain Wood Turtle.

Watercourses drain through three primary watersheds: the Phillip/Wallace Watershed, the Economy Watershed, and the Salmon/Debert Watershed.

No waterbodies are located within the Assessment Area; so focused on potential Project-watercourse interactions.

18 watercourses were identified within the Assessment Area; several areas of potential turtle habitat were noted.

83 drainage features were identified within the Assessment Area; the data for these features was provided to Higgins Wind to facilitate Project Area **refinement during the detailed design phase**, providing a better understanding of the hydrological forms and features of the area to maintain existing patterns of overland flow throughout the project development.

The project's detailed design phase may see additional refinements to the Project Area and placement of infrastructure which could further reduce interactions with field-identified watercourses within the Assessment Area.

**Project activities, primarily those that involve earth moving, vegetation removal, and road construction have the potential to impact watercourses. These potential impacts could include habitat loss, changes to hydrology, and/or displacement of sediment. Effect-specific management, mitigation, and monitoring are required to eliminate, mitigate, or otherwise manage the magnitude of these direct effects.**

Watercourse alterations (i.e. removal of overhanging vegetation from stream banks, removal instream cover, altered substrate composition, interference with sediment transport) for the project have the potential to impact aquatic habitat; habitat degradation.

Indirect effects such as erosion and sedimentation or changes in water quantity and quality can be farther reaching.

Changes in surface water quantity / flow resulting from the alteration of bank or channel grades for road development, the compaction of soil from heavy machinery required for turbine assembly, the alteration of channel beds to facilitate the removal/replacement of pre-existing infrastructure can alter channel morphology, increase flood potential, and disrupt habitat characteristics that support vulnerable species.

Changes in surface water quality can arise from alterations to the surrounding environment and can include an increase in water temperature from decrease shade, an increase in pollutants from machinery and infrastructure, and the mobilization of sediments. Given the dynamic nature of channeling water, effects upon water quality can quickly spread throughout different reaches of the respective watershed.

Will mitigation work? An EPP still needs to be developed.

Watercourse monitoring plan, if required???

It states that the effects to watercourses are expected to be of low magnitude; not significant.

Fish and Fish Habitat

For species designated as rare or at risk, said species and/or their dwellings are provided protection federally under SARA (Species At Risk Act) and provincially under the NS ESA and Biodiversity Act.

Federally, DFO is responsible for the protection of fish and fish habitat in accordance with the Fisheries Act which states that no person shall carry on any work, undertaking or activity, other than fishing, that results in the death of fish, and restricts any work, undertaking or activity that results in the harmful alteration, disruption or destruction of fish or fish habitat.

The southern half of the Study Area is located within critical habitat for Atlantic salmon IBoF pop and there are documented observances of IBoF Atlantic salmon and Brook floater within the Study Area.

In areas of the Project where watercourse/wetland interactions are unavoidable, there is a potential for habitat loss. Watercourse alterations required for the Project have the potential to impact fish and fish habitat.

Changes in water quantity and quality – who monitor and what are the consequences?

The EA says the effects to fish and fish habitat are not significant. Considering the clearing, blasting, infill, road construction, this is questionable.

The Nova Scotia Wetland Conservation Policy outlines a policy goal of no loss of WSS (Wetlands of Special Significance) and no net loss in area and function for other wetlands. Wetlands are considered WSS based on the wetland having significant species or species assemblages, high levels of biodiversity, significant hydrological value, or high social or cultural importance.

Outside the Study Area, there are several WSS associated with provincially protected areas including the Portapique River Wilderness Area to the west and Wentworth Provincial Park to the north. In addition, there are two WSS (determined to contain SAR) located 2km west of the Study Area associated with Sutherland Lake.

**The Study Area is classified as a Mainland moose concentration area.**

19 wetlands were identified either partially or fully within the Assessment Area; treed swamps, shrub swamps, bogs, fens, vernal pool. More studies are necessary!

One WSS was identified 2 km to the east of the Assessment Area in an area known as Dicks Meadow; known to support significant species habitat including confirmed presence of moose, beaver, nesting waterfowl, and an assemblage of flora SOCI including the large purple fringed orchid.

Project activities have the potential to impact wetlands through habitat removal, disruptions to hydrology, and/or displacement of sediment.

Loss of habitat can fragment wildlife corridors, potentially isolating species and lowering species richness. Habitat loss can also disrupt vital habitat characteristics that support vulnerable species. The removal or infilling of wetland habitat can impact the hydroperiod of neighboring wet areas, resulting in farther reaching impacts of habitat quality.

11 of 19 delineated wetlands may require alteration, with eight of these alterations being associated with upgrades to existing roads.

The EA says the effects to wetlands are not significant. How is this possible?

#### Terrestrial Habitat – sensitive and important habitats

For species designated as rare or at risk, individual species and/or their dwellings are provided protection federally, under SARA (Species At Risk Act), and provincially, under the NS ESA (Endangered Species Act) and Biodiversity Act.

The Study Area falls within the Nova Scotia Uplands Ecoregion and is characterized by summits and plateaus, an abundance of river and streams, and uneven-aged forests exhibiting old-growth features. The Assessment Area lies within the Cobequid Hills Ecodistrict, which is a narrow district extending east-west for 150 km between the towns of Pictou and Parrsboro.

The Cobequid Hills contain large intact late successional Acadian forests to shade tolerant hardwood trees, such as sugar maple, beech (SOCl -Species of Conservation Interest), yellow birch, white ash, and ironwood. The forests of this Ecodistrict are generally defined by a large abundance and diversity of ferns and club mosses in the understory. Softwood-dominant forests can also be found at higher elevations, where topographic features are plateau-like, and mixed-wood forests dominate sheltered ravines.

**The majority of the Study Area is composed of untreated (i.e., not treated silver culturally) natural forest stands according to the Nova Scotia Forest Inventory Forest Groupings (81% cover).**

**Several high ranking potential old-growth stands were identified as occurring within the Assessment Area and intersecting with the location of proposed electricity collector lines.**

As the Project occurs primarily on private land, the Old-Growth Forest Policy is not enforceable within most of the Assessment Area and associated old-growth scoring **was not undertaken**.

Late successional forests such as the Rocklands Brook Valley exhibited old-growth features characteristic of the Cobequid Valley Ecodistrict and the Project design avoided these areas. A segment of proposed transmission line crossed one high-ranking forest stand on Crown land.

Since the Assessment Area makes use of pre-existing roads and vegetation areas subject to historic and ongoing forestry activities, the interaction between Project infrastructure components and undisturbed/mature stands of naturally occurring vegetation is minimal. **But what about the impact of road widening, infilling, new road construction, clearing for turbine and crane laydown sites, blasting etc. for 17 massive turbines?**

Project activities, primarily those that involve earth moving or vegetation removal, have the potential to impact terrestrial habitat. **These activities could result in habitat removal or alteration.**

Talus slopes, a priority habitat feature, are found in the Study Area.

No old-growth forest will be impacted by the Project?

The terrestrial habitat within the Assessment Area will be modified. Although the majority of the Project Area consists of existing roads, these roads may be required widening and additional infrastructure added in the ROWs (Right of Ways – ditches, transmission line).

No monitoring programs specific to terrestrial habitat are recommend. **WHY?**

Plant and lichen SAR receive protection under SARA and/or NS ESA which prohibits their disturbance and destruction. Additional regulations aim to protect important habitat features, such as old-growth forests or wetlands, that support many plant and lichen SOCI in Nova Scotia.

