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January 10, 2025

County of Lanark
99 Christie Lake Road
Perth, ON K7H 3C6

Attn: Koren Lam

Re: Response to JP2G Consultants Inc. Peer Review Comments on Proposed Highland Line Pit Natural Environment Report, Township of Lanark Highlands, Ontario (#626599)
Cambium Reference: 19681-001

Dear Koren,

In a letter to the County of Lanark dated November 15, 2023, JP2G Consultants Inc. (JP2G) provided review comments on the licence application for the Thomas Cavanagh Construction Limited (Cavanagh) proposed Highland Line Pit, Lanark Highlands, ON (*Aggregate Resources Act* Application #626599). The review comments relate to JP2G's review of the Natural Environment Report (NER), Proposed Highland Line Pit, Lanark County, Ontario (WSP/Golder 2022). The authors of the NER are now employed at Cambium Inc. (Cambium) and have been retained by Cavanagh to continue to provide services related to this application.

The purpose of this letter report is to respond to the comments provided by JP2G as they relate to the NER. The comments provided by the JP2G are presented below in italics followed by Cambium's responses. A copy of the JP2G letter is provided in Attachment 1.

JP2G COMMENT #1

2.6 County of Lanark: Schedule B to the Official Plan, designates a portion of the site along Highland Line and Anderson Lane as a significant groundwater recharge area. This should be identified in the report and the impacts of the proposed pit on the groundwater recharge area and associated water quality should be discussed in the report.



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Response:

Groundwater recharge and water quality are not significant natural features that are to be discussed in the NER per the provincial technical reporting standards for ARA applications. However, impacts to groundwater recharge and water quality were discussed in the NER as they relate to potential impacts to wetlands and other significant natural features, based on the results of the Water Report (WSP 2022).

As noted in the Water Report (WSP 2022): “Both within the setback area and the extraction area, groundwater recharge will still occur as the proposed pit will not be dewatered. Infiltration will take place through the overburden (in the case of the area within the setbacks) or through the bottom and sides of the pit lake.” The Water Report also concluded that water quality of the adjacent wetlands, watercourses and lake and any associated downstream habitat is not expected to be adversely affected by the proposed extraction.

JP2G COMMENT #2

4.3 Field Surveys: It is noted that field surveys were conducted in 2020 according to various protocols, however it would be beneficial to include information for each survey such as search effort, weather conditions etc. in the report. It appears that only the results of the plant community survey and breeding bird survey were included in the report. The results of the other surveys carried out at the site (i.e. amphibian, bat habitat, turtle surveys etc.) should also be included in the report.

Response:

Below is an updated Table 1 from the NER, which now includes search effort and weather conditions.





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Date	Type of Field Survey	Weather	# Hours on Site	# of Staff
April 24, 2020	Nocturnal Amphibian Survey, Turtle Survey, Bat Habitat Survey, VES*	4 to 11°C, partly cloudy, light winds	7	2
May 6, 2020	Turtle Survey, VES	6 to 10°C, clear to partly cloudy, light to moderate winds	3	2
May 13, 2020	Turtle Survey, Plant Community Survey, Aquatic Survey, VES	12 to 14°C, mostly clear, light to moderate winds	8	1
May 30, 2020	Nocturnal Amphibian Survey, Turtle Survey, Eastern Whip-poor-will Survey, VES	8 to 20°C, cloudy to mostly clear, moderate winds	12	2
June 1, 2020	Breeding Bird Survey, Turtle Survey, VES	4 to 16°C, mostly clear, light to moderate winds	12	1
June 8, 2020	Eastern Whip-poor-will Survey, VES	14 to 18°C, clear, light winds	8	2
June 22, 2020	Breeding Bird Survey, Plant Community Survey, VES	12 to 25°C, partly cloud, light winds	10	1





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Date	Type of Field Survey	Weather	# Hours on Site	# of Staff
June 30, 2020	Nocturnal Amphibian Survey, Eastern Whip-poor-will Survey, VES	18 to 20°C, clear, light winds	6	2
July 1, 2020	Breeding Bird Survey, Plant Community Survey, VES	16 to 25°C, clear, light winds	10	1
August 31, 2020	Plant Community Survey, Aquatic Survey, VES	12 to 20°C, mostly clear, moderate winds	12	1
June 16, 2023	Gather seasonal observations on surface water features	19°C, partly cloudy, light winds	4	1
October 4, 2023	Gather seasonal observations on surface water features	25°C, mostly clear, light winds	4	1

The results of the various surveys are included in the report in several ways, including the species lists and discussed throughout the various sections of the report (e.g., stating no observation of Blanding’s turtle, bat acoustic results are presented in text format, amphibian call-count survey results are discussed in the context of significant wildlife habitat, etc.). Although dedicated data tables for all survey results do not form part of the report, the results of all surveys and their implications as it relates to natural heritage policies are discussed thoroughly. For further clarity, the amphibian call-count data is provided below.

