Tree Conservation Report (TCR)

15 TRADESMAN RD

Part of Lot 23, Concession 11,
City of Ottawa

November 28, 2024

Prepared By:



BCH Environmental Consulting Inc. 20373 Bethune Street, South Lancaster, On KOC 2CO



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1.0. Introduction

As requested by 2040503 Ontario Inc., a Tree Conservation Report (TCR) was completed in response to a Site Plan Control Application with regards to a development within 15 Tradesman Rd, City of Ottawa (Appendix B).

The property in question is located at:

15 Tradesman Road, Part of Lot 13, Concession 11, City of Ottawa.

The property is currently owned by:

2040503 Ontario Inc , 14 Grenfell Cres, Ottawa ON, K2G0G2

Contact Information:

Fred Broder fred@broderelectric.ca

1.1. Site Context

The lands are located along the east side of Tradesman Road (Figure 1). The property parcel is approximately 0.81ha in size and the legal land description is Part of Lot 23, Concession 11, City of Ottawa.

Within the city's Zoning By-law No. 2008-250 the subject lands are designated as Rural Heavy Industrial Zone. The city has not identified any natural heritage features within the subject lands (i.e. significant woodland) with the exception of a potential wetland within the adjacent lands, the city has requested a 30m setback from this assumed wetland.

The majority of the subject lands have been cleared and appear to be utilised as a laydown yard. Tree cover is constrained to the vicinity of the property's boundary (Figure 1). Within the adjacent lands there is deciduous forest to the southeast, a small clump of deciduous forest to the north and what appears to be a small wetland. The remaining adjacent lands consisted of various industrial uses and cleared areas.

The potential for species at risk (SAR) utilising the subject lands is very low. Bats may utilise the trees present as day roost; turtles may utilize the wetland on the adjacent lands and birds may nest in the trees. No formal evaluation of SAR was completed. Bats, birds and turtles will be assumed, and mitigation measures present at the end of this report will mitigate all negative impacts to potential SAR utilising the area.



2.0. Tree Protection (By-law No. 2020-340)

The Tree Protection By-law came into effect on January 1, 2021. Under the Tree Protection By-law, the following protected trees cannot be injured or removed without a tree permit from the City:

- All City-owned trees throughout the urban and rural area
- All trees 10 cm or more in diameter at breast height on private properties within the urban area that are subject to a Planning Act application for Site Plan, Plan of Subdivision, or Plan of Condominium
- All trees 10 cm or more in diameter at breast height on private properties within the urban area that are over 1 hectare in size
- All distinctive trees, which are trees 30 cm or more in diameter at breast height on private properties within the urban area that are 1 hectare or less in size

In addition to this, Schedule E of Bylaw No. 2020-340 states that a Tree Conservation Report is required for all Plans of Subdivision, Site Plan Control Applications, Common Elements Condominium Applications, and Vacant Land Condominium Applications where there is a tree of 10 centimetres in diameter or greater on the site and/or if there is a tree on an adjacent site that has a Critical Root Zone (CRZ) extending onto the development site.

3.0. Methodology

This report is prepared in accordance with the City of Ottawa Tree Protection Bylaw (No.2020-340) and meets the standards present in the Tree Conservation Report Guidelines (Schedule E of Bylaw No.2020-340).

This TCR will provide the methodology to mitigate, as required, negative impacts on trees species and their ecological function.

Colour aerial photography was used to assess the natural environment features in the general vicinity of the proposed building.

The tree inventory was conducted on November 18, 2024 (C. Fontaine) by systematically travelling through the subject lands and the adjacent lands (10m), while taking note of any tree which had a DBH of 10cm or greater (Figure 1 and 2). Staff qualifications are available in Appendix A.

4.0. Results

At the time of the site visit there were no watercourses or vernal pools, a small wetland area was identified within the southeastern portion of the adjacent lands but at the time of the site visit was dry. No steep slopes, including valleys and escarpments, were present. No valued woodlots designated as Urban Natural Features or Natural Environment Areas, areas evaluated in the Urban Natural Areas Environmental Evaluation Study (UNAEES), or other areas that meet the criteria used in the UNAEES were present. No identified Significant woodlands were present within the subject lands. No High



quality specimen trees or hazardous trees were present. There was no riparian woodlots, rare communities or other unique ecological features present.

As mentioned in section 1.0, the potential of species at risk (SAR) utilising the subject lands is very low. Bats may utilise the trees present as day roost; turtles may utilize the wetland and birds may nest in the trees. No formal evaluation of SAR was completed. Bats, birds and turtles will be assumed, and mitigation measures present at the end of this report will mitigate all negative impacts to potential SAR utilising the area.

No tree removal will be necessary within the subject lands and all work is directed outside of their critical root zone. All present vegetated areas will be retained, development is limited to the already gravelled area. There are no anticipated impacts of the development on the conserved portions of vegetation.

Although tree cover within subject lands and the adjacent lands is limited, there is still some ecological function provided such as local wildlife habitat, climate, air quality, wildlife, and nature appreciation benefits. All trees (10cm DBH and over) within the subject lands and adjacent lands will have their critical root zone protected by temporary fencing (snow fencing) to ensure they are not impacted (Figure 1 and 2). All development will occur outside temporary fencing area, and these trees will not be impacted by this development. There are no anticipated negative impacts to the overall health and vigour of the trees identified. Mitigation measures present within section 5.0 will promote the long-term survival of retained trees and woodlands. In addition to the mitigation measures, a 30m setback is being proposed around the wetland, this setback should be allowed to re-naturalize further enhancing the vegetative cover within the subject lands.

Protective measures present in section 5.0. will prevent impacts to retained trees and woodlands during construction within the subject lands and adjacent lands. The tree protection measures are consistent with the City of Ottawa's Tree Protection Specification in Part VI of the Tree Protection By-law.

No city trees have been identified within the property. No trees greater than 50cm are within the subject lands or immediate adjacent lands. There is no alteration of the tree cover on the site, as such additional plantings are not being recommended.

Trees present in table 1 (Figure 1 and 2), represent all the trees 10cm and over within the subject lands and adjacent lands (10m).

5.0. Recommendations and Conclusion

This reports recommendations are intended to mitigate potential negative impacts on trees due to the proposed development and should be implemented through a development agreement between the owners and the municipality. Properly implemented controls within this agreement are deemed sufficient to mitigate the potential impacts of the proposed development on the identified trees.