**Watercourses are also prominent throughout the Assessment Area and are known habitat for eastern waterfan. (SAR S1) – very rare, and highly sensitive lichen, and is granted a ‘Protected Zone’ buffer. This buffer restricts forest harvest, new construction, and road upgrades within 200 m of the lichen.**

**183 flora species were identified; 4 plant SOCI and 3 lichen SOCI. Blue felt lichen is granted a buffer for ‘Rare and sensitive lichen’ which restricts new construction within 100 m of the lichen.**

Project activities have the potential to impact terrestrial flora. These activities could result in changes to or loss of habitat used by SOCI, loss of plant or lichen SOCI, or introduction of non-native species that may become invasive of the environment.



Because some of the Assessment Area was surveyed out of flowering season (October to December) due to a minor layout modification, additional plant and lichen SOCI surveys are recommended during flowering season before construction activities, including land clearing, are initiated.

**Large areas of high-quality Mainland moose (NS ESA status Endangered S1) habitat were identified across the Study Area. The analysis displays the habitat of Mainland moose ranked from suitable to high quality in 5 ha hexagons spanning the RAA (Regional Assessment Area).**

**Threats to Mainland moose include habitat loss and fragmentation, particularly resulting from industrial activities, and loss of habitat connectivity due to the increased placement and density of roads.**

**Renewable energy projects were described as a medium level threat, as the nature of wind projects usually requires the construction or expansion of road networks and loss of forested habitat. Habitat loss and reduced habitat quality may result in behavioural changes, including from reduced opportunities for thermoregulation, loss of overwintering areas, loss of adequate sources of food, reduced space for mating, and reduced protection for calves.**

**The Mainland moose habitat analysis indicates that the majority of suitable habitat within the RAA is considered high quality.**

It appears the Study Area supports a population of Mainland moose for at least part of the year.

The nature of the Study Area being at relatively high altitude and featuring abundant mixed wood forest and wetland habitat makes the majority of the Study Area ideal habitat for Mainland moose. The cooler summer temperatures in this area are also better suited to Mainland moose, and an observed lack of White-tailed deer and ticks limit the risk of disease spreading to moose using the Study Area. The deep snow in winter seems to drive the Mainland moose off the mountain; however, evidence of their return was clear in April 2021 and October 2022.

Fisher population is concentrated in Cumberland, Colchester, and Pictou counties. The Fisher prefers dense, mature to old-growth forests with continuous overhead cover and require large tracts of well-connected habitat.

10 Wood turtle (“Species at Risk”) records within the Study Area (within the Wallace River).

Project activities, primarily those that involve earth moving or vegetation removal, have the potential to impact the terrestrial fauna. These activities could result in habitat removal, alterations to wildlife

corridors, and reductions in food availability. Other project related activities, including during construction and operation, may impact terrestrial fauna behaviours, such as increased traffic and noise.

The NSNRR Significant Species and Habitats Database indicates 19 features related to bats and/or bat habitats within a 100 km radius of the study area. All are classified in the database as “Species at Risk” and relate to Little brown myotis, Northern myotis, or bat hibernacula. One of these records is within 5 km of the Study Area, relating to the Little brown myotis.

Project activities, primarily those involving vegetation removal and turbine operation, have the potential to impact bats and bat habitat. These activities could result in habitat removal along with accidental injury/mortality. Other project activities during construction and operation may impact bat behaviours such as increased noise and lighting. Bat injuries/mortality can result either from a **direct collision with a turbine blade or from barotrauma which is caused by the sudden decrease in air pressure following rotating blades. Research suggests bats are attracted to wind turbines because the tall structures dominate landscapes which may attract insects or be perceived as potential mating sites or roost trees.**

The diversity of habitat types of the Study Area, in particular the prevalence of edge/transitional habitat, provides for the foraging, breeding, and roosting requirements of a variety of resident and migratory bird species.

The NS Significant Species and Habitats database contains 15 unique records pertaining to birds and/or bird habitat within a 10 km radius of the Project.

The project could impact bird migration indirectly. Turbine lighting could cause sensory disturbances that disrupt migration activity. Operating turbines can also cause sensory disturbances, causing birds to divert course, and possibly extend excess caloric energy, thus compromising migration success.

\*The EA states that the turbines will be un-lit at night (apart from a red navigation hazard light mounted on the turbine’s nacelle). Who will monitor this? What will the consequences be?

**Look at mitigation and monitoring for each section throughout the EA**

### Socio-Economic Environment

It is estimated that the Project will result in approximately \$115 million in investment in the province of NS over the first 25 years.

Approximately 100 jobs throughout the 2 year construction period

6-12 full and part-time jobs for the ongoing operation of the project.

Tax revenues of approximately \$800,000 spread across Cumberland and Colchester counties based on the distribution of the turbines.

Is this worth it??? Wouldn't it be better to protect the biodiversity of this unique area in NS. "Nature-based solutions are one of the powerful tools we have to mitigate and adapt to climate change, while at the same time these solutions can provide benefits for biodiversity."

#### Land Use and Value

The EA states the impact to land use and value is expected to be negligible and is therefore considered not significant. I que

stion this and what will be the compensation by the NS Government if this is not the case?

#### Traffic and Transportation

During construction, 20-40 trucks per day, with a few days requiring 100 trucks per day! How is this good for the environment?

**Minister Rushton should follow through on his mandate of protecting this core habitat and connectivity (Colchester/Cumberland) of the Nova Scotia Mainland Moose identified in the Nova Scotia Mainland Moose Recovery Plan.**

**Minister Halman should fail the Higgins Mountain Wind Project Environmental Assessment for all of the reasons clearly identified in the Environmental Assessment and protect this biodiverse area once and for all for future generations.**

"Nature-based solutions are one of the powerful tools we have to mitigate and adapt to climate change, while at the same time these solutions can provide benefits for biodiversity. "

My best regards,

Folly Lake, Nova Scotia



## Pollock, Meaghan Elizabeth

---

**From:** @dal.ca  
**Sent:** April 4, 2023 1:43 PM  
**To:** Environment Assessment Web Account  
**Subject:** Proposed Project Comments

**\*\* EXTERNAL EMAIL / COURRIEL EXTERNE \*\***

Exercise caution when opening attachments or clicking on links / Faites preuve de prudence si vous ouvrez une pièce jointe ou cliquez sur un lien

Project: higgins-mountain-wind-farm Comments: This is a great location for wind farms due to large quantities of land, great wind resource, remoteness, and access to transmission lines. Similar to Nuttby and Dalhousie Mountain, the turbines will likely integrate well with the landscape and make an appreciable addition to renewable energy and zero carbon electricity in Nova Scotia to support the conversion from oil heat and gasoline cars to heat pumps and electric vehicles  
Name:                      Email:                      @dal.ca      Address:                      Municipality: Wentworth  
email\_message: Privacy-Statement: agree x: 75 y: 13

## Pollock, Meaghan Elizabeth

---

**From:** @gmail.com  
**Sent:** April 4, 2023 3:41 PM  
**To:** Environment Assessment Web Account  
**Subject:** Proposed Project Comments

**\*\* EXTERNAL EMAIL / COURRIEL EXTERNE \*\***

Exercise caution when opening attachments or clicking on links / Faites preuve de prudence si vous ouvrez une pièce jointe ou cliquez sur un lien

Project: higgins-mountain-wind-farm Comments: The Higgins Mountain Wind Farm project, as well as most other renewable energy projects need to be given the green light. Not a moment to lose. Climate change isnt waiting for reports and assessments. Name: Email: @gmail.com Address:  
Municipality: Riverside email\_message: Privacy-Statement: agree x: 50 y: 15

## Pollock, Meaghan Elizabeth

---

**From:** @assante.com  
**Sent:** April 4, 2023 4:27 PM  
**To:** Environment Assessment Web Account  
**Subject:** Proposed Project Comments

