



Muncaster
Environmental
Planning Inc.

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Ms. Fairouz Wahab, P. Eng.
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**RE: 176 Nepean Street and 293 & 307 Lisgar Street
Tree Conservation Report and Environmental Impact Statement**

This Environmental Impact Statement (EIS) and Tree Conservation Report (TCR) assesses a residential high-rise development at a land holding composed of three municipal addresses south of Nepean Street and north of Lisgar Street, east of Bank Street in the downtown urban area of the City of Ottawa. The three municipal addresses are 176 Nepean Street, and 293 and 307 Lisgar Street.

As shown on the site plan at the end of this report the development will consist of 521 units in the form of two apartment towers linked by a four-story common elevator lobby and commercial space. The north and south towers, at 27 and 25 storeys, respectively, will both have ground floor commercial/amenity space. The towers also will be connected below grade through four levels of underground parking.

Site Context

The site is designated *General Urban Area* on Schedule B of the City of Ottawa Official Plan. There are no components of the Natural Heritage System in the vicinity of the site, as shown on the Schedule L12 overlay. No Urban Natural Areas were identified on or adjacent to the site by Muncaster and Brunton (2005) and no environmental constraints are shown on Schedule K of the Official Plan.

The site is within the downtown urban area of Ottawa. The majority of the site is currently used for surface parking. One residence remains in the southwest corner of the site, on the north side of Lisgar Street. Garden plots are in the location of a former residence in the northwest corner of the site, south of Nepean Street. Planted trees are along the Nepean and Lisgar Street boulevards with deciduous trees and shrubs along other portions of the site peripheries (Map 1).

Methodology

The focus of the Environmental Impact Statement component of this report is an assessment of potential Species at Risk, with an emphasis on butternut, chimney swift, and bat species. Three evening surveys of the chimney on the southwest residence and general area were completed on June 19th, 28th, and July 5th, 2017. The surveys began between 20:00 and 20:17 each evening, representing at least 30 minutes before sunset, and continued 30 minutes after sunset. Weather during the three surveys was very good

for observations, with calm winds, air temperatures between 20° and 26° C, and partly cloudy or clear skies. Ambient noise, consisting of background car noise and people chatting, was minimal and did not impact the ability to hear avian activity and other wildlife.

In addition to the above targeted surveys, the vegetation on and adjacent to the site was inventoried on June 19th and the inside of the remaining residence was surveyed for potential bat activity on the evening of June 28th. As several sections of the second-floor room ceilings were dilapidated, it was possible to survey the attic, roof lattices, and other open spaces for bat activity. Incidental wildlife observations were made as part of each survey. The Species at Risk assessment was updated in September, 2010 to consider species listed since 2017 and reflect current conditions.

The field surveys and this report were completed by Bernie Muncaster, who has a Master's of Science in Biology and over twenty-eight years of experience in completing natural environment assessments. The purpose of the Tree Conservation Report component is to establish which vegetation should be retained and protected on the site. The owner of the site is Richcraft (Lisgar) Ltd. It is proposed to remove the woody vegetation not identified for retention in 2020 or 2021 outside of the breeding bird season.

Potential Species at Risk

The Ministry of Natural Resources and Forestry's Make a Map: Natural Heritage Areas website was reviewed on June 18th, 2017 and again on September 9th, 2020. This site allows for a search of Threatened and Endangered species covered by the 2008 *Endangered Species Act*, as well as other species of interest. A search was conducted on the 1 km square including the site and adjacent lands (18VR42 - 59). Two endangered Species at Risk, pale-bellied frost lichen and rusty-patched bumble bee, were reported for this square. This lichen is found in wooded areas in Ontario, usually on ironwood trunks at a height of 0.5 to 2 metres and was not observed during the field surveys. Neither was the rusty-patched bumble bee, which is a habitat generalist that usually nests underground. The only known surviving location in Canada of this bumble bee is Pinery Provincial Park on Lake Huron.