Date	Location	Common Name	Species Name	Call Level/Abundance Inside 100m	Call Level/Abundance Outside 100m	Notes
24-Apr-20	Station 1	Spring Peeper	<i>Pseudacris crucifer</i>	0/0	3/FC	very far off site



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Date	Location	Common Name	Species Name	Call Level/Abundance Inside 100m	Call Level/Abundance Outside 100m	Notes
	Station 2	Spring Peeper	<i>Pseudacris crucifer</i>	0/0	3/FC	very far off site
	Station 3	Spring Peeper	<i>Pseudacris crucifer</i>	3/FC	0/0	on site
	Station 4	Spring Peeper	<i>Pseudacris crucifer</i>	3/FC	3/FC	off and on site
	Total # species at stations in April 2020					1
30-May-20	Station 1	Spring Peeper	<i>Pseudacris crucifer</i>	0/0	3/FC	very far off site
	Station 2	Spring Peeper	<i>Pseudacris crucifer</i>	0/0	3/FC	off site
		Leopard frog	<i>Lithobates pipiens</i>	1/1	0/0	on site
	Station 3	Spring Peeper	<i>Pseudacris crucifer</i>	1/5	0/0	on site
		Leopard frog	<i>Lithobates pipiens</i>	1/1	0/0	on site
	Station 4	Spring Peeper	<i>Pseudacris crucifer</i>	3/FC	0/0	on site
		Gray tree frog	<i>Hyla versicolor</i>	2/2	1/2	on and off site
	Total # species at stations in May 2020					3
30-Jun-20	Station 1	None				
	Station 2	Green frog	<i>Lithobates clamitans</i>	0/0	1/4	off site
	Station 3	None				
	Station 4	None				
	Total # species at stations in June 2020					1



JP2G COMMENT #3

4.4.1 Ecological Land Classification: The report states that: "...the Site and visible portions of the Study Area were assessed using the Ecological Land



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Classification (ELC) standard protocols (Lee et al. 1998) to map the plant communities.” An updated version of the ELC Tables (2008) for the Ecological Land Classification for Southern Ontario is available and should be used in the future, rather than the 1998 tables. In the future, wetland communities should be delineated according to the 2022 Ontario Wetland Evaluation System Manuals prepared by MNR, rather than the ELC protocol.

Response:

Cambium has been directed by the MNR not to use the 2008 ELC tables. The 2008 ELC tables were never officially released, were retracted, and are no longer available or referenced anywhere by MNR in relation to ELC. This is further supported by the use of the 1998 tables, rather than the 2008 tables, in the ELC course and by the MNR in the creation of the Significant Wildlife Habitat Ecoregion Criteria Schedules (SWHECS) in 2015. Wetland mapping according to the OWES system is only required and appropriate when an OWES evaluation or boundary change is being conducted. If this were not the case, the ELC system would not include wetland ecosites. The MNR has reviewed the NER and has not requested that the 2008 tables be used, or that the mapping of wetlands use the OWES methods.

JP2G COMMENT #4

4.5.3.1 Bat Surveys: This section states that: ”a survey for suitable roost trees was performed...”. If this survey was completed according to a survey protocol, it should be referenced in this section.

Response:

There are currently no formal, finalized protocols for conducting this type of survey that have been issued by the MNR or MECP; only several drafts released at various times, as well as direct email advice provided to WSP. Generally, the various protocols recommend searching for certain ELC polygon types, then performing snag density surveys within those polygons to identify areas of highest maternity roost potential and therefore the best locations for placement of acoustic detectors. As much of the Site had been logged prior to field



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investigations, there was limited suitable habitat making snag density surveys unnecessary. The remaining suitable habitats across the entire Site were searched, as described in the report.

JP2G COMMENT #5

5.5.2 Birds: Barn swallow has recently been listed from a threatened species to a species of special concern. The relevant sections of the report could be updated for clarity.

Response:

It is acknowledged that the status of this species has changed since the authoring of the NER. This species was not confirmed nesting on the Site, so the status change does not alter the conclusions of the NER. Foraging habitat for this species will continue to be present during development, operation and at final rehabilitation.

JP2G COMMENT #6

5.5.3.1 Bats: The bat detector stations should be labelled on Figure 1 for clarity. Section 4.5.3.1 states that: “concurrent with day-time surveys in April and May, a survey for suitable roost trees was performed, and included searching for trees with suitable cavities, cracks, peeling bark, presence of squirrel nests or dead, retained leaf clusters. Trees that were deemed to provide potential suitable maternity roosting habitat were inspected for any visual signs of bats (e.g., guano).” The results from this survey should be included in this section of the report, however it is noted in Section 6.7.1 that the site does not meet the >10/ha large wildlife trees to be considered significant bat maternity roost habitat.

