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January 10, 2025

Thomas Cavanagh Construction Limited  
9094 Cavanagh Road  
Ashton, Ontario  
K0A 1B0

Attn: Phil White, Quality Control Manager

**Re: Response to Comments from Mark Heaton, Ecologist – Proposed Highland Line Pit Natural Environment Report, Township of Lanark Highlands, Ontario (Aggregate Resources Act Application #626599)  
Cambium Reference: 19681-001**

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Dear Mr. White:

On June 8, 2023, the Friends of Lanark Highlands submitted to the Township of Lanark Highlands a “Preliminary Ecological Opinion” undertaken by Mr. Mark Heaton which provided review comments on the Natural Environment Report (NER; WSP/Golder 2022) prepared as part of the proposed Highland Line Pit application under the *Aggregate Resources Act* (Ontario 1990). Mr. Heaton’s review was performed on behalf of the Friends of Lanark Highlands. The Township of Lanark Highlands directed Cavanagh to respond to this review.

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 is to respond to the comments provided by Mr. Heaton as they relate to the NER. The comments provided by Mr. Heaton are provided in Attachment A to this letter, and are presented below in italics followed by Cambium’s responses.

**Mr. Heaton Comment #1**

*I. Unevaluated wetlands should be evaluated by an OWES certified evaluator as part of the Natural Environment Report (NER) prior to applying for a licence under the Aggregate Resources Act and municipal application for official plan and/or zoning by-law amendments. As per the Natural Heritage Reference Manual (Section 6.1.1, page 60), unevaluated wetlands should be evaluated where significant species or functions have been identified: “Not all wetlands*



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*have been evaluated. For a wetland that is unevaluated but has characteristics or contains components that are typical of a significant wetland (e.g., significant species or functions), the planning authority should ensure that a wetland evaluation is undertaken (e.g., a stand-alone evaluation or as part of an EIS by the proponent, unless MNR has already identified the wetland as a work project) prior to processing any planning approvals. The planning authority should ensure that all evaluated and unevaluated wetlands are mapped and identified as part of an EIS (see section 13.2).” The planning authority (Township of Lanark Highlands) should be directing the applicant to undertake the wetland evaluation as part of the Planning Act approvals process.*

*II. Several hydrologically connected wetlands, not identified in the Natural Environment Report but clearly identified in the Level 1 and 2 Archaeology Report (Duncan Pit), have been omitted from the wetland constraint mapping. These wetlands are associated with groundwater seepage areas. Wetlands in the vicinity support a provincially threatened species. The NER was insufficient in surveying and assessing of the subject lands in relation to potential habitat use, omitting several qualified wetlands from their constraint mapping.*

**Response:**

I. The Ministry of Natural Resources (MNR) has reviewed the NER and has not requested that the unevaluated wetlands at the Site be evaluated according to OWES and have instead accepted WSP’s approach of treating the wetlands as significant and buffering them as such. This is a common and acceptable approach on *Aggregate Resource Act* applications.

II. Archaeological reports are not suitable sources of wetland mapping. No wetlands on Site meeting the definition of a wetland per the OWES (MNR 2022), hydrologically connected or otherwise, were missed in the NER. There are standard size requirements that must be met when conducting vegetation mapping, including wetland mapping. Size is directly related to wetland function, with larger wetlands generally being linked to higher diversity, and other wetland functions (MNR 2022). The two standard vegetation mapping protocols implemented in Ontario both have minimum sizes: 2.0 hectares (ha) under



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OWES (MNR 2022) and 0.5 ha under Ecological Land Classification (ELC) (Lee et al. 1998). The small low-lying areas identified in the archaeology report range in size from approximately 0.1 to 0.26 ha, and therefore do not meet the general size criteria to be mapped as individual plant communities. Further, the very small areas referred to in the archaeology report are hydrologically isolated, heavily influenced by edge effect, and do not contain any features or functions that would justify their inclusion in wetland mapping. During field surveys completed for the NER it was evident that these inclusions are hydrologically disconnected from each other and other wetlands or other surface water features on the Site. They are in relatively deep low points in topography, where they seem to collect primarily surface water run-off in early spring. During field investigations conducted over multiple site visits for the NER, very little water was present in these features, and they were primarily dry, or just with saturated substrate, from mid-spring onward. No frogs or other amphibians or reptiles were observed in them, no other notable species were observed using them, and no notable function was identified to justify inclusion as a separate, mapped plant community.