Species at Risk reported in the Ontario Breeding Bird Atlas for the 10 km square 18VR42 that includes the site and general area are least bittern, eastern whip-poor-will, chimney swift, bobolink, eastern meadowlark, bank swallow, and barn swallow. Except for chimney swift, no suitable habitat is present on or adjacent to the site for these species. No large grassland areas are available for bobolink or eastern meadowlark. Barn swallow nests on structures with open rafters such as barns, larger agricultural sheds and bridges. Bank swallow is a colonial nester; burrowing in eroding silt or sand banks and sand pit walls. Eastern whip-poor-will utilize rock or sand barrens with scattered trees, savannahs, old burns or other disturbed sites in a state of early to mid-forest succession, or open conifer plantations. Least bittern is found in larger marshes and is known from the Ottawa River corridor, approximately 800 metres to the north of the site. No suitable nesting habitat or structures for these birds was observed on or adjacent to the site. Chimney swift nest in accessible brick chimneys without metal linings and historically in the cavities of large trees in deciduous forests. As access and internal opening size for the chimney on the remaining residence was not confirmed (Photo 4), field surveys were completed to identify any chimney swift utilization.

Many other endangered and threatened species have historically been reported in the overall City, including butternut, American ginseng, eastern prairie fringed-orchid, wood turtle, spiny softshell,

Blanding's turtle, musk turtle, Henslow's sparrow, loggerhead shrike, little brown myotis, northern long-eared bat, olive hickorynut, bald eagle, golden eagle, cerulean warbler, least bittern, eastern cougar, lake sturgeon, and American eel.

Based on the habitat present on and adjacent to the site, potential Species at Risk are chimney swift, butternut, and the bat species.

Results of Field Surveys and Existing Conditions

The land use on and adjacent to the site is highly urbanized, with most of the site used for surface parking (Map 1, Photo 1). No aquatic habitat potential is on or adjacent to the site. Garden plots (the 'Off-Bank Community Garden') are in the location of a former residence in the northwest corner of the site, south of Nepean Street. Planted trees are along the Nepean and Lisgar Street boulevards with deciduous trees and shrubs along other portions of the site peripheries (Map 1). A row of Norway maple between 25 and 30cm diameter at breast height (dbh) is along the south side of Nepean Street. Leaf-out was poor on the larger Norway maple, with better leaf-out on the smaller examples but trunk damage was present. Planted Japanese lilac up to 18cm dbh are along the north side of Lisgar Street. These trees appeared to be in good condition.

Manitoba maple was along the north portion of the east site boundary (Photo 2), as well as adjacent to the remaining residence in the southwest portion. The largest Manitoba maple was a mature (75cm dbh) example to the northwest of the residence (Photo 3). This tree has some trunk damage and reduced leaf-out in areas, but had good leaf-out on most branches. The other Manitoba maple were much smaller, up to 20cm dbh, and appeared to be in generally good condition.

Japanese smartweed, glossy buckthorn, black currant, and tartarian honeysuckle shrubs were among the Manitoba maples along the edge of the site. As expected the ground vegetation was dominated by non-native and/or invasive species including common dandelion, bladder campion, wormseed mustard, lady's thumb, common ragweed, common milkweed, Philadelphia fleabane, and common plantain.

Other than chimney swifts, no Species at Risk were observed during the field surveys. Three chimney swifts were observed flying to the north and west of the site at 20:32 and 20:38 on June 19th, but were not in proximity to the site. On June 28th two chimney swifts were seen flying at 21:01 well to the east of the site. No chimney swifts were observed on July 5th and no swifts were seen at any time on or overhead the site.

The inside of the residence in the southwest portion of the site was surveyed for evidence of bat activity on the evening of June 28th. The roof lattice and other open spaces were well exposed due to the deteriorated condition of the ceilings. No bats were observed and there was no evidence of bat usage in the residence. Tarps were in place to prevent wildlife access into the building where the side of the roof had decayed (Photo 5).