Response:

Bat detector locations are shown on Figure 1 of the NER, but it is acknowledged that the corresponding station numbers are not included and would provide more clarity. As noted in the response to Comment #4, there was limited suitable habitat at the Site, and therefore no formal mapping or other presentation of



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results was included in the NER. The results were used to inform placement of the acoustic detectors, the locations of which are presented in the NER.

JP2G COMMENT #7

6.1 Habitat of Endangered or Threatened Species: This section states that there is a potential tri-coloured bat (endangered) maternity roost habitat in the vicinity of station 2 and has been included in a Natural Environment Exclusion Area. Given the isolated nature of this roosting habitat post development, together with the extraction activities occurring adjacent to this feature, loss of forest cover leading to this maternity colony, as well as loss of meadow and wetland habitat for foraging habitat, it is recommended that an Information Gathering Form be filed with MECP for review/approval.

The last sentence of the first paragraph states that “All wetlands on the Site, including a 30 m buffer, are excluded from the extraction area....”. However, based on Figure 2, the small wetland/pond area as described previously in the report, has not been excluded from the extraction area. Impacts on this feature and if it is considered to be Blanding’s Turtle habitat, should be discussed in the report. It is also recommended that a figure be added to the report to show the Blanding’s Turtle habitat on site.

Response:

An Information Gathering Form (IGF) was prepared relating to the tri-coloured bat and Blanding’s turtle at the Site, and presented to the MECP. The IGF included a map illustrating the Blanding’s turtle habitat at the Site, which was described in the text of the NER. The MECP confirmed in an email dated April 26, 2024 (Attachment 2) that the project will not require approvals under the *Endangered Species Act* (Ontario 2007). This determination was based on additional mitigation measures being implemented, including fencing the entire Site during development and operation of the pit. The removal of this feature is addressed in various sections of the NER.



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JP2G COMMENT #8

6.2 Significant Wetlands and Coastal Wetlands: The last sentence of the second paragraph states that: "...wetlands will be buffered from extraction by a 30 m setback (Figure 2), so there will be no physical intrusion into the wetlands.". However, looking at Figure 2, the small wetland/pond area as described previously in the report has not been excluded from the extraction area and will be impacted by the extraction activities. Impacts on this feature should be discussed in the report and as required, appropriate compensation should be recommended for removal of the small wetland/pond area.

Response:

This feature does not meet the size threshold to be considered a distinct vegetation unit under the OWES or ELC mapping protocols, and should not be considered a wetland under Section 6.2 of the NER. The feature is identified as an inclusion in the FOM2-2 community, per ELC protocol. The removal of this feature is addressed in various sections of the NER. As the Site will be rehabilitated as large ponds with wetland treatments in the shallow edges, the loss of this small feature will be compensated for.

JP2G COMMENT #9

6.3 Fish Habitat: Reference should be made in this section that Long Sault Creek is a coldwater creek and impacts on the water temperature of the creek as a result of the proposed development should also be discussed.

Response:

Based on the conclusions of the Water Report (WSP 2022), the proposed extraction will not impact adjacent fish habitat. The applicant submitted a Request for Project review to Fisheries and Oceans Canada (DFO) so that DFO could review and comment on this conclusion. In a letter dated March 12, 2024, DFO confirmed that no authorization under the *Fisheries Act* is required for this project, and that the applicant's obligations under the *Fisheries Act* have been met.



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In addition, Extraction Area 2 has been revised such that the proposed extraction is now 300 m or more away from Long Sault Creek, and the direction of groundwater flow from the proposed extraction area is northeast towards Barber’s Lake, not south/southeast towards Long Sault Creek.

JP2G COMMENT #10

6.7.1 Seasonal Concentration Areas: At the bottom of page 21 of the report, it states that: “Colonially nesting tree / shrub breeding habitats consist of heronries, while colonially nesting ground bird breeding habitat consist of rocky islands and peninsulas where species such as gulls and terns nest. No such habitats are present on the Site.” A review of the NHIC database shows that there is a mixed wader nesting colony documented in the grid cells that cover the subject lands. This should be discussed in the report.

Response:

According to the SWHCS (MNR 2015), mixed wading colonies fall under the category of Colonially Nesting Breeding Bird Habitat (Tree/Shrub) and require the presence of deciduous or mixed treed swamps or treed fens, and confirmed nesting of at least five pairs of herons (green, black-crowned night, or great blue) or egrets to be considered SWH. There is no suitable habitat for wading bird nesting colonies on the Site, and none were observed during breeding bird surveys. The proposed extraction will not negatively affect any such habitats off-Site as noted in the NER.

