## BIRKS

Natural Heritage Consultants Inc. 23 Herrell Ave. Barrie, Ontario L4N 6T5

October 24, 2018

File # 02-010-2018

Maple Leaf Marinas 3282 Ogden's Beach Road P.O. Box 99 Midland, Ontario L4R 4K6

Attention: Dave Rozycki, President

Re: Habitat Evaluation and Impact Assessment for Endangered Bats – Proposed Redevelopment, Bay Moorings Marina, Penetanguishene

Dear Mr. Rozycki:

Birks Natural Heritage Consultants, Inc. (Birks NHC) was contacted by Mr. Paul Neals of Orion Environmental Solutions Inc. to undertake a review of the Bay Moorings Marina property for habitat of Species at Risk bats. It is our understanding that the Bay Moorings Marina is being considered for redevelopment which would result in the removal of many of the trees and structures present. This letter is intended to provide an overview of the work undertaken in September 2018 and to provide an evaluation of potential habitat for Species at Risk bats on the property and any potential for impacts which could result in a contravention of Ontario's *Endangered Species Act*, 2007 (ESA) The property is known as the Bay Moorings Marina located at 200 Fox Street in the Town of Penetanguishene.

## FIELD INVESTIGATION

Birks NHC staff (Brad Baker) attended the property on September 25, 2018. Northern Myotis, Little Brown Myotis, and Tri-colored Bat are all bat species which have been

listed as endangered under the ESA. All three species of bat have both individual and habitat protection. The property was inspected for potential habitat for the Northern Myotis, Little Brown Myotis, and the Tri-colored Bat. This was done based on our understanding of the habitat requirements of these species and following direction outlined in the 'Technical Note for Species at Risk Bats' published by the Regional Operations Division of the Ministry of Natural Resources and Forestry (MNRF) in 2015 ('Technical Note'). The Technical Note provides direction in the assessment of habitat for endangered bat species. As outlined in that document, important habitat for Species at Risk bats includes hibernacula, maternity roosts, day roosts, and foraging habitat. Of those habitat types, no structures typically associated with hibernacula were identified on the site. The remainder are considered further below.

#### **Maternity Roost Habitat**

Reproductive female bats regularly congregate together in large groups during the active season while they care for their pups. These large groups are called maternity roosts. Maternity roosts tend to be found in groupings of mature trees which provide an abundance of cover in the form of loose bark, cracks and crevices. Alternatively, many maternity roosts occur in large old buildings such as churches or barns. Survey methodology provided by the MNRF for the identification of potential maternity roost habitat for bats suggests that the following Ecological Land Classification (ELC) polygons may provide maternity roost habitat:

- Deciduous Forests (FOD)
- Mixedwood Forests (FOM)
- Coniferous Forests (FOC)
- Deciduous Swamp (SWD)
- Mixedwood Swamps(SWM)
- Coniferous Swamps (SWC)

The ELC for Southern Ontario (Lee *et al.*, 1998) was used as a general guide to the classification of the vegetation community types. No ELC polygons falling within the ranges identified above were present on the property. As a result, none of the treed areas located within the property would be considered maternity roost habitat. An air photo overview of the property and surrounding lands is provided in Figure 1 which is included as Attachment 1.

The large boat storage and repair facilities on the property were also considered as they had potential to provide appropriate habitat for maternity roosting. These buildings were inspected visually for any signs of use. All of the large buildings were open on the

inside which was convenient for a visual search of the premises. Photos of a selection of structures investigated on the property are included in Attachment 2. There was no indication that the structures were being used, or had been used historically for bat maternity roosting. Photos of the inside of the buildings area included in Attachment 2.

## **Day Roost Habitat**

All trees and buildings were also considered for their potential to provide locations for bat day roosting based on the presence or absence of features where bats could roost. Male bats and non-reproductive females roost individually or in small groups as they move across the landscape. Potential day roosts are also often located within tree cavities, leaf clusters and protected areas within older buildings depending on the species being considered.