**\*\* EXTERNAL EMAIL / COURRIEL EXTERNE \*\***

Exercise caution when opening attachments or clicking on links / Faites preuve de prudence si vous ouvrez une pièce jointe ou cliquez sur un lien

Project: higgins-mountain-wind-farm Comments: this is my 1st submission , i intend to address other topics . Name:  
Email: @assante.com Address: Municipality: folly lake email\_message:  
Privacy-Statement: agree x: 50 y: 30

April 1, 2023

Submission to Minister of the Environment

Dept of Environment

Matter:

Higgins Mountain Wind Farm Environmental Assessment

Dear Minister Halman,

My Name is \_\_\_\_\_, I live at \_\_\_\_\_ Folly Lake NS., \_\_\_\_\_, \_\_\_\_\_ and in this submission, I strongly object to the conclusions the proponent has included in the Environmental Assessment surrounding visual analysis and the means that these conclusions were derived. (see statement below)

EA Conclusion

Table 11.1 pg. 249 Visual Impacts Low – Project components may be seen from the observer location, but do not stand out or are not discernible in the view (i.e., low exposure on the horizon) Within observer locations Seasonal aspects not applicable; medium-term duration Continuous Reversible Not significant

Mitigation required; no monitoring required

### **CONTEXT FOR MY OBJECTION**

My submission to you today is mine alone however, I have sat in the Chairpersons role of the Community Liaison Committee, selected by the proponent, for the last 4 years leading up to this EA.

#### **Effect on Visual Resources.**

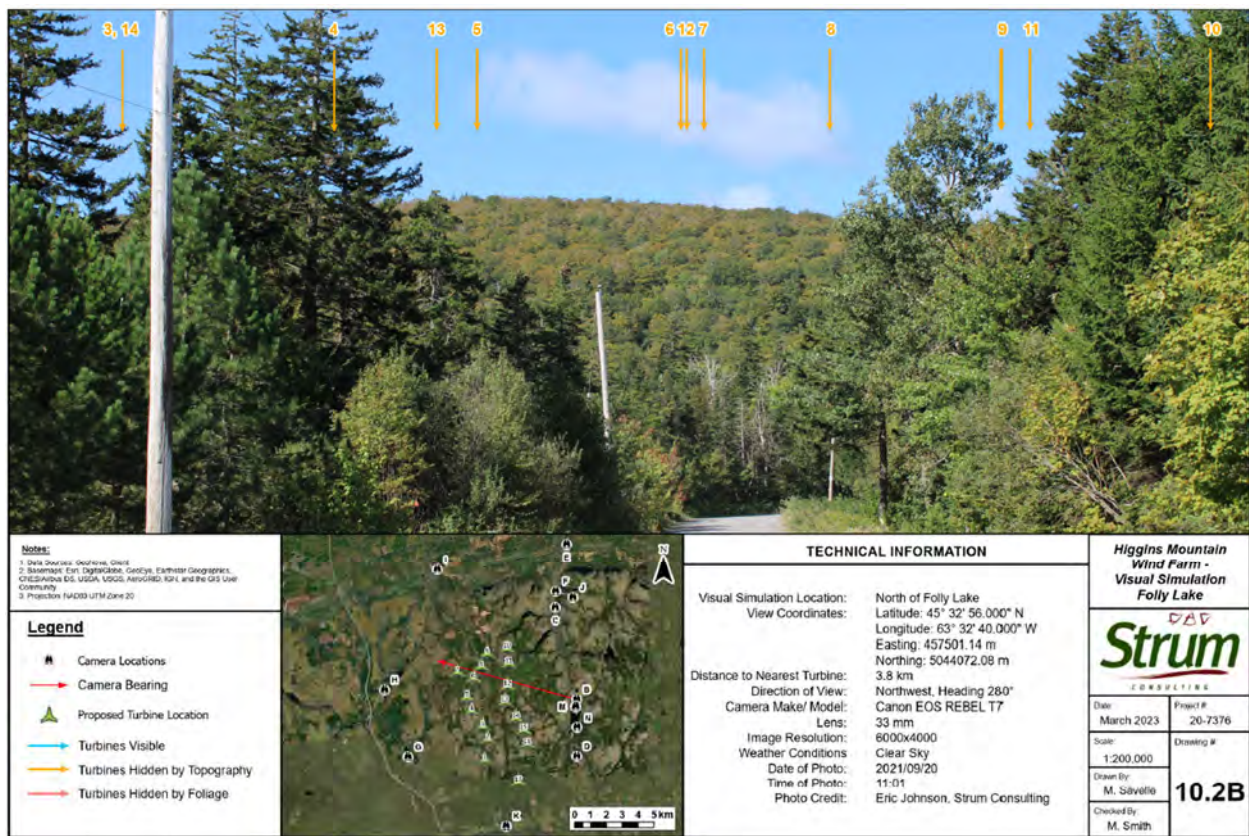
I have a deep knowledge in this matter, as it has been one of the most significant areas of concern of the community, and one that has been discussed repeatedly over the past 4 years in CLC meetings and at public meetings hosted by the proponent and meetings hosted by the community. The proponent is very aware of the community's concerns noted in our minutes and those recorded at public meetings and communicated by individuals to the proponent. We were assured the visual analysis would be a robust independent process with rigor, providing accurate visual impact analysis. Instead, it is rife with errors, misrepresentation and a disregard for the actual impact.



The Province of Nova Scotia designates the Wentworth Valley Area as a high value tourism area for its landscape and natural beauty. The province has designated the location as a Scenic Loop, and recognized and promoted it as a year-round destination for outdoor recreation in nature. We expect the Minister to defend the visual resources of this area as identified by the province and consider my objections and proposed remedies.

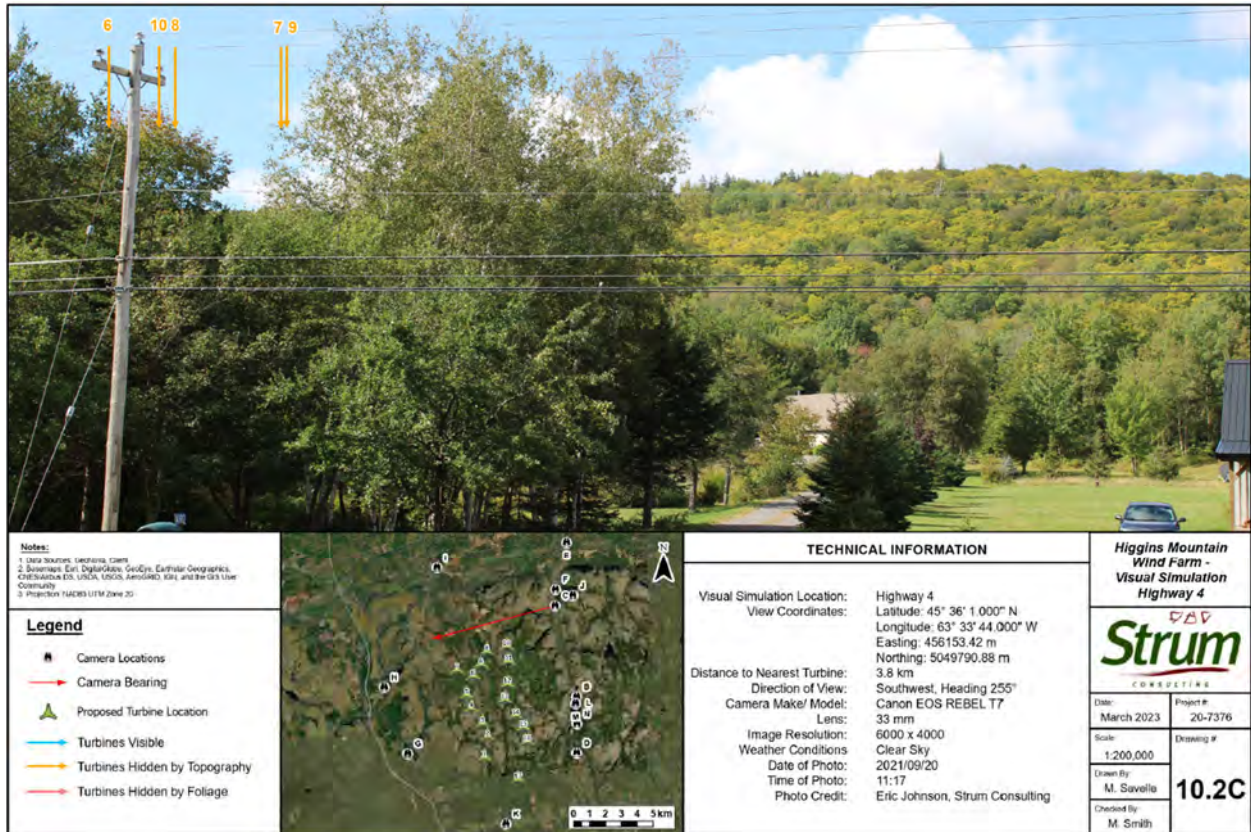
My Objections:

-despite assurances that the community would choose the sightlines deemed to have significant importance, the proponent has failed to capture many of these in the analysis. For example, key look offs where thousands trek annually, have been excluded from the analysis and instead we are provided with a shot from Lafarge Lane. (Where no one lives) looking at a nearby hillside.

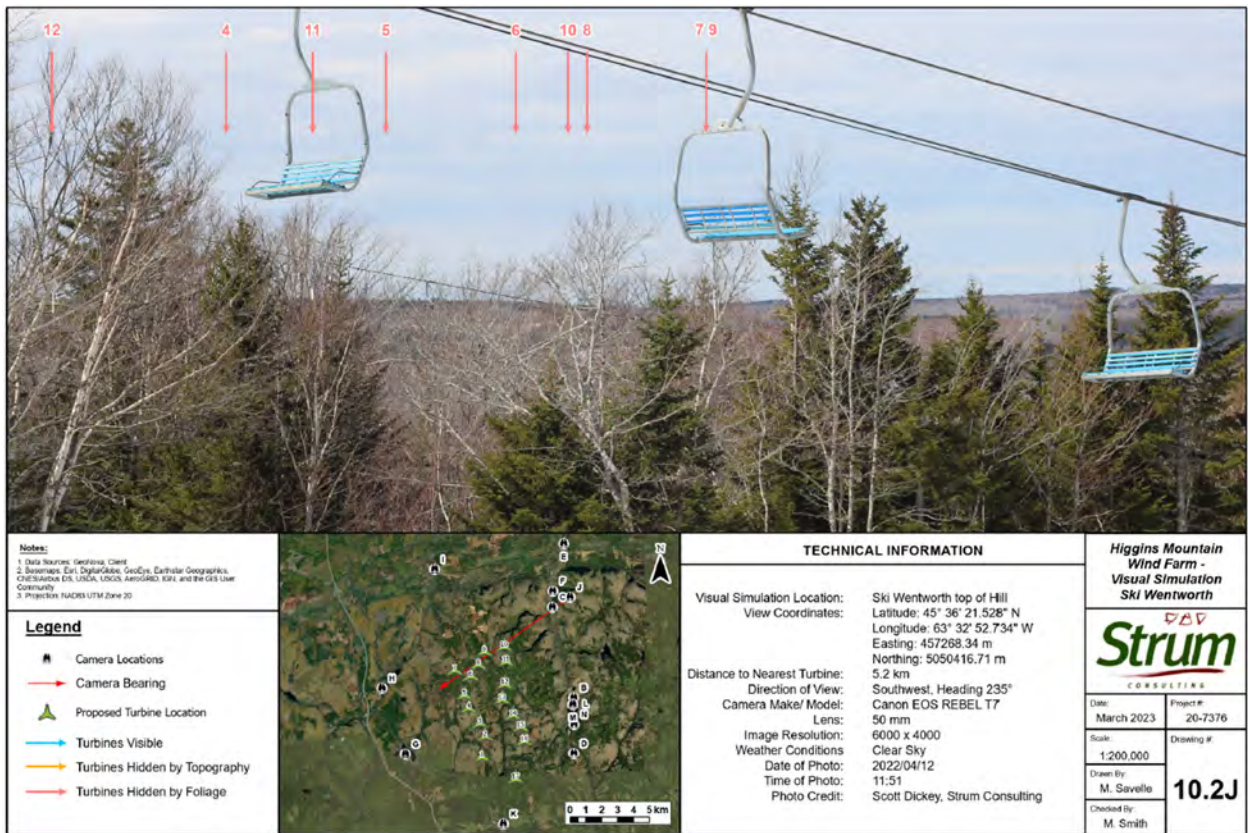


**\*\* This shot is of no use from a visual impact assessment and the focal length is not as promised.**

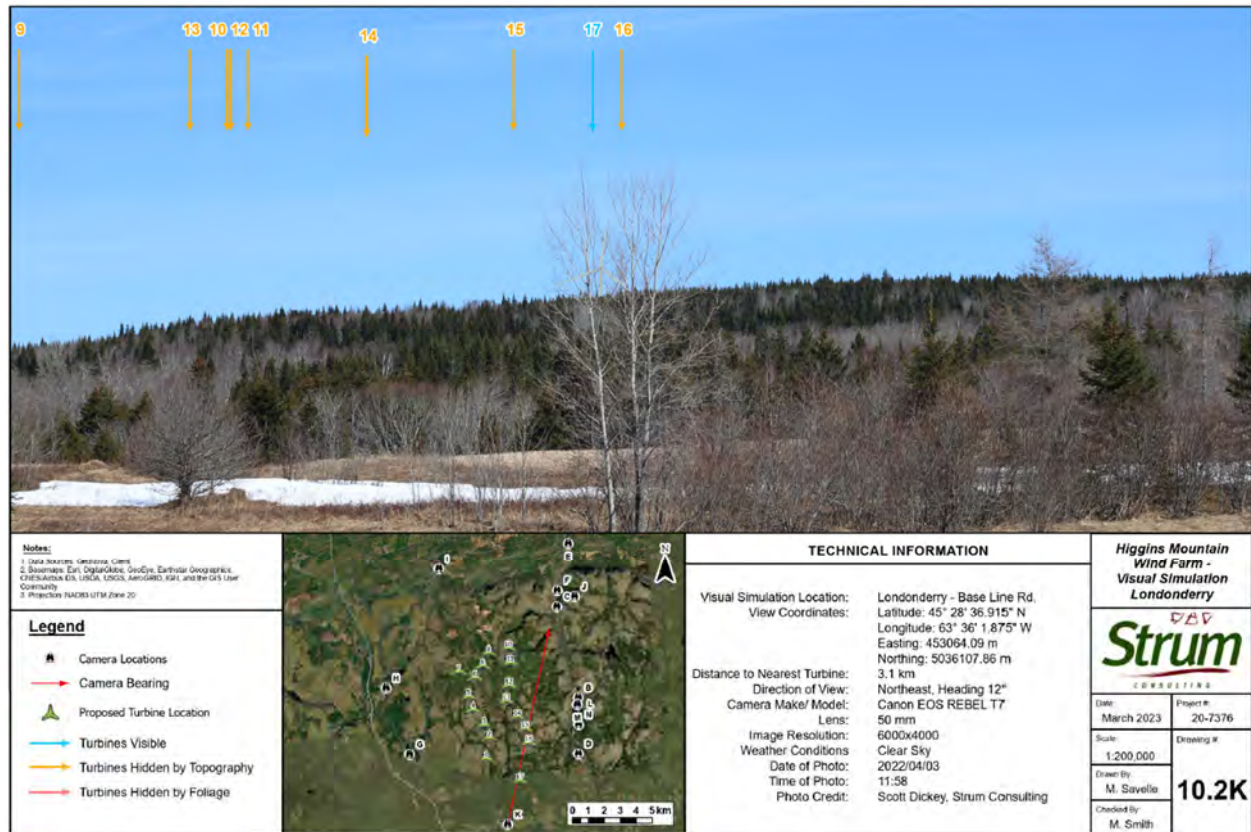
-there are multiple photos looking toward the wind field that use lone trees to shield a very visible and, in some cases, dominant turbine. Turbines are “ghosted” so that they are lost in branches of even small trees. I bring your attention to 10.2C below, where you can see the trees prevent any understanding of what a turbine might look like. Similar concerns in 10.2J, 10.2K, 10.2N. We were told in a CLC meeting on March 28<sup>th</sup> that this is recognized and was unintentional as placements had not yet been finalized when photos were taken two years ago yet no effort was made to redo the field work to reflect the impact of the final proposed locations. **\*\*Please note comments below photographs.\*\***