Refer to the response to Comment #2 for discussion on Species at Risk.

### Mr. Heaton Comment #2

*Species at risk presence and value of habitats on the subject lands inappropriately identified and assessed. Blanding's Turtle, a provincially threatened species, has been observed entering and exiting the subject lands. The Survey Protocol for Blanding's Turtle (OMNRF, 2015) provides clear direction for presence/absence surveys. Environmental conditions and search effort at the time of surveys was not presented in the NER, therefore it is unknown as to whether there was reasonable likelihood of detection. Several wetland units, associated with groundwater seepage, were dismissed in favour of aggregate extraction. A small wetland unit in FOM2-2 has suitable habitat for this species. Adjacent groundwater seepage areas may also be suitable. As per the General Habitat Description, these wetlands should be included as Category 2 as they qualify:*



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*“Suitable habitat for Blanding’s Turtles during the active season includes a variety of wetlands such as marsh, swamps, ponds, fens, bogs, slow-flowing streams, shallow bays of lakes or rivers, as well as graminoid shallow marsh and slough forest habitats that are adjacent to larger marsh complexes (Joyal et al. 2001, Gillingwater 2001, Gillingwater and Piraino 2004, 2007, Congdon et al. 2008, Edge et al. 2010; Seburn 2010). Suitable wetlands used during the active season are typically eutrophic (mineral or organic nutrientrich), shallow with a soft substrate composed of decomposing materials, and often have emergent vegetation, such as water lilies and cattails (COSEWIC 2005, Congdon et al. 2008).”*

*Furthermore, Category 3 habitat should have been identified in the NER and supported through observations of animal movements between wetlands. Category 3 habitat includes essential movement corridors of up to 500 m between wetlands, which will encompass the areas that are most likely to be used for overland movement between Category 1 and Category 2 habitats (MECP, 2021). The use of ecopassages should be considered where Blanding’s turtle are at risk of road mortality.*

**Response:**

The Ministry of Environment, Conservation and Parks (MECP) has reviewed the NER, an Information Gathering Form (IGF) and additional mitigation measures provided by WSP and Cambium, and is satisfied that the proposed application does not require permitting under the ESA.

Additional mitigation measures include turtle exclusion fencing around the extraction areas, which has been included on the Site Plan. 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, as outlined in MNR guidance (<https://www.ontario.ca/page/reptile-and-amphibian-exclusion-fencing>). The turn-arounds will be curved away from the Site entrances.



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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.

Category 2 and 3 habitat was identified for this species on the Site, as discussed in the NER (Section 6.1).





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**Mr. Heaton Comment #3**

*Significant Wildlife Habitat (SWH) assessments were incomplete and misleading. There is a clear process defined in the Natural Heritage Reference Manual (Figure 9.1). Step 3 of the process relies on Ecological Land Classification mapping for determining candidate SWH. Step 4 relies on field studies and other sources of information to determine confirmed SWH based on Ecoregion 5E criteria. Detailed results of field studies were not included in the NER. Amphibian call counts were absent. ELC associations with candidate SWH were not completed. Therefore, the NER did not follow the defined assessment process.*

**Response:**

A complete description of all methods for all surveys performed by WSP, and the data which feed into the assessment of SWH in accordance with the criteria set out in the Significant Wildlife Habitat Criteria Schedules (SWHCS), is provided in the NER (Section 4.0). The SWHCS identifies various types of surveys to be conducted *only when* habitat criteria (i.e., candidate SWH) are present. Where habitat criteria was present at the Site, based on WSP’s expert review of habitats in the field and supplemental desktop spatial analysis, targeted surveys were performed in accordance with the SWHCS recommendations (e.g., amphibian call-counts, breeding bird surveys, turtle basking surveys, etc.) as outlined in the NER. The MNR are responsible for SWH, and are reviewing the NER.