Trees were investigated for the presence of loose bark, cracks, crevices, or leaf clusters. As expected, several of the larger trees include loose bark, cracks or crevices that could host day roosting bats during the active season. Photos of a selection of trees present on the property are included in Attachment 2. Day roost function is inconsistent since any feature could provide day roost use and bats will not necessarily return to the same roost on consecutive nights. The majority of the landscape trees on the property were smaller than 25 cm diameter at Breast height. The remainder were in relatively good condition. There was a small grouping of Oak trees north of the office/residential building on the property that may have some function for day roost. Even if all of the trees were removed on the property there is no expectation that the removal of these trees would constitute damage to bat habitat as they would not impair the ability of bats to carry out their life functions. There are abundant trees and other buildings available on adjacent properties and elsewhere throughout the Town of Penetanguishene.

Smaller buildings on the property were evaluated for openings which would allow entrance and egress of bats and/or guano deposits to indicate use over the past year. Photos of a selection of smaller structures investigated on the property are included in Attachment 2. The structures on the property were all in good repair and showed no signs of use. There remains some potential for these structures to be used for day roosting bats. As with potential trees, there are abundant buildings available on the adjacent properties and new buildings will be created on the property.

Mitigation is recommended in the form of timing windows and worker training to offset potential for accidental contraventions of the ESA relating to removal of trees and buildings on the property. Assuming the mitigation is followed, there is no expectation that the removal of these buildings would constitute damage to bat habitat which would result in a contravention of Section 10 of the ESA.

## **Foraging**

There is no expectation that the proposed works would result in a significant reduction in insect production in the area. Insect populations will continue to be produced in the waters associated with the Marina in the same manner as they have for the past years of operation. Thus, the property will continue to provide habitat function for any bats which may be present in the area. As such, no potential contraventions of Section 10 of the ESA as they relate to potential foraging habitat for bats are expected to result from the proposed development

#### **Summary**

Based on the fact that the site conditions are not ideal for bat roost and there is no expectation that naturalized areas, like the in-water areas of the shoreline, with potential to provide food for bats will be removed, the proposed removal of landscape trees and existing buildings represent minimal and mitigable potential for contraventions of the ESA. Assuming that the mitigation measures set out in the following section are followed (*i.e.*, timing and review), the proposed redevelopment is not expected to result in a contravention of the ESA.

## **MITIGATION**

Mitigation is intended to ensure that no accidental contraventions of Section 9 of the ESA relating to potential bat day roosting result from tree or building removal. Given that any trees on the property and surrounding land may provide inconsistent habitat for Species at Risk bats in the form of day roost, care should be taken when clearing vegetation or undertaking the demolition of buildings present on the property.

Construction activities involving the removal of trees should be restricted between the beginning of April to the end of October. We generally recommend that demolitions and tree removals take place in the winter, between November 1 and March 30 of any

given year, while bat species are overwintering elsewhere. This will ensure that no bats actively roosting in trees will be killed or harmed as a result of clearing activities.

It is recommended that contractors working onsite be made aware of the potential for Species at Risk bats to occur and be instructed stop work and contact the MNRF Midhurst District if bats are identified during the demolition.

The absence of a protected species on a property does not indicate that they will never occur within the area. Given the dynamic character of the natural environment, there is a constant variation in habitat presence and use. Care should be taken in the interpretation of presence of species of concern including those listed under the ESA. Changes to policy, or the natural environment, could result in shifts, removal, or addition of new areas to the list of areas currently considered habitat. This report is intended as a point in time assessment of Species at Risk, and specifically the endangered bats identified. It does not provide long term 'clearance' for Species at Risk.

While there is no expectation that the assessment should change significantly, it is the responsibility of the proponent to ensure that they are not in contravention of the ESA at the time that site works are undertaken. A review of this assessment provided in this report by a qualified person should be sufficient to provide appropriate advice at the time of the onset of future site works.