JP2G COMMENT #11

6.7.1 Seasonal Concentration Areas: The report states that: “Based on the field surveys, no portions of the Site provide the necessary number (>10/ha) of large (>25cm DBH) wildlife trees to be considered significant bat maternity roost habitat...”. Based on the acoustic surveys carried out at the property, there is suitable maternity roost habitat on site and therefore the identified Natural Environment Exclusion Area should be considered significant wildlife habitat. The report should be updated accordingly.



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Response:

The presence of bats does not equate to the presence of significant bat maternity roost habitat. Acoustic surveys cannot identify the number of large wildlife trees or significant wildlife habitat. Significant wildlife habitat of this type must meet the definition provided in the SWHECS (MNR 2015), which, as stated in the NER, no portion of the Site does.

JP2G COMMENT #12

6.7.2 Rare Vegetation Communities or Specialized Habitats for Wildlife: It is understood that seeps were noted on site but are in the wetland area and won't be impacted by the development, but the small pond feature which is also associated with a groundwater seepage area, will be impacted as the extraction activities will occur in this area. The impact of the proposed development this feature should be discussed in the report and the report should include mitigation measures to be implemented when removing this feature.

Response:

A seep is not the same as a depression that intercepts the groundwater table, which is the case for the small wetland inclusion at the Site. The wording of the NER was slightly misleading in that regard, and should instead have stated that the wetland inclusion intercepts the groundwater table and also receives surface water inputs.

JP2G COMMENT #13

6.7.3 Habitat for Species of Conservation Concern: This section states that: "There is no marsh habitat suitable for marsh breeding birds on the Site or in the Study Area." Based on the ELC description of the Cattail Organic Shallow Marsh (MAS3-1) and possibly the Mixed Mineral Shallow Marsh (MAS1) located on the site or in the study area, these communities would be considered to meet the habitat criteria and a discussion on if any of the defining criteria were met, should be included in the report along with any associated mitigation measures.

Response:



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The main ecosites to consider for this habitat type according to the SWHECS (MNRF 2015) are: MAM, SAS, SAM, SAF, FEO and BOO, none of which are present at the Site. MAS communities are only considered marsh breeding bird significant wildlife habitat if green heron is confirmed breeding, according to the SWHECS (MNRF 2015). Although green heron was observed during breeding bird surveys at the Site, it was observed as a fly-over only and no evidence of breeding by this species was confirmed at the Site, despite targeted marsh bird surveys. No other defining criteria for this habitat type per the SWHECS (e.g., presence of breeding by listed species in required numbers) were met despite targeted surveys. Therefore, no significant marsh breeding bird habitat is present at the Site.

JP2G COMMENT #14

7.1 Mitigation: The second paragraph provides mitigation measures for birds. It is recommended that the wording of this paragraph be revised slightly to state that “...unless a nesting survey has been completed by a qualified biologist within 5 days of the woody vegetation removal, and no active nests were observed...” this wording should also be used in section 8.0.

Response:

Cambium recommends that nesting surveys be completed prior to all vegetation clearing, as birds protected under the *Migratory Birds Convention Act* (Canada 1994) nest in herbaceous vegetation as well as woody vegetation. This is why the distinction of “woody vegetation” is not included in the NER. There are no standard times that Environment and Climate Change Canada (ECCC) has identified as being appropriate for conducting nest sweeps prior to clearing; and nests are protected regardless of when nest sweeps were conducted. Cambium recommends nesting surveys be completed within 48 hours of proposed clearing, as birds may construct nests in a very short time period (i.e., less than 5 days). The revised wording “...unless a nesting survey has been completed by a qualified biologist within 48 hours of vegetation removal, and no active nests were observed...” will be added to the Site Plan Notes.



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JP2G COMMENT #15

7.1 Mitigation: Additional mitigation measures should be included such as:

Installing fencing at the limits of the extraction area to prevent turtles and snakes from entering the site while the pit is active and to ensure that no encroachment into the 30 metre buffer areas surrounding the wetlands occurs.

- *A properly installed and maintained permanent exclusion barrier (for example chain-link fencing, plastic or metal sheeting, etc.) should be erected as per the Species at Risk Branch Best Practices Technical Note Reptile and Amphibian Exclusion Fencing Version 1.1 July 2013 at the limits of the extraction area prior to all site preparation and construction activities.*
- *Once the work areas are surrounded by properly dug in fencing and prior to further site alterations, the work areas are to be searched daily for turtles and snakes. Any turtles and snakes observed during the operation of the pit are to be relocated as required to ensure they are not endangered by the construction activities.*
- *The fencing should be regularly inspected and any repairs are to be made as soon as possible, as long as the pit is active.*
- *The fencing can be removed once the pit has been rehabilitated, should the owner wish to do so.*

Response:

An Information Gathering Form was prepared and submitted to the MECP.

Inclusion of turtle exclusion fencing has been incorporated into the Site Plans for the project in cooperation with the MECP, as follows:

Turtle exclusion fencing will be installed around the entirety of Extraction Area 1 and Extraction Area 2 prior to extraction in each area, with openings to allow Site access at the locations shown on the Operations Plan for the proposed pit.

