

October 19, 2023

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Planning, Development and Legislative Services
Regional Municipality of Waterloo
150 Frederick St.
Kitchener, ON
N2G 4J3

Attention: Mr. Matthew Colley
Senior Planner

**RE: Edworthy West Pit, Township of North Dumfries
Natural Environment Technical Report and Environmental Impact Study -
Peer Review**

Natural Resource Solutions Inc. (NRSI) was retained by the Regional Municipality of Waterloo to undertake a peer review of a Natural Environment Technical Report (NETR) and Environmental Impact Study (EIS) prepared by Goodban Ecological Consulting Inc. (GEC), as well as additional application materials, for the proposed Edworthy West Pit aggregate development in the Township of Dumfries ("proposed development"). The proposed development is located at Spragues Road and Greenfield Road (Part of Lots 16-18, Concession 9), in the Township of North Dumfries ("subject property").

The reviewed materials were submitted by Cambridge Aggregates Ltd. ("the proponent") under a Township of North Dumfries Zoning By-Law Amendment Application, Aggregate Resources Act Licence Application, and Planning Act application in January 2023. These materials were prepared and submitted and are herein referred to collectively as the "Application". NRSI staff provided review comments on the Application on June 27, 2023. These comments recommended additional steps to address natural heritage policies relevant to the proposed development, expand the proposed restoration measures and demonstrate that negative impacts to natural heritage features will be avoided. GEC has submitted a response letter addressing comments made in the June 2023 peer review, as well as a Butternut Health Assessment ("BHA"). NRSI staff have reviewed these materials at the request of Region of Waterloo planning staff. Our comments are set out below.

Tasks Completed

In order to complete this assignment, NRSI reviewed the following materials:

- Response to NRSI's June 27, 2023, Peer Review Letter Report on the Natural Environment Technical Report and Environmental Impact Statement for the Proposed Edworthy West Pit. Prepared by Goodban Ecological Consulting Inc. August 3 2023; and
- Butternut Health Assessment - Township of North Dumfries - ARA Licence Application #626603 - "Edworthy West Pit". Prepared by Goodban Ecological Consulting Inc. September 6 2023.

Staff of GEC (Anthony Goodban), and NRSI (Jack Richard and Hashveenah Manoharan) attended a site meeting on May 30th, 2023 to review the subject property and on-site features. Review comments provided in both this letter and the previous June 2023 peer review letter are

based on a desktop review of the above-described materials, aerial imagery, available natural heritage information for the subject property and surrounding lands, and findings from the site visit.

Comments

The response letter prepared by GEC addresses each of the initial peer review comments provided by NRSI staff on June 27 2023. While the initial peer review letter stated that these comments may be addressed through the submission of an updated NETR and EIS, GEC has identified that the comments and recommendations provided may be effectively addressed within the response letter and by making minor updates to the Site/Operation Plans for the proposed development. NRSI staff are in agreement with this and supportive of this approach.

At this time, it is our opinion that the majority of the peer review comments provided in NRSI's June 27 2023 letter have been adequately addressed through the comments provided by GEC and updates proposed to the Site/Operation Plans. Initial review comments that have been addressed and require no further discussion have not been referenced within this letter.

NRSI staff provided a variety of comments related to Species at Risk (SAR) that had been identified within the subject property or as having potential to occur within the subject property in the NETR and EIS. Regarding SAR bats, NRSI's June 2023 letter requested explanation be provided as to why Tri-coloured Bat (*Perimyotis subflavus*) was not considered within the bat habitat assessment made within the NETR and EIS. The response letter provided by GEC adequately addresses this comment and details that potential impacts to this species and its habitat are considered unlikely to occur as a result of the proposed development based on the lack of suitable habitat within the subject property and use of a tree removal timing window that will ensure trees that may provide habitat for bat will not be removed during the bat active period. GEC has demonstrated that this mitigation measure is consistent with MECP guidance and NRSI staff are in agreement that the rationale and mitigation measures proposed will effectively avoid adverse impacts to potential SAR bats and bat habitat within the subject property.

