

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 be 'M. Heaton', written in a cursive style.

Mark Heaton
Ecologist
June 5, 2023