# **CLOSURE**

Based on a review of the property, there is no reason to suspect that potential for Species at Risk bats would be limiting to the proposed removal of landscape trees and existing buildings on the property to permit redevelopment. We trust the information included in this letter and mitigation provided afford sufficient rationalization for your review as to why the proposed works are not expected to result in a contravention of the ESA for Species at Risk bats. Please do not hesitate to contact us with any questions or concerns you may have related to this letter. Thank you very much for your assistance in this matter.

If you have any questions regarding this project please do not hesitate to contact the undersigned.

Yours truly,

Birks Natural Heritage Consultants Inc.

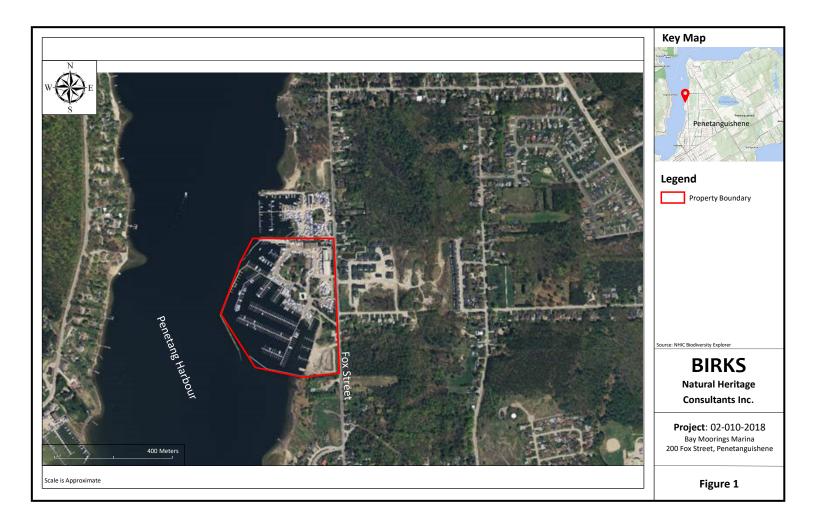
Brad Baker, H. B.Sc.

**Ecologist** 

Attach: Attachment 1 - Figure 1 - Air Photo of Site

Attachment 2 - Site Photographs

cc:





Photograph 1. Exterior of large boat workshop at the north end of property. (September 25, 2018)



Photograph 2. Interior of large boat workshop at the north end of property. (September 25, 2018)



Photograph 3. Exterior of large boat storage facility at the northeast corner of property. (September 25, 2018)



Photograph 4. Interior of large boat storage facility at the northeast corner of property. (September 25, 2018)



Photograph 5. Exterior of marina office/residential structure in the north central green space. (September 25, 2018)



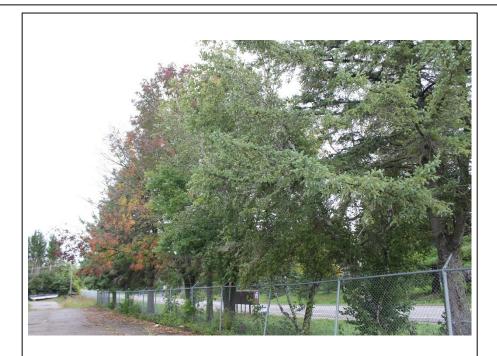
Photograph 6. Exterior of small motel structure central area of the property. (September 25, 2018)



Photograph 7. Exterior of small gate house structure at the entrance to the property. (September 25, 2018)



Photograph 8. Exterior of residential dwelling at the south end of the property. (September 25, 2018)



Photograph 9. Small landscape trees along Fox Street at the east of the property. (September 25, 2018)



Photograph 10. Healthy landscape trees (Locust) found beside the parking area at the east of the property. (October 10, 2018)



Photograph 11. Young Birch, Oak and Pine trees east of the marina office/residential structure. (October 10, 2018)



Photograph 12. A grouping of Oak Trees (~ 5 Trees) north of the marina office/residential structure with some potential for day roost. (October 10, 2018)



Photograph 13. Small landscape trees associated with the park on the property. (September 25, 2018)



Photograph 14. Landscape trees (Box Elder) along Fox Street at the south east of the property beside the residential dwelling (September 25, 2018)