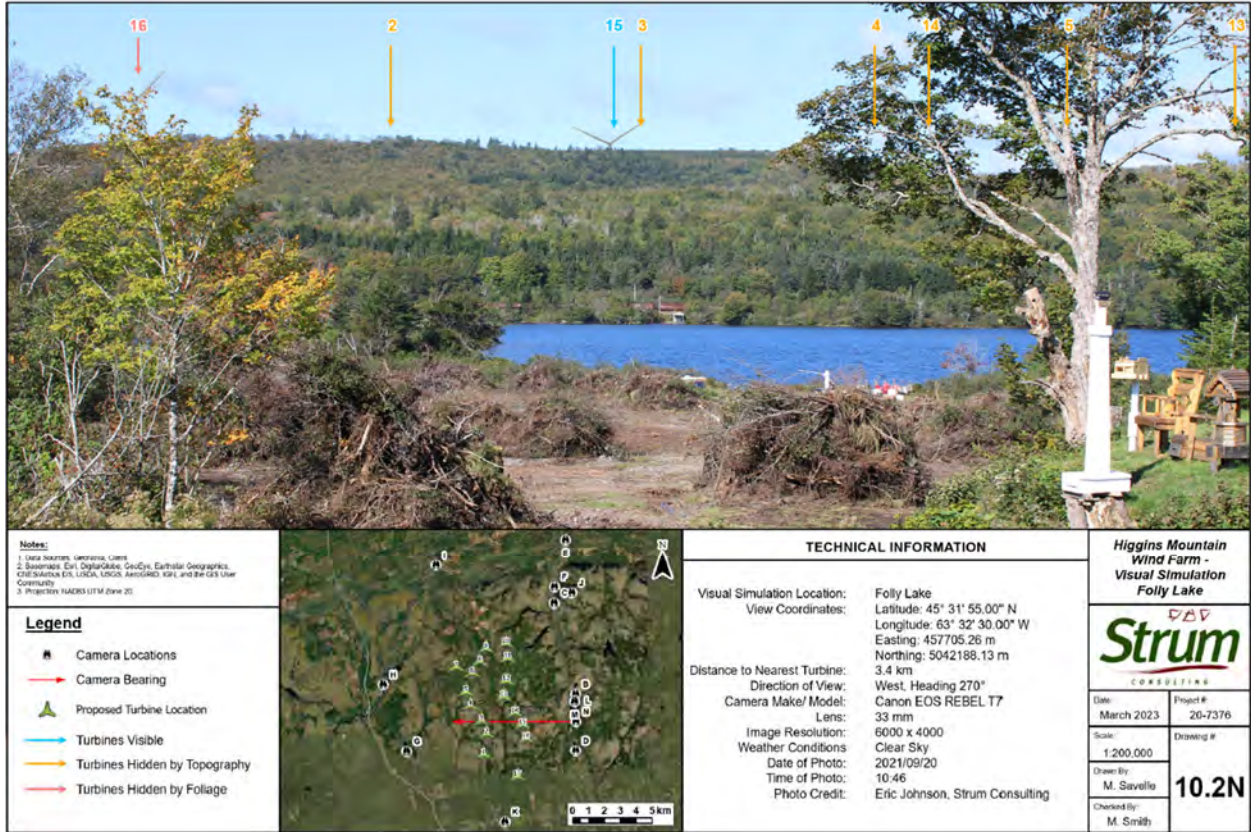
**\*\*Trees on left almost completely block out any realistic view of the wind field.**



**\*\* The trees to the left of the photographer completely obscure the mountain making this useless to access the visual impact.**

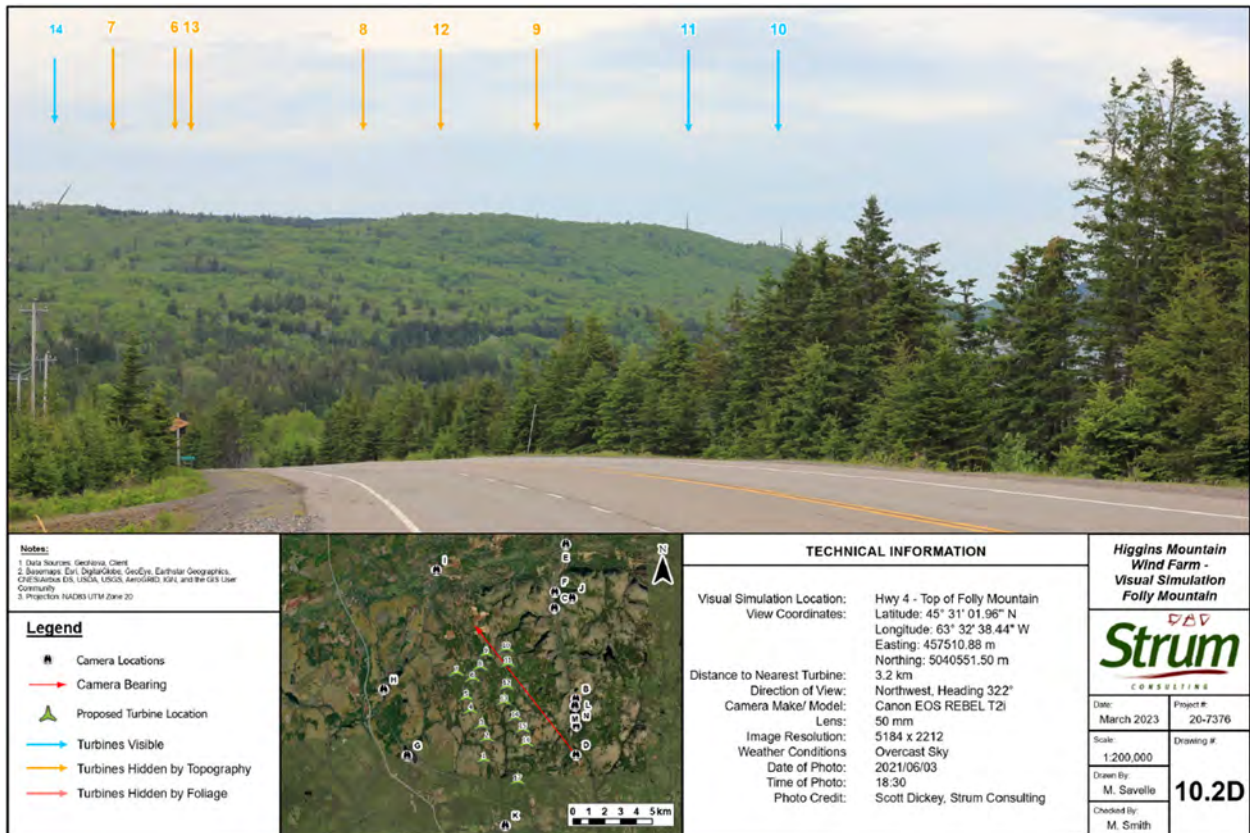


**\*\* Please note the birch tree in the middle of the photo which completely obscures #17, a dominant turbine. This appears deceptive.**