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January 10, 2025


**Closing**

We trust that this information meets your current needs. If you have any questions, please contact the undersigned.

Best regards,

**Cambium Inc.**

DocuSigned by:  
  
 AC17126AFF204FA...  
 Fergus Nicoll Dip.T.  
 Ecological Specialist

DocuSigned by:  
  
 B52DA9433CDD43E...  
 Gwendolyn Weeks H.B.Sc.Env.  
 Senior Ecologist / Senior Project  
 Manager

FIN/GAW

Encl. *Cambium Qualifications & Limitations*  
*Attachment A – M. Heaton Comment Letter*

\\cambiumincstorage.file.core.windows.net\projects\19600 to 19699\19681-001 Cavanagh - Highland Ln\Deliverables\Agency Comments\Comm Group\Mark Heaton\2025-01-10 - RPT M Heaton Responses\_Cav Highland Line.docx





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## CAMBIUM QUALIFICATIONS AND LIMITATIONS

### Limited Warranty

In performing work on behalf of a client, Cambium relies on its client to provide instructions on the scope of its retainer and, on that basis, Cambium determines the precise nature of the work to be performed. Cambium undertakes all work in accordance with applicable accepted industry practices and standards. Unless required under local laws, other than as expressly stated herein, no other warranties or conditions, either expressed or implied, are made regarding the services, work or reports provided.

### Reliance on Materials and Information

The findings and results presented in reports prepared by Cambium are based on the materials and information provided by the client to Cambium and on the facts, conditions and circumstances encountered by Cambium during the performance of the work requested by the client. In formulating its findings and results into a report, Cambium assumes that the information and materials provided by the client or obtained by Cambium from the client or otherwise are factual, accurate and represent a true depiction of the circumstances that exist. Cambium relies on its client to inform Cambium if there are changes to any such information and materials. Cambium does not review, analyze or attempt to verify the accuracy or completeness of the information or materials provided, or circumstances encountered, other than in accordance with applicable accepted industry practice. Cambium will not be responsible for matters arising from incomplete, incorrect or misleading information or from facts or circumstances that are not fully disclosed to or that are concealed from Cambium during the provision of services, work or reports.

Facts, conditions, information and circumstances may vary with time and locations and Cambium's work is based on a review of such matters as they existed at the particular time and location indicated in its reports. No assurance is made by Cambium that the facts, conditions, information, circumstances or any underlying assumptions made by Cambium in connection with the work performed will not change after the work is completed and a report is submitted. If any such changes occur or additional information is obtained, Cambium should be advised and requested to consider if the changes or additional information affect its findings or results.

When preparing reports, Cambium considers applicable legislation, regulations, governmental guidelines and policies to the extent they are within its knowledge, but Cambium is not qualified to advise with respect to legal matters. The presentation of information regarding applicable legislation, regulations, governmental guidelines and policies is for information only and is not intended to and should not be interpreted as constituting a legal opinion concerning the work completed or conditions outlined in a report. All legal matters should be reviewed and considered by an appropriately qualified legal practitioner.

### Site Assessments

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.

Only conditions at the site and locations chosen for study by the client are evaluated; no adjacent or other properties are evaluated unless specifically requested by the client. Any physical or other aspects of the site chosen for study by the client, or any other matter not specifically addressed in a report prepared by Cambium, are beyond the scope of the work performed by Cambium and such matters have not been investigated or addressed.

### Reliance

Cambium's services, work and reports may be relied on by the client and its corporate directors and officers, employees, and professional advisors. Cambium is not responsible for the use of its work or reports by any other party, or for the reliance on, or for any decision which is made by any party using the services or work performed by or a report prepared by Cambium without Cambium's express written consent. Any party that relies on services or work performed by Cambium or a report prepared by Cambium without Cambium's express written consent, does so at its own risk. No report of Cambium may be disclosed or referred to in any public document without Cambium's express prior written consent. Cambium specifically disclaims any liability or responsibility to any such party for any loss, damage, expense, fine, penalty or other such thing which may arise or result from the use of any information, recommendation or other matter arising from the services, work or reports provided by Cambium.