Other wildlife observed during the field surveys included American crow, rock pigeon, and European starling, with ring-billed gull and great blue heron flying overhead.

**176 NEPEAN and 293 & 307 LISGAR STREETS
TREE CONSERVATION REPORT and ENVIRONMENTAL IMPACT STATEMENT**



Photo 1 – Central and west portions of the site, with planted Norway maples in the rear on the south side of Nepean Street. View looking north from north of Lisgar Street



Photo 2 – Mature Manitoba maple in the west portion of the site



Photo 3 – Manitoba maple along the north portion of the east edge of the side, south of Nepean Street



Photo 4 –Chimney on the remaining residence in the southwest portion of the site.



Photo 5 – Tarps to prevent wildlife access to the remaining residence in the southwest portion of the site. View looking south to the north portion of the residence

Impact Analysis and Recommendations

Species at Risk

No Species at Risk utilization was observed for the site, with chimney swift the only Species at Risk observed in the general area, flying well overhead to the north and east of the site. No bats were noted nor was evidence of bat utilization in the remaining residence. No butternuts were observed on or within 50 metres of the site.

No forests are on or adjacent to the site and no features which may trigger a significant wildlife habitat designation were observed on the highly disturbed site.

Tree Retention

Due to the density of the development and required urban servicing and associated grading no tree retention is anticipated for the site. The functions and features of the removed Manitoba maples can be replaced over time with a generous planting of native trees and shrubs. There are no specific planting sensitivities for the site, although the landscape architect may choose species that are less sensitive to an urban environment.

Where the adjacent street trees cannot be retained along the boulevards of Nepean and Lisgar Streets, they are to be replaced following construction.

The follow is a summary of the recommended mitigation measures:

1. On-site contractors are to be aware of potential Species at Risk in the vicinity of the study corridor. The project biologist is Bernie Muncaster (613-747-3753). Any Species at Risk sightings are to be immediately reported to the project manager and the Ministry of the Environment, Conservation and Parks and activities modified to avoid impacts on the species and habitat until further direction is provided by the Ministry;
2. To protect breeding birds, no tree or shrub removal should occur between April 15th and August 15th, unless a breeding bird survey conducted by a qualified biologist within five days of the woody vegetation removal identifies no active nests in the trees or shrubs;
3. If any trees can be retained, such as the street trees along the boulevards of Nepean and Lisgar Streets, they are to be protected with sturdy temporary fencing at least 1.3 metres in height installed from the tree trunk a distance of ten times the retained tree's diameter where possible. Signs, notices, or posters are not to be attached to any tree. No grading, heavy machinery traffic, stockpiling of material, machinery maintenance and refueling, or other activities that may cause soil compaction are to occur within three metres of the critical root zone of the trees to be retained and protected. The root system, trunk, or branches of the trees to be retained are to be protected and not damaged. If any roots of trees to be retained are exposed during site alterations, the roots shall be immediately reburied with soil or covered with filter cloth, burlap or woodchips and kept moist until the roots can be buried permanently. A covering of plastic should be used to retain moisture during an extended period when watering may not be possible. Any roots that must be cut are to be cut cleanly to facilitate healing and as far from the tree as possible. Exhaust fumes from all equipment during construction will not be directed towards the canopy of the adjacent retained trees.

All of the supports and bracing for the protective fencing should be placed outside of the protected area and should be installed in such a way as to minimize root damage. Also, since the desired effect of the barrier is to prevent construction traffic from entering the tree's critical root zone, the barrier should be kept in place until all site servicing and construction has been completed;