NRSI's June 2023 review letter commented that a Butternut Health Assessment should be completed in order to categorize the health of the identified Butternut (*Juglans cinera*) within the subject property in accordance with the Butternut Assessment Guidelines (2021). As identified in the letter prepared by GEC, a BHA was completed by GEC on July 24, 2023. The results of the BHA have been summarized within the response letter while the full BHA and correspondence from the MECP have also been made available for review. Based on our review of these materials, it is our opinion that the BHA and proposed approach to address Butternut within the subject property are appropriate. Correspondence with the MECP provided by GEC also confirms their support for the proposed approach and states that no authorization will be needed under the *Endangered Species Act, 2007*.

NRSI staff had recommended that an Ecological Monitoring Plan be prepared by GEC in order to clearly identify the timing and frequency of each type of monitoring associated with the proposed restoration activities, target plant survivorship, thresholds for further management action, and specifications on the submission of these monitoring reports. The response letter prepared by GEC acknowledges this comment but instead proposes that these ecological monitoring details be outlined within the Site/Operation Plans for the proposed pit, rather than put forth in a separate Ecological Monitoring Plan. Specifically, the letter identifies that the Site/Operation Plans will be updated to state that photo-plot monitoring will be completed within the restoration areas twice per year during the growing season and that monitoring will include

an assessment of plant survivorship, in addition to a general assessment and the collection of site photos. The letter also identifies that the survivorship target for woody plantings is for 65% of plantings to achieve a “free-to-grow” condition and that species substitutions may be made if the planted materials are found to exhibit high mortality. It is our opinion that this survival target is both realistic and appropriate. Finally, GEC identifies that: “Upon commencement of ecological enhancement activities, a biennial ecological monitoring report shall be completed... no later than June 30 following the end of the second year.” The letter further describes that this report will detail the restoration activities completed during the two preceding years and demonstrate the successful implementation of the Ecological Enhancement Plan & Rehabilitation Plan provided in the NETR and EIS.

Overall, NRSI staff are in agreement with the approach proposed in GEC’s response letter and support the identification of restoration details within the Site/Operation Plans as opposed to the creation of a separate Ecological Monitoring Plan. It is anticipated that the incorporation of these monitoring requirements into the Site/Operation Plans will adequately guarantee their completion. It is recommended that consideration be given to extending the monitoring period from 2 to 5 years post-planting in order to more effectively evaluate whether the desired vegetation communities have successfully established within the subject property. It is our opinion that monitoring could be completed in Year 1, 3 and 5, rather than on an annual basis for a 2-year period. This would result in the overall monitoring effort only slightly increasing, but allow for longer period of monitoring to be completed. The results of monitoring should be used to inform adaptive management decisions such as plant replacement or species substitution in order to ensure the success of the restoration area, as proposed by GEC in their response letter. Consistent with the recommendations made in the response letter, it is recommended that the restoration monitoring report be submitted to the Region of Waterloo and other reviewing agencies at the end of the monitoring period.

Conclusion

Based on our review of the response letter and BHA submitted by GEC, it is NRSI's position that the mitigation, restoration, and enhancement measures proposed are likely to effectively support the protection of the existing natural features that will be retained. Comments and recommendations made within NRSI's initial peer review letter (June 27 2023) have primarily been addressed through the recently submitted materials. As noted above, it is recommended that the proposed ecological monitoring period be increased from a 2-year to a 5-year monitoring period in order to more effectively evaluate the successful establishment of the desired vegetation communities. It is also recommended that the restoration monitoring report be submitted to the Region of Waterloo at the end of the monitoring period.

Please do not hesitate to contact us if you require further clarification on these matters.

Sincerely,
Natural Resource Solutions Inc.



Elaine Gosnell, B.Sc., P. Biol.
Senior Biologist, Certified Arborist



Jack Richard, R.P.F.
Registered Professional Forester and Biologist