### Limitation of Liability

Potential liability to the client arising out of the report is limited to the amount of Cambium's professional liability insurance coverage. Cambium shall only be liable for direct damages to the extent caused by Cambium's negligence and/or breach of contract. Cambium shall not be liable for consequential damages.

### Personal Liability

The client expressly agrees that Cambium employees shall have no personal liability to the client with respect to a claim, whether in contract, tort and/or other cause of action in law. Furthermore, the client agrees that it will bring no proceedings nor take any action in any court of law against Cambium employees in their personal capacity.





## Preliminary Ecological Opinion

### PROPOSED HIGHLAND LINE PIT

Lanark County

Proponent: Thomas Cavanagh Construction Limited

The following documents were reviewed in relation to the above noted proposal:

- 1) Proposed Site Plan dated March 13, 2023
- 2) Natural Environment Report dated December 12, 2022
- 3) Level 1 and Level 2 Water Report dated December 2022
- 4) Level 1 and Level 2 Archaeology Report (Duncan Pit Property) dated October 5, 2020

Three issues identified in the review:

**1. Unevaluated wetlands should be evaluated by an OWES certified evaluator as part of the Natural Environment Report (NER) prior to applying for a licence under the Aggregate Resources Act and municipal application for official plan and/or zoning by-law amendments.**

- As per the [Natural Heritage Reference Manual](#) (Section 6.1.1, page 60), unevaluated wetlands should be evaluated where significant species or functions have been identified:

“Not all wetlands have been evaluated. For a wetland that is unevaluated but has characteristics or contains components that are typical of a significant wetland (e.g., significant species or functions), the planning authority should ensure that a wetland evaluation is undertaken (e.g., a stand-alone evaluation or as part of an EIS by the proponent, unless MNR has already identified the wetland as a work project) prior to processing any planning approvals. The planning authority should ensure that all evaluated and unevaluated wetlands are mapped and identified as part of an EIS (see section 13.2).”

- The planning authority (Township of Lanark Highlands) should be directing the applicant to undertake the wetland evaluation as part of the Planning Act approvals process.
- Several hydrologically connected wetlands, not identified in the Natural Environment Report but clearly identified in the Level 1 and 2 Archaeology Report (Duncan Pit), have been omitted from the wetland constraint mapping. These wetlands are associated with groundwater seepage areas.
- Wetlands in the vicinity support a provincially threatened species. The NER was insufficient in surveying and assessing of the subject lands in relation to

potential habitat use, omitting several qualified wetlands from their constraint mapping.

## **2. Species at risk presence and value of habitats on the subject lands inappropriately identified and assessed.**

- Blanding's Turtle, a provincially threatened species, has been observed entering and exiting the subject lands. The Survey Protocol for Blanding's Turtle (OMNRF, 2015) provides clear direction for presence/absence surveys. Environmental conditions and search effort at the time of surveys was not presented in the NER, therefore it is unknown as to whether there was reasonable likelihood of detection.
- Several wetland units, associated with groundwater seepage, were dismissed in favour of aggregate extraction. A small wetland unit in FOM2-2 has suitable habitat for this species. Adjacent groundwater seepage areas may also be suitable. As per the [General Habitat Description](#), these wetlands should be included as Category 2 as they qualify:

“Suitable habitat for Blanding's Turtles during the active season includes a variety of wetlands such as marsh, swamps, ponds, fens, bogs, slow-flowing streams, shallow bays of lakes or rivers, as well as graminoid shallow marsh and slough forest habitats that are adjacent to larger marsh complexes (Joyal et al. 2001, Gillingwater 2001, Gillingwater and Piraino 2004, 2007, Congdon et al. 2008, Edge et al. 2010; Seburn 2010). Suitable wetlands used during the active season are typically eutrophic (mineral or organic nutrient-rich), shallow with a soft substrate composed of decomposing materials, and often have emergent vegetation, such as water lilies and cattails (COSEWIC 2005, Congdon et al. 2008).”