The turtle exclusion fencing will include a “turn-around” at the end of each fencing segment where it meets the openings for the Site entrances / exits, as outlined in the MNR guidance document (<https://www.ontario.ca/page/reptile->



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and-amphibian-exclusion-fencing). The turn-arounds will be curved away from the Site entrances / exits.

Fencing will be suitable for the exclusion of turtles at the Site, and will consist of metal or wooden frame with wire mesh and/or slats. The fencing will be designed to be heavy-duty and suitable for long-term use. Installation methods will follow MNR guidance, including:

- Minimum height of 0.6 m
- Minimum buried depth of 0.1 m
- Place posts 2-3 m apart on the activity side of the fence
- Back-fill and compact soil on both sides
- Install turn-arounds at the ends of each fence segment of at least 0.5 m wide and 2.0 m long
- Install prior to emergence from hibernation to avoid nesting turtles or nests being trapped within the fencing

Inspection / monitoring of the fence by site staff will occur twice annually, once during spring after snow melt and once early summer to facilitate the fence being in good condition during the most active season for turtles. Any deficiencies will be addressed immediately.

JP2G COMMENT #16

7.1 Mitigation: Additional mitigation measures should be included such as:

To ensure that the water quality of the adjacent wetlands, watercourses and Lake and any associated downstream habitat is not adversely affected as a result of the proposed works, the following recommendations should be implemented:

- *The extent of exposed soils is to be kept to a minimum at all times. Progressive revegetation with native trees and shrubs of exposed, non-developed areas is to be achieved as soon as possible.*
- *Erosion and sediment control measures are a critical component of the construction work. Effective sediment and erosion control measures are to be*



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maintained until complete revegetation of disturbed areas is achieved. Silt fencing is to be installed along the edges of the work areas. It is important that fencing is properly dug-in to treat any surface water flow and is maintained as required, including removal of accumulated sediment.

- *Additional mitigation measures to minimize the potential for inputs of sediments and other contaminants into the surrounding surface water features and the environment in general include proper maintenance on construction equipment with respect to refuelling, washing and fluid changes, and proper disposal of fluids, filters and other waste materials. None of this work should take place within 30 metres of any surface water features.*
- *If any water quality issues are noted at any time, work is to stop immediately and measures taken to improve water quality, prior to work continuing to commence.*
- *If the geotechnical work shows a potential impact on the cold water downstream receiving features, then DFO should be consulted.*

Response:

The Water Report (WSP 2022) concluded that water quality of the adjacent wetlands, watercourses and lake and any associated downstream habitat is not expected to be adversely affected by the proposed extraction. The applicant submitted a Request for Project review to DFO so that DFO could review and comment on this conclusion. In a letter dated March 12, 2024, DFO confirmed that no authorization under the *Fisheries Act* is required for this project, and that the applicant's obligations under the *Fisheries Act* have been met.

As it relates to each bullet point above, Cambium offers the following responses:

- Agreed. Progressive rehabilitation will be undertaken as soon as possible, in accordance with an MNR approved rehabilitation plan.
- No portion of the work area lies within 30 m of any surface water feature. If a gradient exists such that discharge to waterbodies could occur during works





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Peterborough



January 10, 2025

at the Site, sediment and erosion control fencing will be implemented. This provision has been added to the Site Plan.

- Agreed. Standard environmental protection measures will be in place at the Site, such as proper maintenance on construction equipment with respect to refuelling, washing and fluid changes, and proper disposal of fluids, filters and other waste materials. No portion of the work area lies within 30 m of any surface water feature.
- Agreed. If any water quality issues are noted at any time, work is to stop immediately and measures taken to improve water quality, prior to work continuing. The water monitoring program included on the Site Plan has been expanded to include water quality parameters.
- Agreed. Temperature monitoring will occur in monitoring wells at the Site (20-3; 20-6; SG-1) to assess water temperature changes that may impact Barber's Lake or Long Sault Creek. DFO will be contacted if issues are identified.

JP2G COMMENT #17

8.0 Summary and Recommendations: The above mitigation measures, as well as any other mitigation measures, should be included in this section as well as Section 8.1 Site Plan Notes.

Response:

Additional measures will be implemented and included in the Site Plan Notes as noted in the response to Comments #14, #15 and #16, and through discussion with relevant agencies (i.e., MNR).

JP2G COMMENT #18

8.1 Site Plan Notes: Little brown myotis, northern myotis and maternity roost habitat for tri-coloured bat, should be added to the significant natural features that have been confirmed on-site.

Response:



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January 10, 2025

This has been added to the Site Plan.

CLOSING

If you have any questions on this letter report, please contact the undersigned.

Best regards,

Cambium Inc.