5.1. Mitigation for the Species at Risk and Migratory Birds Convention Act

- 1- To protect breeding birds, no tree or shrub removal should occur between April 1th and August 30th, unless a breeding bird survey is completed by a qualified biologist within two days of the woody vegetation removal and identifies no nesting activity.
- 2- To prevent impacts to bats, no clearing of trees shall take place
- 3- With regard to turtles, no clearing of vegetation shall take place. Additionally, exclusion fencing should be installed around the perimeter of the site to prevent turtles from entering work areas.
- 4- The contractor is to be aware of potential Species at Risk in the vicinity of the site. Appendix 1 of City of Ottawa Protocol for Wildlife Protection during Construction (2022) and Appendix D of this report for descriptions of these species. Any Species at Risk sightings are to be immediately reported to the project biologist and the MECP, and activities modified to avoid the potential for impacts until further direction is received by the Ministry.

5.2. Recommendation and Mitigation for Tree Protection

- 1- Prior to any work activity, tree protection fencing must be installed around the outer edge of the critical root zone or as designated in Figure 1 and 2 and remain in place until the work is complete. This temporary fencing will be sturdy and at least 1.2 metres in height and installed in such a way that the fence cannot be altered (snow fencing is an acceptable type of material that can be utilised.
- 2- Signs shall be posted on the protective fencing to clearly indicate that: a) the fencing is to protect the critical root zones of the retained trees; b) the fencing is not be moved, and; c) fencing is to be maintained until the construction is complete.
- 3- Within the critical root zone of a protected tree, no person shall:
 - a. place any material or equipment, including outhouses;
 - b. raise or lower the existing grade; or
 - c. extend any hard surface or significantly change landscaping.
 - d. Additionally, there will be no grading, heavy machinery traffic, stockpiling of material, machinery maintenance and refueling, or other activities that may cause soil compaction occurring within three metres of the critical root zone of the trees to be protected.
- 4- The root system, trunk, and branches of the trees to be protected 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. Overhanging branches from protected trees that may be damaged during construction are to be pruned by a qualified arborist prior to construction.
- 5- Exhaust fumes from all equipment during construction will not be directed towards the canopy of the adjacent protected trees.



5.3. Additional Mitigation Measures

- 1- The extent of any vegetation removal within the development area is to be minimized where possible.
- 2- There will be no use of herbicides in clearing of vegetation.
- 3- Municipal by-laws and provincial regulations for noise will be followed.
- 4- To discourage wildlife from entering the work areas during construction, the site should be kept clear of food wastes and other garbage. Proper drainage should be provided to avoid accumulation of standing water, which could attract amphibians, birds, and other wildlife to the work areas.
- 5- As recommended in City of Ottawa Protocol for Wildlife Protection during Construction (2022), 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 2.0 of City of Ottawa Protocol for Wildlife Protection during Construction (2022) and Appendix C for additional recommendations on construction site management with respect to wildlife. It is the responsibility of the contractor to be familiar with all components of City of Ottawa Protocol for Wildlife Protection during Construction (2022). Any sensitive wildlife in the work area are to be relocated to the South-East the subject lands. Animals should be moved only far enough to ensure their immediate safety.

To conclude this TCR, it is the professional opinion of the authors that with proper implementation and maintenance of the mitigation measures (see above), the proposed development will not negatively impact the health and survival of the retained trees.

Thank you for the opportunity to work with you. If you have any questions or comments, please do not hesitate to contact our office.

Shaun St.Pierre, B.Sc. Biology

Cody Fontaine, Wildlife Technologist



REFERENCES

City of Ottawa. 2021. Tree Protection Bylaw No.2020-340.

City of Ottawa. 2022. Protocol for Wildlife Protection during Construction. December 2022.



Table 1: Tree Information

rable	Table 1: Tree Information									
Tree ID	Species	Zone	Easting	Northing	AVG. DBH (cm)	Critical Root Zone (m)	Health	Comments	Ownership	Fate
1	Trembling Aspen	18T	465713.8592	5020773.029	16	1.6	Good	Multistem	Neighbour	Retained
2	Trembling Aspen	18T	465716.236	5020772.095	12	1.2	Good	Single Stem	Neighbour	Retained
3	Trembling Aspen	18T	465715.2936	5020777.189	13	1.3	Good	Single Stem	Neighbour	Retained
4	Largetooth Aspen	18T	465716	5020775	20	2	Good	Single Stem	Neighbour	Retained
5	Largetooth Aspen	18T	465717.2809	5020779.075	23	2.3	Good	Single Stem	Neighbour	Retained
6	Largetooth Aspen	18T	465718.0181	5020776.971	24	2.4	Good	Single Stem	Neighbour	Retained
7	Largetooth Aspen	18T	465718.882	5020778.377	25	2.5	Good	Single Stem	Neighbour	Retained
8	Largetooth Aspen	18T	465721.1511	5020778.996	21	2.1	Good	Single Stem	Neighbour	Retained
9	Largetooth Aspen	18T	465722.0724	5020779.216	19	1.9	Good	Single Stem	Neighbour	Retained
10	Largetooth Aspen	18T	465724.0165	5020776.911	20	2	Good	Single Stem	Neighbour	Retained
11	Largetooth Aspen	18T	465723.7411	5020779.799	26	2.6	Good	Single Stem	Neighbour	Retained
12	Largetooth Aspen	18T	465725.2919	5020778.557	22	2.2	Good	Single Stem	Neighbour	Retained
13	Trembling Aspen	18T	465729	5020777	17	1.7	Good	Single Stem	Neighbour	Retained
14	Trembling Aspen	18T	465731.4493	5020779.652	20	2	Good	Single Stem	Neighbour	Retained
15	Trembling Aspen	18T	465737	5020782	24	2.4	Good	Single Stem	Neighbour	Retained
16	Largetooth Aspen	18T	465733.8592	5020785.793	26	2.6	Good	Single Stem	Neighbour	Retained
17	Largetooth Aspen	18T	465739	5020784	17.5	1.75	Good	Multistem	Neighbour	Retained
18	Largetooth Aspen	18T	465740.4886	5020784.046	25	2.5	Good	Single Stem	Neighbour	Retained
19	Red Maple	18T	465742.4894	5020786.985	21	2.1	Good	Single Stem	Neighbour	Retained
20	Red Maple	18T	465742.0559	5020785.636	26	2.6	Good	Single Stem	Neighbour	Retained
21	Gray Birch	18T	465746	5020783	14	1.4	Good	Single Stem	Neighbour	Retained
22	Gray Birch	18T	465744.8922	5020786.316	20	2	Dead	Leaning, Branch Dieback. Single Stem	Neighbour	Retained
23	Trembling Aspen	18T	465745.2699	5020782.14	16	1.6	Good	Single Stem	Neighbour	Retained
24	Red Maple	18T	465749.156	5020789.499	29	2.9	Good	Single Stem	Neighbour	Retained
25	Trembling Aspen	18T	465751.8922	5020784.921	12	1.2	Good	Single Stem	Neighbour	Retained
26	Trembling Aspen	18T	465751.3084	5020790.373	34	3.4	Dead	No Bark, Broken @ 7m. Single Stem	Neighbour	Retained
27	Red Maple	18T	465755.915	5020790.783	12	1.2	Good	Single Stem	Neighbour	Retained
28	Trembling Aspen	18T	465758.7663	5020791.827	33	3.3	Poor	Branch Dieback, Bark Falling Off. Single Stem	Neighbour	Retained
29	Gray Birch	18T	465761.1943	5020790.687	13	1.3	Good	Single Stem	Neighbour	Retained
30	Largetooth Aspen	18T	465760.8363	5020796.035	14	1.4	Good	Single Stem	Neighbour	Retained
31	Largetooth Aspen	18T	465762.7018	5020792.131	16	1.6	Good	Single Stem	Neighbour	Retained
32	Red Maple	18T	465762.882	5020789.472	16	1.6	Good	Single Stem	Neighbour	Retained