4. The extent of exposed soils is to be kept to a minimum at all times. Re-vegetation of exposed, non-developed areas with native species is to be achieved as soon as possible to reduce surface erosion. Potential native species to plant include sumac and dogwood shrubs along with sugar maple, basswood, and white spruce trees. Sourcing native species from local seed sources is strongly recommended to ensure adaptability and longevity. There are no planting sensitivities for the site other than the highly urbanized environment;
5. Seepage barriers such as silt fencing, straw bale check dams, and other sediment and erosion control measures will be installed as required to OPSD requirements in any temporary drainage ditches, around disturbed areas during construction, and stockpiles of

fine material. These control measures must be properly maintained to maximize their function during construction and will be removed at the completion of construction once the site has stabilized. Any dewatering of groundwater is to be properly treated before release or directed to the sanitary system;

6. As recommended in City of Ottawa (2015) prior to beginning work each day, wildlife is to be checked for by conducting a thorough visual inspection of the work space and immediate surroundings. See Section 2.5 of the City's Protocol for Wildlife Protection during Construction (City of Ottawa, 2015) for additional recommendations on construction site management. Although highly unexpected, any turtles and snakes in the work area are to be relocated to the Ottawa River corridor. Animals should be moved only far enough to ensure their immediate safety. See Appendix 1 and the links in Section 4 of City of Ottawa (2015) for suggestions on how to effectively relocate turtles and snakes;
7. Municipal by-laws and provincial regulations for noise will be followed and utilities will be located in the vicinity of the site prior to construction; and,
8. Waste will be managed in accordance with provincial regulations. The contractor will have a spill kit on-hand at all times in case of spills or other accidents.

Schedule of Proposed Works

It is proposed to remove the woody vegetation not identified for retention in 2020 or 2021 outside of the breeding bird period from April 15th to August 15th. City of Ottawa staff (Forester – Planning) is to be contacted at least two business days prior to any tree removal so that staff have the opportunity to verify that any protective fencing has been properly constructed.

Conclusion

The majority of the site is currently used for surface parking. One residence remains in the southwest corner of the site, on the north side of Lisgar Street. Planted trees are along the Nepean and Lisgar Street boulevards with deciduous trees and shrubs along other portions of the site peripheries. No Species at Risk utilization was observed on or adjacent to the site and no natural heritage features, as identified in the Provincial Policy Statement, are present.

The existing tree coverage is minimal and is dominated by Manitoba maple and planted street trees. Manitoba maple is usually not recommended for retention due to its short lifespan, weak major limbs, and generally poor form and aesthetic values.

It is important that mitigation measures outlined in this report are properly implemented and maintained. With this successful implementation, the author of this report concludes that the construction and operation of the urban development will not have a detectable impact on the natural environment features and functions in the landscape.

References

City of Ottawa. 2010. City of Ottawa Official Plan. As adopted by City Council, May, 2003 and Updated 2010. Publication: 1-28. 227 pp & Sched.

City of Ottawa. 2015. Protocol for Wildlife Protection during Construction. August, 2015. 14 pp & Append.

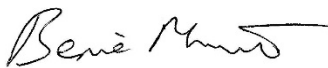
Muncaster, B.W. and D.F. Brunton. 2005. Urban Natural Areas Environmental Evaluation Study. Prepared for the City of Ottawa.

Ontario Ministry of Natural Resources. 2010. Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement, 2005. Second Edition. March 2010. 233 pp.

Ontario Ministry of Natural Resources and Forestry. 2015. Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E. January, 2015. 38 pp.