DocuSigned by:

Fergus Nicoll

AC17126AFF204FA...

Fergus Nicoll Dip.T.
Ecological Specialist

DocuSigned by:

G. Weeks

B52DA9433CDD43E...

Gwendolyn Weeks H.B.Sc.Env.
Senior Ecologist / Senior Project
Manager

FIN/GAW

Encl. *Cambium Qualifications & Limitations*
Attachment 1 – JP2G Peer Review Comment Letter
Attachment 2 – MECP Letter

Copies: *Phil White, Cavanagh*
Neal DeRuyter, MHBC
Mike Dwyer, County of Lanark
Forbes Symon, JP2G

\\cambiumincstorage.file.core.windows.net/projects\19600 to 19699\19681-001 Cavanagh - Highland Ln\Deliverables\Agency Comments\NER Peer Reviewer\2025-01-10 - Cambium_JP2G_NER Response.docx



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CAMBIUM QUALIFICATIONS AND LIMITATIONS

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A site assessment is created using data and information collected during the investigation of a site and based on conditions encountered at the time and particular locations at which fieldwork is conducted. The information, sample results and data collected represent the conditions only at the specific times at which and at those specific locations from which the information, samples and data were obtained and the information, sample results and data may vary at other locations and times. To the extent that Cambium's work or report considers any locations or times other than those from which information, sample results and data was specifically received, the work or report is based on a reasonable extrapolation from such information, sample results and data but the actual conditions encountered may vary from those extrapolations.

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Jp2g Consultants Inc.

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Jp2g No. 20-7064K

November 15, 2023

County of Lanark
99 Christie Lake Road
Perth, ON K7H 3C6

Attention: Koren Lam

**Re: EIS Peer Review – Highland Line Pit
Part Lot 5, Concession 10,
Township of Lanark Highlands
County of Lanark
County File No. 0940-OP-23004 - Highland Pit OPA**

Dear Koren:

I have reviewed the report titled: *Natural Environment Report, Proposed Highland Line Pit, Lanark County, Ontario, dated December 12, 2022, prepared by Golder Associated Ltd.* and provide the following comments as they relate to the Natural Heritage Policies of the PPS, the Natural Heritage Policies of the County of Lanark Sustainable Communities Official Plan as well as the Landform Specific Policies of the Township of Lanark Highlands Official Plan.

In addition to our comments, the Ministry of the Environment, Conservation and Parks (MECP) have also provided comments on the report which are attached at the end of this letter.

2.6 County of Lanark

- Schedule B to the Official Plan, designates a portion of the site along Highland Line and Anderson Lane as a significant groundwater recharge area. This should be identified in the report and the impacts of the proposed pit on the groundwater recharge area and associated water quality should be discussed in the report.

4.3 Field Surveys

- It is noted that field surveys were conducted in 2020 according to various protocols, however it would be beneficial to include information for each survey such as search effort, weather conditions etc. in the report.
- It appears that only the results of the plant community survey and breeding bird survey were included in the report. The results of the other surveys carried out at the site (i.e. amphibian, bat habitat, turtle surveys etc.) should also be included in the report.

4.4.1 Ecological Land Classification

- The report states that: *"...the Site and visible portions of the Study Area were assessed using the Ecological Land Classification (ELC) standard protocols (Lee et al. 1998) to map the plant communities."*
 - An updated version of the ELC Tables (2008) for the Ecological Land Classification for Southern Ontario is available and should be used in the future, rather than the 1998 tables.
 - In the future, wetland communities should be delineated according to the 2022 Ontario Wetland Evaluation System Manuals prepared by MNRF, rather than the ELC protocol.

4.5.3.1 Bat Surveys

- This section states that: "...a survey for suitable roost trees was performed...". If this survey was completed according to a survey protocol, it should be referenced in this section.

5.5.2 Birds

- Barn swallow has recently been listed from a threatened species to a species of special concern. The relevant sections of the report could be updated for clarity.

5.5.3.1 Bats

- The bat detector stations should be labelled on Figure 1 for clarity.
- Section 4.5.3.1 states that: "concurrent with day-time surveys in April and May, a survey for suitable roost trees was performed, and included searching for trees with suitable cavities, cracks, peeling bark, presence of squirrel nests or dead, retained leaf clusters. Trees that were deemed to provide potential suitable maternity roosting habitat were inspected for any visual signs of bats (e.g., guano)." The results from this survey should be included in this section of the report, however it is noted in Section 6.7.1 that the site does not meet the >10/ha large wildlife trees to be considered significant bat maternity roost habitat.