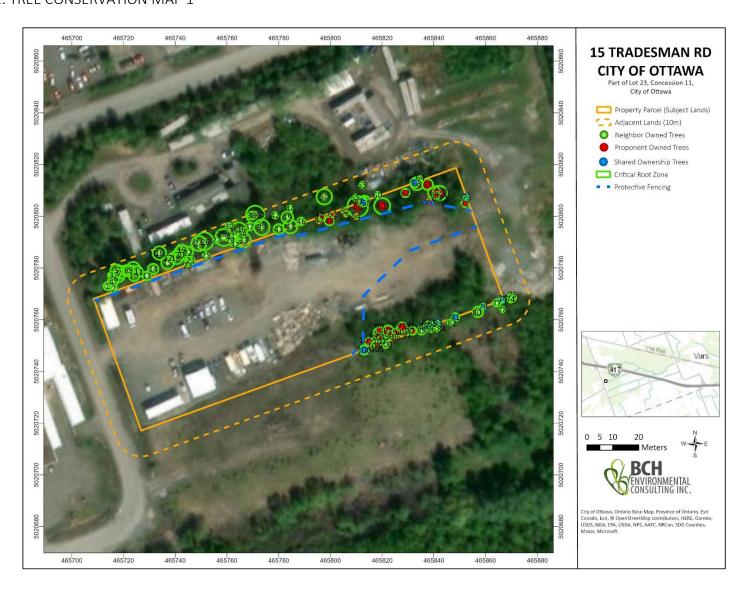
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Tree ID	Species	Zone	Easting	Northing	AVG. DBH (cm)	Critical Root Zone (m)	Health	Comments	Ownership	Fate
33	Trembling Aspen	18T	465766.4461	5020790.755	28	2.8	Good	Single Stem	Neighbour	Retained
34	Red Maple	18T	465765.9426	5020793.241	17	1.7	Good	Single Stem	Neighbour	Retained
35	Trembling Aspen	18T	465764.5051	5020794.373	33	3.3	Poor	Branch Dieback. Single Stem	Neighbour	Retained
36	Gray Birch	18T	465766	5020794	16.5	1.65	Good	Multistem	Neighbour	Retained
37	Gray Birch	18T	465768.6625	5020795.99	15.3	1.5	Good	Multistem	Neighbour	Retained
38	Red Maple	18T	465769.6334	5020800.323	15.5	1.55	Good	Multistem	Neighbour	Retained
39	Trembling Aspen	18T	465773.4493	5020795.754	30	3	Poor	Branch Dieback. Single Stem	Neighbour	Retained
40	Trembling Aspen	18T	465770.915	5020800.632	35	3.5	Good	Single Stem	Neighbour	Retained
41	Gray Birch	18T	465780	5020795	20	2	Good	Single Stem	Neighbour	Retained
42	Red Maple	18T	465778.6625	5020800.383	12	1.2	Good	Single Stem	Neighbour	Retained
43	Red Maple	18T	465784.4886	5020796.085	27	2.7	Good	Single Stem	Neighbour	Retained
44	Red Maple	18T	465784.4595	5020802.976	11	1.1	Good	Single Stem	Neighbour	Retained
45	Trembling Aspen	18T	465783.3084	5020799.553	23	2.3	Good	Single Stem	Neighbour	Retained
46	Gray Birch	18T	465788.7018	5020798.052	15	1.5	Good	Single Stem	Neighbour	Retained
47	Red Maple	18T	465795.5838	5020798.344	10	1	Good	Single Stem	Proponent	Removed
48	Red Maple	18T	465796.6625	5020799.485	12	1.2	Good	Single Stem	Proponent	Removed
49	Red Maple	18T	465799.5279	5020798.18	17	1.7	Good	Single Stem	Proponent	Removed
50	Trembling Aspen	18T	465797.6193	5020807.589	30	3	Poor	Branch Dieback. Single Stem	Neighbour	Retained
51	Gray Birch	18T	465800.8757	5020800.799	10	1	Good	Single Stem	Proponent	Removed
52	Gray Birch	18T	465805.6727	5020801.881	13	1.3	Good	Single Stem	Proponent	Removed
53	Red Maple	18T	465806	5020801	11	1.1	Good	Single Stem	Proponent	Removed
54	Red Maple	18T	465810	5020800	10	1	Good	Single Stem	Proponent	Removed
55	Trembling Aspen	18T	465809.561	5020807.216	10	1	Good	Single Stem	Neighbour	Retained
56	Trembling Aspen	18T	465810.5445	5020803.816	40	4	Poor	Branch Dieback. Single Stem	Proponent	Removed
57	Trembling Aspen	18T	465812.3438	5020805.678	19	1.9	Good	Single Stem	Shared	Retained
58	Trembling Aspen	18T	465813.1845	5020805.982	20	2	Dead	Branch Dieback, Bark Falling Off. Single Stem	Shared	Retained
59	Gray Birch	18T	465812.267	5020812.204	10	1	Good	Single Stem	Neighbour	Retained
60	Red Maple	18T	465818.1511	5020808.249	12	1.2	Good	Single Stem	Neighbour	Retained
61	Trembling Aspen	18T	465820	5020804	31	3.1	Dead	Branch Dieback, Bark Falling Off. Single Stem	Proponent	Removed
62	Trembling Aspen	18T	465829	5020809	16	1.6	Good	Single Stem	Proponent	Removed
63	Trembling Aspen	18T	465833.4823	5020812.665	25	2.5	Poor	Branch Dieback, Bark Falling Off. Single Stem	Proponent	Removed
64	Red Maple	18T	465834.4658	5020814.406	11	1.1	Good	Single Stem	Neighbour	Retained
65	Red Maple	18T	465832.6408	5020813.01	18	1.8	Good	Multistem	Shared	Retained