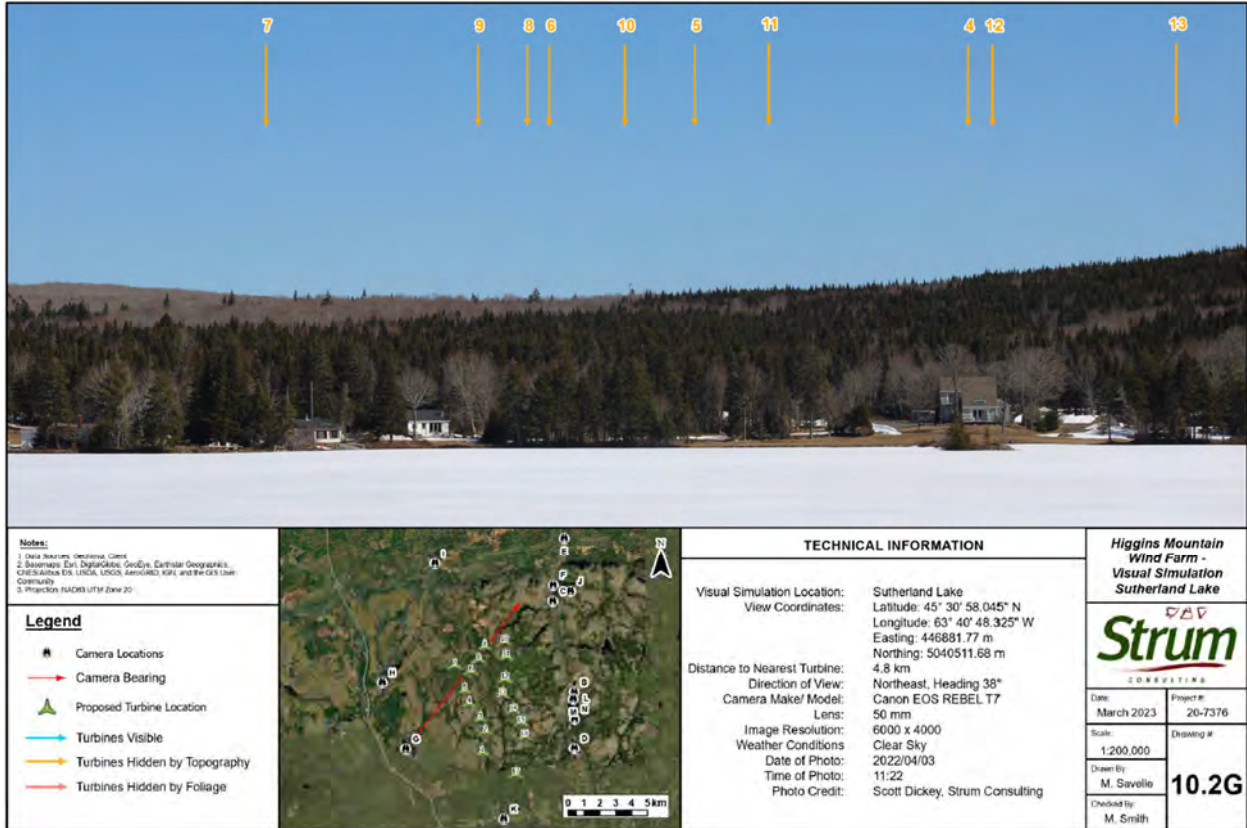


**\*\* #16, a dominant wind turbine is completely obscured by the trees in the upper left-hand corner.**

-the direction of a photograph together with the selective use of different focal lengths of the lenses often looks out on an area and fails to show dominant turbines which are to the right or left but would be clearly in a person's field of view. Again, we are told this was not on purpose but rather the photo work was done before final tower placements (this is not the case as many were only micro adjustments from original plans). Regardless the field work should have been redone to provide an accurate representation for the community to comment on.

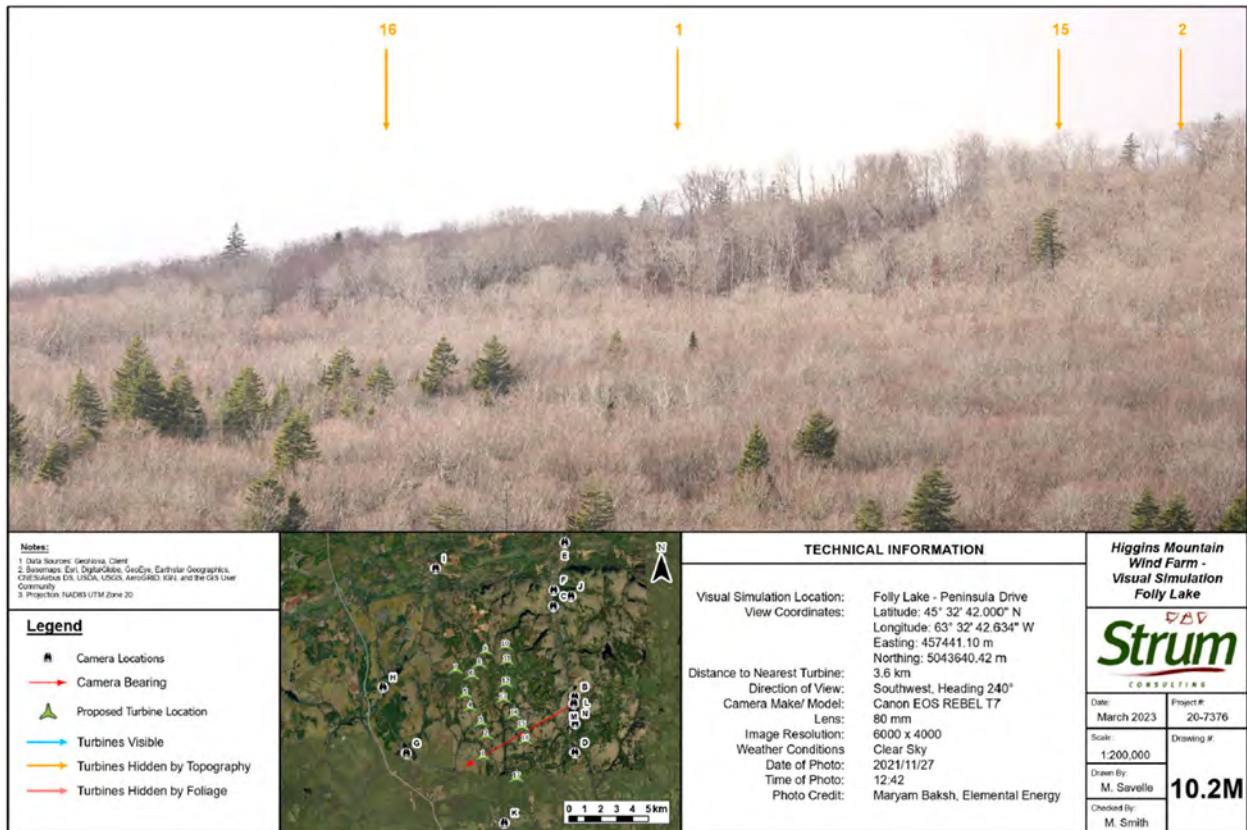


**\*\* If a more panoramic view looking to the left were provided you would see the majority of the wind field is highly visible.**



**\*The vector for this photograph is directed in a fashion that misses most of the wind field to the right of the looker, it may be obscured by the terrain but we have no idea from this photograph at Sutherlands lake.**

-Strum Consulting was asked in a public meeting as well as CLC and individual meetings if they would be using their own resources to conduct the photo support of the visual analysis. We were told repeatedly that they would need to do the work themselves in order to sign off on the report as engineers and consultants and provide the community the comfort that the process was independent. Instead, many of the photos were taken by a spouse of one of the developers along with a former employee of Elemental who has since left the firm. I was with the two individuals during these photo shoots and was assured they would be redone by Strum. This all occurred despite the assurance from Pres. of Strum who stated they would not sign off on submission of this work unless it was their own.