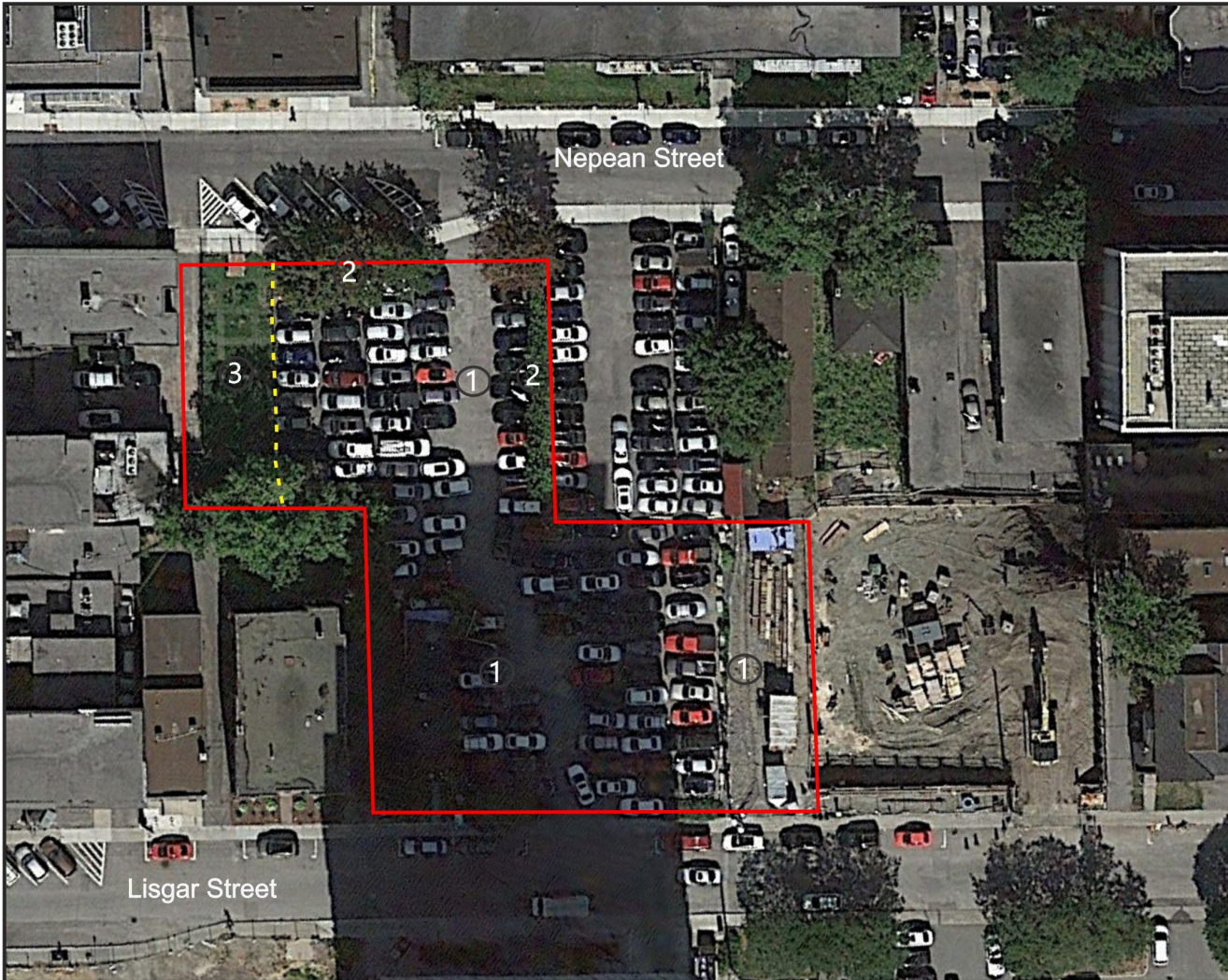
Please call if you have any questions on this Environmental Impact Statement and Tree Conservation Report.

Yours Sincerely,
MUNCASTER ENVIRONMENTAL PLANNING INC.



Bernie Muncaster, M.Sc.
Principal

lisgarEISTCR



2016 Aerial Photography from Google Earth

Legend



Vegetation Communities

- ① Disturbed land
- ② Deciduous hedgerow
- ③ Garden plot



Approx. Scale 1:750



Map 1

FILE: 16-29

June 19, 2017

Prepared for: **Richcraft (Lisgar) Ltd.**

Prepared by:



Muncaster
Environmental
Planning Inc.

CURRENT VEGETATION

**176 NEPEAN and 293 & 307 LISGAR STREETS
CITY of OTTAWA**

MAP 2 – SITE PLAN