6.1 Habitat of Endangered or Threatened Species

Little Brown Myotis, Northern Myotis and Tri-Coloured Bat Heading

- This section states that there is a potential tri-coloured bat (endangered) maternity roost habitat in the vicinity of station 2 and has been included in a Natural Environment Exclusion Area. Given the isolated nature of this roosting habitat post development, together with the extraction activities occurring adjacent to this feature, loss of forest cover leading to this maternity colony, as well as loss of meadow and wetland habitat for foraging habitat, it is recommended that an Information Gathering Form be filed with MECP for review/approval.

Blanding's Turtle Heading

- The last sentence of the first paragraph states that "All wetlands on the Site, including a 30 m buffer, are excluded from the extraction area...". However, based on Figure 2, the small wetland/pond area as described previously in the report, has not been excluded from the extraction area. Impacts on this feature and if it is considered to be Blanding's Turtle habitat, should be discussed in the report.
- It is also recommended that a figure be added to the report to show the Blanding's Turtle habitat on site.

6.2 Significant Wetlands and Coastal Wetlands

- The last sentence of the second paragraph states that: "...wetlands will be buffered from extraction by a 30 m setback (Figure 2), so there will be no physical intrusion into the wetlands.". However, looking at Figure 2, the small wetland/pond area as described previously in the report has not been excluded from the extraction area and will be impacted by the extraction activities. Impacts on this feature should be discussed in the report and as required, appropriate compensation should be recommended for removal of the small wetland/pond area.

6.3 Fish Habitat

- Reference should be made in this section that Long Sault Creek is a cold water creek and impacts on the water temperature of the creek as a result of the proposed development should also be discussed.

6.7.1 Seasonal Concentration Areas

- At the bottom of page 21 of the report, it states that: "Colonially nesting tree / shrub breeding habitats consist of heronries, while colonially nesting ground bird breeding habitat consist of rocky islands and peninsulas where species such as gulls and terns nest. No such habitats are present on the Site." . A review of the NHIC database shows that there is a mixed wader nesting colony documented in the grid cells that cover the subject lands. This should be discussed in the report.

- The report states that: *“Based on the field surveys, no portions of the Site provide the necessary number (>10/ha) of large (>25cm DBH) wildlife trees to be considered significant bat maternity roost habitat...”*. Based on the acoustic surveys carried out at the property, there is suitable maternity roost habitat on site and therefore the identified Natural Environment Exclusion Area should be considered significant wildlife habitat. The report should be updated accordingly.

6.7.2 Rare Vegetation Communities or Specialized Habitats for Wildlife

Specialized Habitats for Wildlife Heading

- It is understood that seeps were noted on site but are in the wetland area and won't be impacted by the development, but the small pond feature which is also associated with a groundwater seepage area, will be impacted as the extraction activities will occur in this area. The impact of the proposed development this feature should be discussed in the report and the report should include mitigation measures to be implemented when removing this feature.

6.7.3 Habitat for Species of Conservation Concern

- This section states that : *“There is no marsh habitat suitable for marsh breeding birds on the Site or in the Study Area.”* Based on the ELC description of the Cattail Organic Shallow Marsh (MAS3-1) and possibly the Mixed Mineral Shallow Marsh (MAS1) located on the site or in the study area, these communities would be considered to meet the habitat criteria and a discussion on if any of the defining criteria were met, should be included in the report along with any associated mitigation measures.

7.1 Mitigation

- The second paragraph provides mitigation measures for birds. It is recommended that the wording of this paragraph be revised slightly to state that *“...unless a nesting survey has been completed by a qualified biologist within 5 days of the woody vegetation removal, and no active nests were observed...”* this wording should also be used in section 8.0.
- Additional mitigation measures should be included such as:
 - Installing fencing at the limits of the extraction area to prevent turtles and snakes from entering the site while the pit is active and to ensure that no encroachment into the 30 metre buffer areas surrounding the wetlands occurs.
 - A properly installed and maintained permanent exclusion barrier (for example chain-link fencing, plastic or metal sheeting, etc.) should be erected as per the Species at Risk Branch Best Practices Technical Note Reptile and Amphibian Exclusion Fencing Version 1.1 July 2013 at the limits of the extraction area prior to all site preparation and construction activities.
 - Once the work areas are surrounded by properly dug in fencing and prior to further site alterations, the work areas are to be searched daily for turtles and snakes. Any turtles and snakes observed during the operation of the pit are to be relocated as required to ensure they are not endangered by the construction activities.
 - The fencing should be regularly inspected and any repairs are to be made as soon as possible, as long as the pit is active.
 - The fencing can be removed once the pit has been rehabilitated, should the owner wish to do so.
 - To ensure that the water quality of the adjacent wetlands, watercourses and Lake and any associated downstream habitat is not adversely affected as a result of the proposed works, the following recommendations should be implemented:
 - The extent of exposed soils is to be kept to a minimum at all times. Progressive re-vegetation with native trees and shrubs of exposed, non-developed areas is to be achieved

as soon as possible.