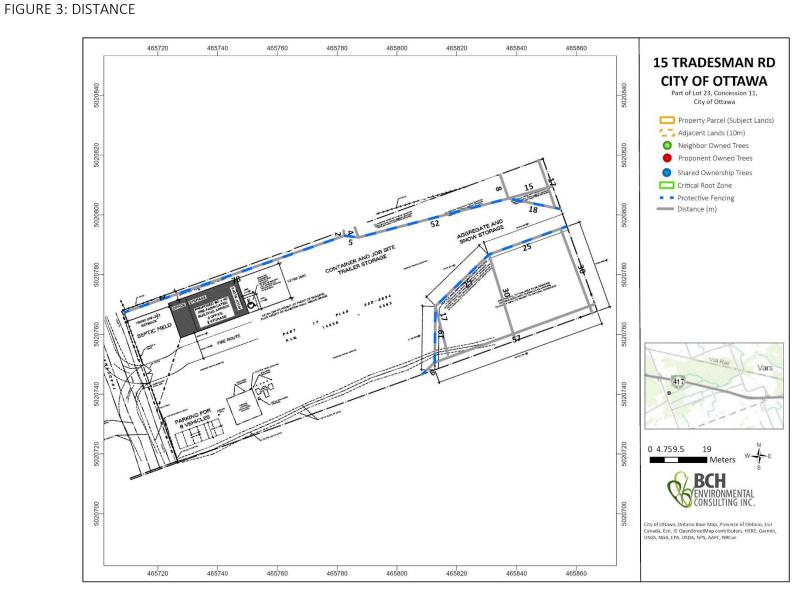
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Tree ID	Species	Zone	Easting	Northing	AVG. DBH (cm)	Critical Root Zone (m)	Health	Comments	Ownership	Fate
66	Trembling Aspen	18T	465840.144	5020809.216	24	2.4	Dead	Branch Dieback, Bark Falling Off. Single Stem	Proponent	Removed
67	Red Maple	18T	465838.144	5020806.014	10	1	Good	Single Stem	Proponent	Removed
68	Trembling Aspen	18T	465837.5445	5020812.288	21	2.1	Poor	Branch Dieback, Bark Falling Off. Single Stem	Proponent	Removed
69	Red Maple	18T	465841	5020808	14	1.4	Good	Single Stem	Proponent	Removed
70	Willow Species	18T	465842.2526	5020809.006	28	2.8	Good	Single Stem	Proponent	Removed
71	Red Maple	18T	465841	5020808	13	1.3	Dead	Branch Dieback, Bark Falling Off. Single Stem	Proponent	Removed
72	Willow Species	18T	465852	5020805	14	1.4	Good	Single Stem	Proponent	Removed
73	Red Maple	18T	465852.6465	5020807.373	10	1	Good	Multistem	Shared	Retained
74	Gray Birch	18T	465869.5901	5020767.954	13	1.3	Good	Single Stem	Neighbour	Retained
75	Willow Species	18T	465870.2266	5020768.597	16	1.6	Good	Single Stem	Neighbour	Retained
76	Willow Species	18T	465866.2154	5020767.533	10	1	Good	Single Stem	Shared	Retained
77	Willow Species	18T	465864.3777	5020766.515	15	1.5	Good	Single Stem	Neighbour	Retained
78	Willow Species	18T	465866.5768	5020763.911	10	1	Good	Single Stem	Neighbour	Retained
79	Willow Species	18T	465859	5020765	12	1.2	Good	Single Stem	Shared	Retained
80	Willow Species	18T	465857	5020763	20	2	Good	Multistem	Neighbour	Retained
81	Willow Species	18T	465848.2977	5020761.06	15	1.5	Poor	Leaning. Single Stem	Shared	Retained
82	Trembling Aspen	18T	465846.3777	5020758.917	11	1.1	Good	Single Stem	Neighbour	Retained
83	Trembling Aspen	18T	465841.496	5020758.603	10	1	Good	Single Stem	Shared	Retained
84	Willow Species	18T	465841.2337	5020756.702	11	1.1	Good	Single Stem	Neighbour	Retained
85	Trembling Aspen	18T	465839.3847	5020757.274	14	1.4	Good	Single Stem	Neighbour	Retained
86	Trembling Aspen	18T	465839.0071	5020756.349	10	1	Good	Single Stem	Neighbour	Retained
87	Trembling Aspen	18T	465837.3071	5020757.09	10	1	Good	Single Stem	Shared	Retained
88	Trembling Aspen	18T	465838.2461	5020757.429	20	2	Good	Single Stem	Shared	Retained
89	Trembling Aspen	18T	465835.1833	5020755.853	16	1.6	Good	Single Stem	Neighbour	Retained
90	Gray Birch	18T	465830.428	5020755.842	10	1	Good	Single Stem	Proponent	Removed
91	Gray Birch	18T	465829.5539	5020755.137	11	1.1	Good	Single Stem	Proponent	Removed
92	Gray Birch	18T	465831.7553	5020755.709	15	1.5	Good	Single Stem	Proponent	Removed
93	Gray Birch	18T	465827.6294	5020757.061	19	1.9	Good	Single Stem	Proponent	Removed
94	Gray Birch	18T	465825.854	5020755.212	15	1.5	Good	Single Stem	Proponent	Removed
95	Gray Birch	18T	465824.4985	5020753.617	10	1	Good	Single Stem	Proponent	Removed
96	Gray Birch	18T	465823.1924	5020754.133	16	1.6	Good	Single Stem	Proponent	Removed
97	Red Maple	18T	465822.1934	5020755.711	21	2.1	Good	Multistem	Proponent	Removed
98	Red Maple	18T	465819.3384	5020754.614	27	2.7	Good	Single Stem	Proponent	Removed