- Furthermore, Category 3 habitat should have been identified in the NER and supported through observations of animal movements between wetlands. Category 3 habitat includes essential movement corridors of up to 500 m between wetlands, which will encompass the areas that are most likely to be used for overland movement between Category 1 and Category 2 habitats (MECP, 2021). The use of ecopassages should be considered where Blanding's turtle are at risk of road mortality.

## **3. Significant Wildlife Habitat (SWH) assessments were incomplete and misleading.**

- There is a clear process defined in the Natural Heritage Reference Manual (Figure 9.1). Step 3 of the process relies on Ecological Land Classification mapping for determining candidate SWH. Step 4 relies on field studies and other sources of information to determine confirmed SWH based on Ecoregion 5E criteria. Detailed results of field studies were not included in the NER. Amphibian call counts were absent. ELC associations with

candidate SWH were not completed. Therefore, the NER did not follow the defined assessment process.

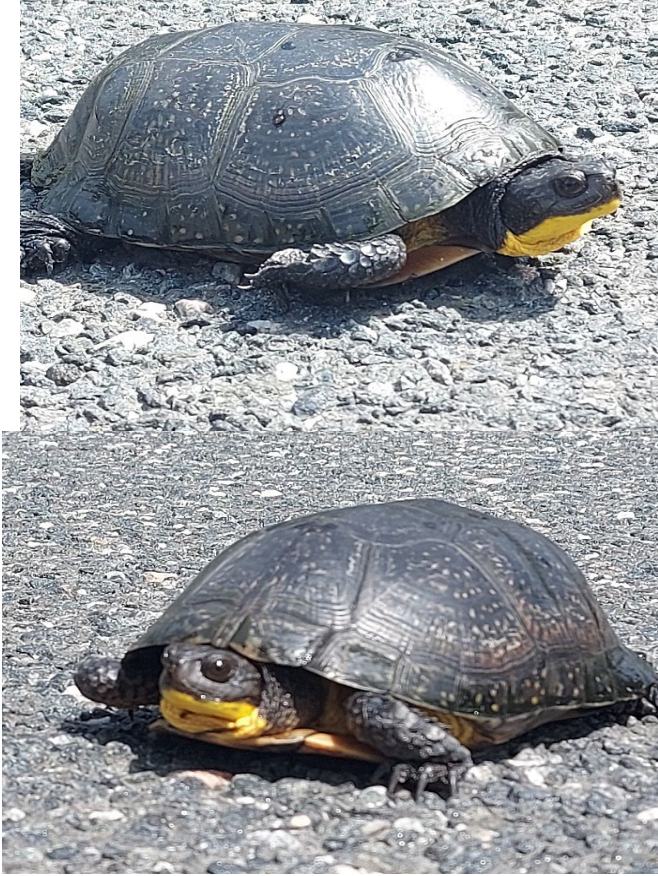
A handwritten signature in black ink, appearing to read 'M. Heaton', with a stylized flourish at the end.

Mark Heaton  
Ecologist  
June 5, 2023



**PICTURE**

**LOCATION**



Crossing road from wetlands between Leo Jay Lane and Entrance 1 of proposed pit. Had to stop 3 gravel trucks, so they would not hit him. Came from south side of Highland Line heading towards the north side, 2 gravel trucks passed slowly by my guidance. Turtle turned around and headed back to where he came from and 3rd gravel truck came and I had to stop him as he could not pass safely.

May 12th, 2023 @ 2:53 pm



Showing the Blanding Turtle in front of the wetlands. Wetlands part of proposed aggregate site - Cavanagh Construction.

May 12th, 2023 @ 3:06 pm



Showing the Blanding Turtle off the road. Note\* the hydro pole in the background is right before Entrance 1 to the proposed pit! Marked with red arrow. Approx 100m away

May 12th, 2023 @ 3:06 pm