- Erosion and sediment control measures are a critical component of the construction work. Effective sediment and erosion control measures are to be maintained until complete revegetation of disturbed areas is achieved. Silt fencing is to be installed along the edges of the work areas. It is important that fencing is properly dug-in to treat any surface water flow and is maintained as required, including removal of accumulated sediment.
 - Additional mitigation measures to minimize the potential for inputs of sediments and other contaminants into the surrounding surface water features and the environment in general include proper maintenance on construction equipment with respect to refuelling, washing and fluid changes, and proper disposal of fluids, filters and other waste materials. None of this work should take place within 30 metres of any surface water features.
 - If any water quality issues are noted at any time, work is to stop immediately and measures taken to improve water quality, prior to work continuing to commence.
- If the geotechnical work shows a potential impact on the cold water downstream receiving features, then DFO should be consulted.

8.0 Summary and recommendations

- The above mitigation measures, as well as any other mitigation measures, should be included in this section as well as Section 8.1 Site Plan Notes.

8.1 Site Plan Notes

- Little brown myotis, northern myotis and maternity roost habitat for tri-coloured bat, should be added to the significant natural features that have been confirmed on-site.

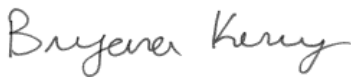
Conclusion:

Provided the above information is included in the report and all recommendations and mitigation measures are properly implemented, negative impacts on SAR, SAR habitat, wetlands and significant wildlife habitat can be mitigated for the proposed development. However, given the nature of the proposed development and the identified habitat for SAR on/adjacent to the site, as per MECP's comments, it is recommended that an Information Gathering Form (IGF) be filed with the MECP and that any required authorizations be obtained.

Yours truly,

Jp2g Consultants Inc.

Engineers • Planners • Project Managers



Bryana Kenny, B.Sc. (Hons.)

Biologist | Planner

From: [Gwendolyn Weeks](#)
To: [Gwendolyn Weeks](#)
Subject: FW: Highland Line Pit 626599 - ARA Notification and Consultation
Date: December 19, 2024 2:20:03 PM
Attachments: [image005.png](#)

From: Norman, Brandan (MECP) <Brandan.Norman@ontario.ca>
Sent: April 26, 2024 10:18 AM
To: Neal DeRuyter <nderuyter@mhbcplan.com>
Cc: 'Phil White' <PWhite@thomascavanagh.ca>; Vince Deschamps <vdeschamps@mhbcplan.com>; Chelsea Major <cmajor@mhbcplan.com>; Teitler, Melanie (She/Her) (MNRF) <Melanie.Teitler@ontario.ca>; Gwendolyn Weeks <Gwendolyn.Weeks@cambium-inc.com>; Fergus Nicoll <Fergus.Nicoll@cambium-inc.com>
Subject: RE: Highland Line Pit 626599 - ARA Notification and Consultation

Hi Neal,

Thank you for providing responses to my comments concerning the Highland Line Pit. Please see the below response acknowledging your mitigation measures are likely sufficient and no authorization is required.

The Ministry of the Environment, Conservation and Parks (MECP) has reviewed Highland Line Pit application submitted by Golder and Associates, and later Cambium, on behalf of the Proponent Thomas Cavanagh Construction Limited, to assess the potential impacts of the proposal on Species at Risk protected under the *Endangered Species Act, 2007* (ESA).

Based on the ministry's review of the project documentation and information that has been provided, the conclusions that that neither sections 9 nor 10 of the ESA will be contravened for species identified above appear reasonable and valid and therefore authorization is not required.

Should any of the project activities change, please notify MECP immediately to obtain advice on whether the changes require authorization under the ESA. Failure to carry out these activities as described could potentially result in contravention of the ESA. Further, it is recommended that Thomas Cavanagh Construction Limited continue to monitor for Species at Risk while carrying out the activities to document changes, in the event that there should be any. The proponent remains responsible for ensuring compliance with the ESA and may be subject to prosecution or other enforcement action if activities result in any harm to an at-risk species or habitat.

The ministry's position here is based on the information that has been provided to MECP by the Proponent and your project team. Should information not have been made available and considered in MECP's review or new information come to light that changes the conclusions made, or if on-site conditions and circumstances change so as to alter the basis for the conclusions, please contact the Species at Risk Branch as soon as possible to discuss next steps.

We also note that while it does not appear that an ESA authorization will be required, the proposed activities may be subject to other approvals, such as those issued by local municipalities and conservation authorities. Please be advised that it is the responsibility of the Proponent to be aware of and comply with all other relevant provincial or federal requirements, municipal by-laws or required approvals from other agencies. It is also the responsibility of the Proponent to ensure that all required approvals are obtained and relevant policies adhered to.

Regards,
Brandan

Brandan Norman

Management Biologist | Species at Risk Branch
Ministry of the Environment, Conservation & Parks | Ontario Public Service
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