Tree ID	Species	Zone	Easting	Northing	AVG. DBH (cm)	Critical Root Zone (m)	Health		Comments	Ownership	Fate
99	Gray Birch	18T	465819	5020756	13	1.3	Good	Single Stem		Proponent	Removed
100	Willow Species	18T	465821.3052	5020750.503	14	1.4	Good	Multistem		Neighbour	Retained
101	Trembling Aspen	18T	465817.709	5020750.502	13	1.3	Good	Single Stem		Proponent	Removed
102	Trembling Aspen	18T	465819.8057	5020752.357	15	1.5	Good	Single Stem		Proponent	Removed
103	Gray Birch	18T	465818.4834	5020753.163	18	1.8	Good	Single Stem		Proponent	Removed
104	Gray Birch	18T	465816.1078	5020750.198	12	1.2	Good	Single Stem		Proponent	Removed
105	Gray Birch	18T	465814.856	5020751.5	16	1.6	Good	Single Stem		Proponent	Removed
106	Red Maple	18T	465813.0424	5020748.324	18	1.8	Good	Single Stem		Shared	Retained









APPENDIX A: QUALIFICATIONS SHAUN M. ST.PIERRE, B.Sc. Biology

EDUCATION

B.Sc. Biology, Trent University 2007 Fisheries and Wildlife Technology, Frost Campus, Sir Sandford Fleming College, 2005 Fisheries and Wildlife Technician, Frost Campus, Sir Sandford Fleming College, 2004

LANGUAGES

Fluent in French and English

POSITIONS HELD

2018 - : BCH Environmental Consulting Inc., Biologist / Owner

2006-2017: Bowfin Environmental Consulting Inc., Biologist / GIS Specialist / Environmental Site Inspector

2005: St. Lawrence River Institute of Environmental Sciences, Field Research Assistant

2004: MNR Kawartha Lakes, Field Research Assistant

DFO- Experimental Lake Area, Field Research Assistant
 Resource Stewardship S, D &G, Stewardship Ranger

CERTIFICATIONS / PROFESSIONAL AFFILIATIONS

MTO/DFO/OMNR Fisheries Protocol, Ecological Land Classification, Certified in Inventory and Identification Methods for Ontario's Reptiles and Amphibians, North American Benthological Society (NABS) Certified Family Level Taxonomist, Ontario Benthos Biomonitoring Network (OBBN), Ontario Stream Assessment Protocol (OSAP), Certified Ontario Wetland Evaluator (OWES), Butternut Health Assessor (BHA), first aid, CPR, Pleasure Craft Operator Card, Marine Radio Operator, WHMIS, WHSA, Hazard Identification, Assessment and Control, All Terrain Vehicle Riders Course (issued by the Manitoba Safety Council), Water Safety Training (Bronze Cross), Possession / Acquisition Firearms Licence, Ontario Hunter Education Course Certificate, Ontario Trapper Education Course Certificate, Wildlife Chemical Immobilization, Vaccination, and Euthanasia- Certificate of Knowledge, South Lancaster Fish and Game Club (SLFGC; president 2012 and 2013; executive member 2014-2018), Ontario class G driver's license, and Snowmobile License.

EXPERIENCE

Experience in environmental impact assessments, environmental monitoring, environmental assessments, terrestrial habitat assessment, species at risk surveys, amphibian surveys, avian surveys, freshwater habitat assessment, collection and identification of plants, collection and identification of aquatic invertebrate, collection and identification of fish, fish salvage, fish behavioral studies, winter bat hibernaculum inventories and fisheries inventories including habitat mapping, electroshocking, FWIN and RIN. Other experience include GIS mapping.

Environmental and Fisheries Inspections

- Provided environmental and fisheries inspections for the construction of the Cataraqui Crossing HWY 401-MTO (Kingston, ON).
- Provided environmental and fisheries inspections for the construction of the Three Nations Bridge including surveys for nesting species at risk (Cornwall, ON).
- Provided environmental and fisheries inspections for construction (Ottawa, ON).
- Conducted nest surveys (Kemptville, ON.; Stittsville, ON.; Cornwall, ON.)
- Conducted environmental inspections for the construction of the Clarkson WWTP outfall, Lake Ontario.
- Conducted environmental inspections for the construction of a new bridge crossing Bearbrook Creek along the 417.



- Provided environmental and fisheries inspections for the blasting and drilling operation for the Burloak Water Purification Tunnel project (Burlington, ON).
- Provided environmental and fisheries inspections for the construction of the Poole Creek Realignment/Huntmar Drive Crossing.

Species at Risk Inventories / Monitoring

- Butternut survey and assessment for proposed developments (Brockville, Carleton Place, Carp, Clarence-Rockland, Cornwall, Munster, Hawkesbury, Kemptville, Ottawa, South Lancaster, Smith Falls, Stittsville, Prospect, Vars, Moose Creek, Prescott, Westminster, Renfrew, Battersea, Jones Falls, and Millbrook).
- American Eel surveys using the boat electrofisher on the Mississippi River (Almonte, ON), South Nation River (Casselman, ON) and Ottawa River (Renfrew, ON; Ottawa, ON: Shawville, QC)
- American Eel collection on the St. Lawrence River for the St. Lawrence River Institute (Cornwall, ON)
- American Ginseng survey for proposed development (Kanata, South Lancaster and Renfrew).
- Whip-poor-will survey for proposed development (Navan, ON; Kemptville, ON; Stittsville, ON; Prescott, ON; Alexandria, ON) and quarries (Avonmore, Moosecreek, Prospect, Stittsville, Kanata, Ottawa)
- Assisted in a Least Bittern survey (Avonmore, ON)
- Conducted turtle surveys: Blanding's turtle, Eastern musk turtle (Carleton Place, ON; Ottawa, ON; Stittsville, ON; Kanata, ON, Prospect, ON)
- Conducted rapid clubtail surveys (Almonte, ON)
- Bat maternal nesting site surveys (Prescott, ON; Battersea, ON; Prescott, ON; Hawkesbury, ON; Russell, ON)