**\*\*This photograph was not taken by [redacted] of Elemental Energy, rather she was present when the photograph was taken. I however was present and can assure this was the case. In any event it was not conducted by Strum Consulting as promised to the community.**

-we recognise that trying to mimic what the human eye sees is hard work and requires a knowledge of cameras, computer rendering and human sight. We would like to see work using a focal length that is as close to the human eye's depth of field, many believe this to be 80-90 MM and then stitch photos together to provide a panoramic view to reflect a person's field of view. The Community was told by

Strum and the proponent that this was not the standard and instead would be provided with photos using a single lens length of 50 mm. The analysis provided in the EA instead uses multiple lenses including 21, 33, 50 and 80 mm in different locations depending on the day, the photographer and subject but never are they used to examine the same subject which might have some scientific value . When questioned on this in our March 28<sup>th</sup> meeting the proponent and consultant were no longer concerned with the need for a consistency in the photo analysis. I include some examples below of how different a single subject matter might look with the four different lenses used. This work was done on March 16<sup>th</sup>, 2023 by \_\_\_\_\_, professional photographer from Pridham's Studio.



**\*\*This four shots are taken from a receptor location used in the EA, they are shown using the four different focal lengths that have been shown in the environmental assessment. Please note how different turbines would appear using these four focal lengths.**





\*\* These are four more taken from a receptor location. Also using 21, 33, 50 and 80 mm lenses.



\*\*This is another example of how different a sign post looks from a distance using four different focal lengths. They are (21, 33, 50, and 80 mm).

## Conclusion

The community has no faith in the statement of visual impact presented by the proponent in the EA owing to errors, selective camera views and a lack of simulation in important areas; see below

Table 11.1, page 249

Visual Impacts Low – Project components may be seen from the observer location, but do not stand out or are not discernible in the view (i.e., low exposure on the horizon) Within observer locations Seasonal aspects not applicable; medium-term duration Continuous Reversible Not Significant Mitigation required; no monitoring required.

It is not hard for the community to compare the consultant's opinion on visual impact by simply visiting existing turbines in the area. What is presented here does not reflect that reality. The community is not stupid and what is presented in the EA submission represents a disregard for their right to assess the visual impact upon the places where they live.

This writer asks Minister Halman to reject the Higgins Mountain Wind Farm Environmental Assessment and require a new independent Visual Impact Analysis including new visual field work to be completed in light of the final tower locations. That the work be sighted from areas of concern to the community its residents and users. That the independent process is conducted as communicated and using technical methods that reflect the real impact as accurately as possible. This should then be presented to the Community in a public setting given that the stakeholders have never seen this work nor can they assess it based on this EA. The intention of this is for the community to ascertain what they can live with and communicate that to the Minister so that they may then adjudicate the development and important adjustments made.

In this writer's opinion, 4 towers remain dominant, and some subtle adjustments could remedy this if the Minister would require it to be so.

Respectfully,



**Notes:**

1. Photo taken 04/09/2023
2. Equipment: DJI, Topcon, Nikon, Nikon, Nikon
3. Software: ESRI, AutoCAD, ArcGIS, AutoCAD, AutoCAD, AutoCAD
4. Project: Higgs Mountain Wind Farm

**Legend**

- Camera Locations
- Camera Bearing
- Proposed Turbine Location
- Turbines Visible
- Turbines Hidden by Topography
- Turbines Hidden by Foliage



**TECHNICAL INFORMATION**

Visual Simulation Location: North of Folly Lake  
 View Coordinates: Latitude: 45° 32' 56.000" N  
 Longitude: 65° 32' 40.000" W  
 Easting: 457501.14 m  
 Northing: 5044072.08 m  
 3.8 km  
 Distance to Nearest Turbine:  
 Direction of View: Northwest, Heading 260°  
 Camera Make/Model: Canon EOS REBEL T7  
 Lens: 33 mm  
 Image Resolution: 6000x4000  
 Weather Conditions: Clear Sky  
 Date of Photo: 2023/05/20  
 Time of Photo: 11:04  
 Photo Credit: Eric Johnson, Strum Consulting

Higgs Mountain  
 Wind Farm -  
 Visual Simulation  
 Folly Lake



Date:	March 2023	Project #:	20-2376
Scale:	1:200,000	Drawing #:	10.2B
Drawn by:	MT, J. Smith		
Checked by:	MT, Smith		



**Notes:**

- 1. Day Number Mapping Chart
- 2. Equipment For: TopoQuest, Google Earth, Trimble GPS/RTK, Garmin, etc. (USA, CAN, AMZN, etc. phone) or a similar device
- 3. Photo: 10/20/17 10:45 AM

**Legend**

-  Camera Locations
-  Camera Bearing
-  Proposed Turbine Location
-  Turbines Visible
-  Turbines Hidden by Topography
-  Turbines Hidden by Foliage



**TECHNICAL INFORMATION**

Visual Simulation Location: Highway 4  
 View Coordinates: Latitude: 45° 36' 1.900" N  
 Longitude: 63° 33' 44.300" W  
 Easting: 456153.42 m  
 Northing: 5045790.88 m  
 3.8 km  
 Direction of View: Southwest, Heading 255°  
 Camera Make/ Model: Canon EOS REBEL T7  
 Lens: 33 mm  
 Image Resolution: 6000 x 4000  
 Weather Conditions: Clear Sky  
 Date of Photo: 2021/09/20  
 Time of Photo: 11:12  
 Photo Credit: Eric Johnson, Strum Consulting

**Higgins Mountain  
 Wind Farm -  
 Visual Simulation  
 Highway 4**









Date: March 2023	Project #: 20-2376
Scale: 1:250,000	Drawing #: <b>10.2C</b>
Drawn By: M. Sevelle	
Checked By: M. Sevelle	



**Notes:**

1. See Survey Station 1004
2. See Item 101, Designation: 1004, Station Description: 1004, Station Type: 1004, Station Code: 1004, Station Name: 1004
3. Project No. 1004 (1004) 1004

**Legend**

-  Camera Locations
-  Camera Bearing
-  Proposed Turbine Location
-  Turbines Visible
-  Turbines Hidden by Topography
-  Turbines Hidden by Foliage



**TECHNICAL INFORMATION**

Visual Simulation Location: Ski Wentworth top of Hill  
 View Coordinates: Latitude: 45° 36' 21.528" N  
 Longitude: 63° 32' 52.734" W  
 Easting: 457298.94 m  
 Northing: 5056416.71 m  
 Distance to Nearest Turbine: 5.2 km  
 Direction of View: Southwest, Heading 235°  
 Camera Make/ Model: Canon EOS REBEL T7  
 Lens: 56 mm  
 Image Resolution: 6000 x 4000  
 Weather Conditions: Clear Sky  
 Date of Photo: 2022/04/12  
 Time of Photo: 11:51  
 Photo Credit: Scott Dickey, Strum Consulting