Aquatic Inventories

- Boat electrofishing along the shoreline of the Ottawa River (Chat Falls, ON) along the shoreline of the
 Cataraqui River (Kingston, ON), downstream of the Carillion Dam (Pointe-Fortune, QC), Lake St. Francis (South
 Lancaster, ON), South Nation River (Casselman, ON), Raisin River (Lancaster, ON), and the St. Lawrence River
 (Cornwall, ON)
- Collecting and data entry for benthic macroinvetebrate community surveys on several watercourses within Ontario including: Bonnechere River (Renfrew, ON), Montreal River (Latchford, ON), Jock River (Ottawa, ON), tributaries of the Bonnechere River (Renfrew, ON), tributaries to Feedmill Creek (Ottawa, ON), tributary to Chippewa Creek (North Bay, On) and tributary to the Beaudette River (Alexandria, ON).
- Collecting and data entry for several fish community surveys including: Black Creek (Westminster, ON), Bonnechere River (Renfrew and Douglas, ON), Butler's Creek (Brockville, ON), East Branch of Little Cataraqui Creek (Kingston, ON), Kehoe Ditch (Greely, ON), Lac Opemisca (Ouje-Bougoumou, QC), Marshall Seguin Municipal Drain (Vars, ON), Montreal River (Latchford, ON), tributaries of Lavalle Creek (Carleton Place), tributaries to Feedmill Creek (Ottawa, ON), tributaries to Lafontaine Creek (Clarence-Rockland), tributaries to Shirley's Brook (Kanata, ON), tributaries to the Beaudette River (Alexandria, ON), tributaries to the Bonnechere River (Renfrew, ON), tributaries to the Ottawa River (Carp, ON; Ottawa, ON; Wendover, ON; Clarence-Rockland, ON), tributaries to the South Nation River (Jessup Falls, ON), tributary to Hawkesbury Creek (Hawkesbury, ON), Hawkesbury Creek (Hawkesbury, ON), tributary to the St.Lawrence River (Prescott, ON) and tributary to the North Castor River (Greely, ON).
- Mapped fish habitat in many watercourses including: Black Creek (Westminster, ON), Bonnechere River (Renfrew and Douglas, ON), Butler's Creek (Brockville, ON), Kehoe Ditch (Greely, ON), Lac Opemisca/Lac Barlow Bypass channel (Ouje-Bougoumou, QC), Marshall Seguin Municipal Drain (Vars, ON), McKinnons Creek (Navan, ON), Montreal River (Latchford, ON), tributaries of Lavalle Creek (Carleton Place), tributaries of the Bonnechere River (Renfrew, ON), tributaries to Lafontaine Creek (Clarence-Rockland), tributaries to McKinnons Creek (Navan, ON), tributaries to Shirley's Brook (Kanata, ON), tributaries to the North Castor River (Greely, ON), tributaries to the Ottawa River (Ottawa, ON; Wendover, ON), tributaries to the South Nation River (Casselman, ON), tributaries to the South Nation River (Jessup Falls, ON), tributary to the St.Lawrence River (Prescott, ON) and tributary to Hawkesbury Creek (Hawkesbury, ON).
- Assisted in YOY sampling on the Raisin River (Lancaster, ON).
- Conducted riverine index netting on the Bonnechere River (Renfrew, ON).



- Assisted in gill netting on Bonnechere River (Renfrew, ON), Lac Barlow (Ouje-Bougoumou, QC), Lac Opemisca (Ouje-Bougoumou, QC), Montreal River (Latchford, ON), and Raisin River (Lancaster, ON).
- Assisted in conducting larvae surveys on Bonnechere River, Hoople Creek, Montreal River and Raisin River,
- Collected walleye eggs from the spawning grounds on the Bonnechere River, Montreal River, Raisin River and Hoople Creek.
- Assisted in the monitoring of a new wetland channel created in the Little Cataraqui River.
- Marsh monitoring program breeding amphibian survey at Stittsville, ON; Cornwall, ON; Kanata, ON; Hoople Creek and the Bonnechere River.
- Assisted in conducting fall walleye index netting for the MNR in Kawartha Lakes
- Conducted turtle surveys (Carleton Place, ON; Ottawa, ON)
- Conducted headwater waters assessment (Kanata, ON; Navan, ON, Ottawa, ON)

Terrestrial Inventories

- Multiple Environmental Impact Assessments across Ontario
- Tree Inventory for construction of the light rail (LRT; Ottawa, ON)
- Winter white-tailed deer survey (Edwardsburgh, ON)
- Plant community inventories for proposed developments, quarries, sand pits and road extensions (Brockville, Carleton Place, Carp, Casselman, Elgin, Griffith, Hamilton, Jessup Falls, Navan, Ottawa, Stittsville, Rockland, Simcoe, Cornwall, Kemptville, Hawkesbury, Smith Falls, Wendover, Moosecreek, Westminster, Prescott, Renfrew, Jones Falls, Michipicoten Island and in Ouje-Bougoumou in QC)

Aquatic Habitat Mapping for Municipal, City Roads and Provincial Highways

- Conducted MTO habitat assessments at Galetta Side Road, Torbolton Road, Kinburn Side Road (Ottawa, ON)
- Conducted MTO habitat assessments at Prince of Wales, Fernbank Road, Fallowfield Road, HWY 115, Arbuckle drain, the Carp river, tributaries to the Carp river and tributaries to Mud creek (Ottawa, ON)
- Conducted MTO habitat assessments at Innes Road, Ottawa, ON.
- Conducted MTO habitat assessments at MacLaren Side Road, Ottawa, ON.

Other

- Fish salvage: Mississippi River (Almonte, ON), Monaghan Drain (Ottawa, ON), tributary to the Rideau Canal (Kemptville, ON), and tributary to Feedmill Creek (Ottawa ON), Bonnechere River (Renfrew, ON)
- Assisted in conducting a winter bat hibernaculum inventory (Plantagenet, ON)
- Field research assistant for the Metalicuus study and EDC study (Experimental Lakes Area, ON)
- Captured, pit tagged, telemetry tagged and tracked Northern Pike (Experimental Lakes Area, ON)
- Construction and maintenance of nature trail (the Cornwall Outdoor Recreational Area, ON)
- Conducted frog deformities surveys (Glengarry, ON)
- Organized youth fishing derbies through SLFGC (2011-2013; South Lancaster)
- Organized the St.Francis Walleye Tournament through SLFGC (2012-2013; South Lancaster)



CODY J.C FONTAINE, Fisheries and Wildlife Technologist

EDUCATION

Fisheries and Wildlife Technology, Frost Campus, Sir Sandford Fleming College, 2012 Fisheries and Wildlife Technician, Frost Campus, Sir Sandford Fleming College, 2011

LANGUAGES

Fluent in English

POSITIONS HELD

BCH Environmental Consulting Inc., Fisheries and Wildlife Technologist
 Bowfin Environmental Consulting Inc., Fisheries and Wildlife Technologist

2009: Raisin Region Conservation Authority, Field Research Assistant

CERTIFICATIONS / PROFESSIONAL AFFILIATIONS

MTO/DFO/OMNR Fisheries Protocol, Environmental Monitoring For Construction Projects Practitioner (EMCPP), Ontario Stream Assessment Protocol (OSAP), Class 2 Electroshocking, first aid, CPR, Pleasure Craft Operator Card, WHMIS, WHSA, Hazard Identification, Assessment and Control, Ice Safety Training, Possession / Acquisition Firearms License, Fish Identification Certificate, Radio Telemetry Certificate, Fish Hatchery Operations Certificate, Ontario Hunter Education Course Certificate, Ontario trapper Education Course Certificate, Ontario class G driver's license.

EXPERIENCE

Experience in environmental monitoring, environmental assessments, terrestrial habitat assessment, species at risk surveys, amphibian surveys, freshwater habitat assessment, collection and identification of plants, collection and identification of fish, fish salvage, bat hibernaculum inventories and fisheries inventories including netting and electroshocking. Other experiences include GIS mapping.

Aquatic Inventories

- Assisted with boat electrofishing along the shoreline of the Ottawa River (Chat Falls and Ottawa, ON), Lake St. Francis (South Lancaster, ON), Bonnechere (Renfrew, ON), Raisin River (Lancaster, ON), Buckhorn Lake (Peterborough, ON) and the St. Lawrence River (Cornwall, ON)
- Assisted in collecting and data entry for several fish community surveys including: Bonnechere River (Renfrew, ON), tributaries to Feedmill Creek (Ottawa, ON), tributaries to Shirley's Brook (Kanata, ON), tributaries to the Ottawa River (Ottawa, ON), tributaries to the Rideau River (Manotick, ON), tributaries to the Castor River (Vars, ON), tributaries to the Otonabee River (Lakefield, ON), tributary to the Madawaska River (Arnprior, ON), tributaries to Kemptville Creek (Kemptville, ON), tributary to Blairs Creek (Clarence Creek, ON), tributaries to South Indian Creek River (Russell, ON) tributaries to the South Nation River (Casselman, ON), tributaries to Fraser Clarke Drain (Nepean, ON), tributaries to the Raisin River (Long Sault, ON), Oliver-Magee drain (South Glengarry, ON) and tributary to Hawkesbury Creek (Hawkesbury, ON).
- Assisted in collecting walleye eggs from the spawning grounds on the Raisin River.
- Marsh monitoring program breeding amphibian surveys (Stittsville, Lakefield, Cornwall, Long Sault, South Glengarry, Bourget, Manotick and Kanata, ON).
- Conducted turtle surveys (Carleton Place, Ottawa, Cornwall and Lancaster, ON)
- Conducted Headwater Assessments (Ottawa, Stittsville and Manotick, ON)
- Invasive Species Survey (Ottawa, ON)

Species at Risk Inventories / Monitoring



- Assisted in butternut surveys, inventories and assessments for proposed developments (Carleton Place, Casselman, Cornwall, South Glengarry, Long Sault, Kemptville, Smiths Falls, Ottawa, Stittsville, Peterborough, Lakefield, Brockville, Alfred, Orleans, Kanata and Prescott, ON).
- American Eel surveys using the boat electrofisher on the Ottawa River (Ottawa, ON)
- American Eel collection on the St. Lawrence River for the St. Lawrence River Institute (Cornwall, ON)
- Conducted tailrace surveys for hydro facilities regarding American eel and lake sturgeon fatalities (Almonte, Renfrew, Ottawa and Fitzroy Harbour, ON)
- Whip-poor-will survey for proposed development (Ottawa, Kemptville, Bourget, Stittsville, Alfred, South Glengarry and Alexandria, ON) and quarries (Ottawa and Cornwall, ON)
- Surveyor for Little Brown bat, Eastern Small Footed Bat and Northern Long Eared Bat surveys at Ernestown Windpark (Ernestown, ON)
- Gray Ratsnake Survey (Smiths Falls and Lakefield, ON)
- Bat Cavity Survey (Lakefield, Smiths Falls, Bourget, Clarence Creek, Casselman, Orleans, Kanata, South Glengarry and Embrun, ON)
- Conducted Least Bittern surveys (Prospect, Alexandria, and Lancaster, ON)
- Conducted Black Tern nest surveys (Alexandria, and Cornwall, ON)
- Conducted turtle surveys: Blanding's turtle, Musk turtle and Northern Map turtle, Painted turtle and Snapping turtle (Carleton Place, Ottawa, Stittsville, Kanata, Rockland, Cornwall, Lakefield, Alfred, Clarence Creek and Lancaster, ON)
- Conducted American Ginseng Survey (Alfred, ON)
- Conducted rapid clubtail surveys (Almonte, ON)
- Conducted Osprey nest surveys (Cornwall, ON)

Terrestrial Inventories

- Assisted plant community inventories for proposed developments (Ottawa, Cornwall and Prescott, ON)
- Assisted in ELC inventories (Ottawa, Lakefield, Alfred, Kanata, Long Sault, South Glengarry and Peterborough ON)
- Nesting Bird Survey (Stittsville and Brockville ON)
- Large Tree Survey (Carp, Kanata and Orleans, ON)
- Deer and Moose Overwintering Survey (Alfred, ON)

Environmental and Fisheries Inspections

- Assisted in providing environmental and fisheries inspections for construction (Ottawa, ON)
- Assisted in turtle salvage during construction at the Cavanagh Snow Dump (Kanata, ON)

Fish Salvage

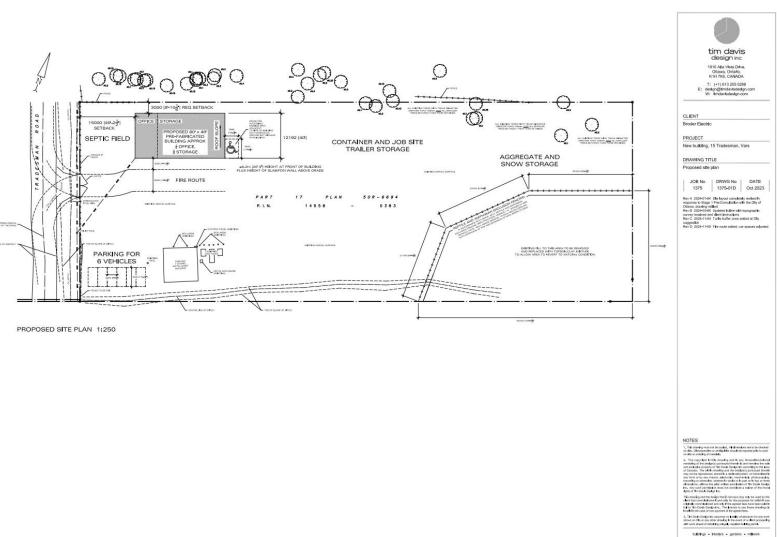
- Highway 401 Fish Salvage Brockville, ON and Prescott, ON (Cruikshank, MTO Contract)
- Other fish salvages: Cardinal Creek (Ottawa, ON), Monaghan Drain (Ottawa, ON), tributary to the Rideau Canal (Kemptville, ON), tributary to Feedmill Creek (Ottawa ON), Bonnechere River (Renfrew, ON), Mississippi River (Almonte, ON), Ottawa River (Ottawa, ON), Tributary to Fraser Clarke Drain (Nepean, ON), tributary to St.Lawrence River (Newington, ON), Davidson Pond (Ottawa, ON), Hazeldean tributary (Ottawa, ON), tributary to Jock River (Richmond, ON), culvert on Thunder Road (Gloucester, ON), culvert on Dunning Road (Cumberland, ON)