Higgins Mountain  
 Wind Farm -  
 Visual Simulation  
 Ski Wentworth









Date: March 2023	Project #: 26-2376
Scale: 1:200,000	Drawing #: 10.2J
Drawn by: M. Sewell	<b>10.2J</b>
Checked by: M. Smith	



#### Notes:

1. Data Source: Sentinel-2  
 2. Software: Arc, DigitalGlobe, Google, Turbine Configuration  
 3. Coordinates: UTM, UTM Zone 18Q, WGS84, 5000 and 6000 m  
 4. Projection: UTM Zone 18Q

#### Legend

-  Camera Location
-  Camera Bearing
-  Proposed Turbine Location
-  Turbines Visible
-  Turbines Hidden by Topography
-  Turbines Hidden by Fringe



#### TECHNICAL INFORMATION

Visual Simulation Location: Londonderry - Base Line Rd.  
 View Coordinates: Latitude: 45° 28' 36.915" N  
 Longitude: 63° 36' 1.875" W  
 Easting: 453064.07 m  
 Northing: 5096107.86 m  
 Distance to Nearest Turbine: 3.1 km  
 Direction of View: Northeast, Heading 12°  
 Camera Make/Model: Canon EOS REBEL T7  
 Lens: 50 mm  
 Image Resolution: 6000x4000  
 Weather Conditions: Clear Sky  
 Date of Photo: 2022/04/03  
 Time of Photo: 11:58  
 Photo Credit: Scott Dickey, Strum Consulting

Higgins Mountain  
 Wind Farm -  
 Visual Simulation  
 Londonderry



Date:	Project #:
March 2023	26-2376
Budget:	Drawing #:
1,200,000	10.2K
Drawn By:	Checked By:
M. Sewell	M. Smith



**Notes:**  
 1. Data Source: Northing, UTM  
 2. Elevation: 5m, DigitalElevation Model, Contour, Contour, Contour  
 3. Camera: Canon EOS REBEL T7, 35mm, 100mm, 1/1000, ISO 100, F/5.6  
 4. Photo: 2021-09-20 10:46

**Legend**

- Camera Locations
- Camera Bearing
- ▲ Proposed Turbine Location
- Turbines Visible
- Turbines Hidden by Topography
- Turbines Hidden by Foliage



TECHNICAL INFORMATION	
Visual Simulation Location:	Folly Lake
View Coordinates:	Latitude: 45° 31' 55.00" N Longitude: 63° 32' 30.00" W Easting: 457736.26 m Northing: 5042186.13 m
Distance to Nearest Turbine:	3.4 km
Direction of View:	West, Heading 270°
Camera Make/Model:	Canon EOS REBEL T7
Lens:	35 mm
Image Resolution:	6000 x 4000
Weather Conditions:	Clear Sky
Date of Photo:	2021-09-20
Time of Photo:	10:46
Photo Credit:	Eric Johnson, Strum Consulting

Higgins Mountain  
Wind Farm -  
Visual Simulation  
Folly Lake

Date:	March 2023	Project #:	20-2176
Scale:	1:200,000	Drawing #:	<b>10.2N</b>
Drawn by:	M. Smith		
Checked by:	M. Smith		











**Notes:**

1. Data Source: Aerial Imagery, 2020
2. Software: Esri, DigitalGlobe, Location, Earthstar Geomatics, 2020; ArcGIS Pro, 2020; Microsoft, 2020; and Esri, 2020.
3. Prepared: 10/20/2021 by M. Swale

**Legend**

-  Camera Locations
-  Camera Bearing
-  Proposed Turbine Location
-  Turbines Visible
-  Turbines Hidden by Topography
-  Turbines Hidden by Foliage



**TECHNICAL INFORMATION**

Visual Simulation Location: Hay 4 - Top of Folly Mountain  
 View Coordinates: Latitude: 45° 31' 01.96" N  
 Longitude: 63° 32' 38.44" W  
 Easting: 457610.85 m  
 Northing: 9040551.50 m  
 Distance to Nearest Turbine: 3.2 km  
 Direction of View: Northwest, Heading 322°  
 Camera Make/Model: Canon EOS REBEL T2i  
 Lens: 50 mm  
 Image Resolution: 5184 x 2212  
 Weather Conditions: Overcast Sky  
 Date of Photo: 2021/06/30  
 Time of Photo: 18:30  
 Photo Credit: Scott Dickey, Strum Consulting

Higgins Mountain  
 Wind Farm -  
 Visual Simulation  
 Folly Mountain



Date: March 2023	Project #: 20-2376
Scale: 1:200,000	Drawing #:
Drawn by: M. Swale	<b>10.2D</b>
Checked by: M. Swale	



**Notes:**

1. Data Source: Bentley, CADW
2. Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNR/Airbase/EAS, USDA, AeroGRID, IGN, and the GIS User Community
3. Project No. 2022-0134 Date: 02

**Legend**

- Camera Locations
- Camera Bearing
- Proposed Turbine Location
- Turbines Visible
- Turbines Hidden by Topography
- Turbines Hidden by Foliage



**TECHNICAL INFORMATION**

Visual Simulation Location: Sutherland Lake  
 View Coordinates: Latitude: 45° 30' 58.045" N  
 Longitude: 63° 40' 48.320" W  
 Easting: 446681.77 m  
 Northing: 5046511.68 m  
 Distance to Nearest Turbine: 4.8 km  
 Direction of View: Northeast, Heading 30°  
 Camera Make/Model: Canon EOS REBEL T7  
 Lens: 50 mm  
 Image Resolution: 6000 x 4000  
 Weather Conditions: Clear Sky  
 Date of Photo: 2022/04/03  
 Time of Photo: 11:22  
 Photo Credit: Scott Dickey, Strum Consulting

Higgins Mountain  
 Wind Farm -  
 Visual Simulation  
 Sutherland Lake

**Strum**  
 CONSULTING

Date:	March 2023	Project #:	26-2276
Scale:	1:200,000	Drawing #:	
Drawn by:	M. Sewell	<b>10.2G</b>	
Checked by:	M. Smith		



**Notes:**

1. See Section 10.0 for more details.
2. See Section 10.1 for more details.
3. See Section 10.2 for more details.
4. See Section 10.3 for more details.

**Legend**

- Camera Locations
- Camera Bearing
- Proposed Turbine Location
- Turbines Visible
- Turbines Hidden by Topography
- Turbines Hidden by Foliage



**TECHNICAL INFORMATION**

Visual Simulation Location: Folly Lake - Peninsula Drive  
 View Coordinates: Latitude: 45° 32' 42.000" N  
 Longitude: 63° 32' 42.854" W  
 Easting: 457441.10 m  
 Northing: 5043540.42 m  
 Distance to Nearest Turbine: 3.6 km  
 Direction of View: Southwest, Heading 240°  
 Camera Make/Model: Canon EOS REBEL T7  
 Lens: 86 mm  
 Image Resolution: 6000 x 4000  
 Weather Conditions: Clear Sky  
 Date of Photo: 2021/11/27  
 Time of Photo: 12:42  
 Photo Credit: Maryam Baksh, Elemental Energy

Higgins Mountain  
 Wind Farm -  
 Visual Simulation  
 Folly Lake



Date: March 2023	Project #: 25-2376
Scale: 1:200,000	Drawing #: <b>10.2M</b>
Created by: M. Sewell	
Checked by: M. Smith	