Other

- Organized fishing derby through RRCA (2008-2012; Cornwall, ON)
- Conducted environmental education presentations to many school groups (Cornwall, and Lancaster, ON)
- Tree Planting (2008-2012; Cornwall, ON)



APPENDIX B: PLANS





APPENDIX C: On-site Reference Handout

20373 Bethune Street South Lancaster, On KOC 2CO 613.571.8883 shaun@bchenviro.ca

General Provisions:

- Watch out for wildlife while driving, and avoid hitting them, provided that it is safe to do so.
- Ensure sediment and erosion control measures (i.e., silt fencing) and other protective measures are in place prior to beginning work. Inspect them regularly, and particularly after storm events, to ensure their continued effectiveness.
- Prior to beginning work each day, check for wildlife by conducting a thorough visual inspection of the work space and immediate surroundings.
- Restrict all activities, vehicles and materials to the designated work space. Do not disturb areas identified for retention.
- Secure stockpiled materials, vehicles and structures against wildlife entry.
- Litter and other waste materials must be appropriately contained and promptly disposed of.
- Do not feed any wildlife or leave food out where it could attract them.

For health and safety reasons, and for protection of animals, removal and relocation of mammals must only be done by qualified and properly equipped personnel. Call the wildlife service provider [BCH ENVIRONMENTAL CONSULTING INC.] at (613) 571-8883 for assistance.

Scratches and bites from animals, whether domestic or wild, can result in serious infections and/or transmit diseases. Seek medical treatment immediately for any person injured by an animal.

Wildlife Encounters:

- **Do not harm any wildlife.** Many species are protected under provincial and/or federal legislation. Legal protection of egg-laying species applies to their eggs as well. Penalties for contravening these Acts can be severe
- **Stand back** and allow the animal to leave the site. Wildlife may be encouraged to move away from the work area by shouting, waving of arms, clapping of hands or gentle redirection using a push broom. Contact project biologist / wildlife service provider for assistance if needed (e.g., if young animals are found). Do not unnecessarily harass any wildlife.
- Turtles may need to be helped to safety. Our most common species, Painted and Snapping Turtles, are protected under the Fish and Wildlife Conservation Act, 1997. If one of these turtles is found in the work area, it can be gently removed to a safe location nearby. Wear gloves, or use a broom to steer the turtle into a bucket or other container. Handle with care to avoid injury to the turtle or yourself, particularly when dealing with Snapping Turtles, which may bite or scratch. Turtles may also wet themselves when handled.
- Most of Ottawa's **snakes** are protected under the Fish and Wildlife Conservation Act, 1997. None of them are venomous, but bites may cause infections. Some produce a foul-smelling musk when handled, instead of biting. Snakes will usually try to escape or hide when disturbed, and only defend themselves when trapped. If a snake is found in the work area, it should be gently herded out to a safe location.
- **Stop work immediately** if any species protected under the Endangered Species Act, 2007 are seen in or near the work site (see attached sheet for tips on identifying some commonly encountered species). Take a photograph if possible, to confirm the sighting, and contact the project biologist at (613) 571-8883 and the Ministry of Environment, Conservation and Parks at SAROntario@ontario.ca. Additional measures to avoid impacts may be required by the Ministry before work can restart.



APPENDIX D: Commonly Encountered Species Protected under the Endangered Species Act, 2007

Blanding's Turtle

Bright yellow chin and throat. Highly domed, speckled shell up to 28 cm (11 in) in length.

Eggs small, oval and white. Usually less than 12 eggs per nest.





Photo courtesy of R. van de Lande

Bobolink

Males black with white back and cream hood during spring and summer breeding season. Females and non-breeding males streaky brown. Nests on the ground in open grasslands and hayfields.





Photo courtesy of A. MacPherson

Eastern Meadowlark

Streaky grayish-brown bird with bright yellow front marked by black "V." Short tail has white edges on each side. Nests on the ground in open grassy areas; often seen perching on fence posts or shrubs.



Photo courtesy of A. MacPherson

Butternut

Each leaf has several pairs of leaflets on either side of the main stalk, and one leaflet at the tip.
Leaves and twigs grow in an alternating pattern along the branches. The nuts resemble limes or lemons in shape, and have greenish-yellow fuzzy rinds covering a hard, brown, ridged shell. The closely related Black Walnut. Its leaves are very similar to Butternut's leaves, but the terminal leaflet at the tip of each leaf is often much smaller than the other leaflets, or missing entirely.



Photo courtesy of A. MacPherson



APPENDIX E: Agency Contact

Agency	Staff Contact(s)	Telephone	Information/Authority on:
City of Ottawa	Planner	(613) 580-2424	Development application review process
	Environmental Planner	(613) 580-2424	EIS and other municipal environmental policies
	Forester- Planning	(613) 580-2424	Tree Conservation Report and urban tree removal
Conservation Authority – usually only one will be involved in any given application	Mississippi Valley Rideau Valley South Nation	(613) 253-0006 (613) 692-3571 (613) 984-2948	Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation
Fisheries and Oceans Canada	Fish and Fish Habitat Protection Program (Ontario)	1-855-852-8320 FisheriesProtection@dfo- mpo.gc.ca	Fish and fish habitat issues
Ministry of Environment, Conservation and Parks	Management Biologist	SAROntario@ontario.ca	Provincially protected species at risk (occurrence data, habitat information, advice and applications for permits under the Endangered Species Act, 2007).
Ministry of Natural Resources and Forestry (Kemptville District office)	Management Biologist	(613) 258-8204 (main office)	Wetlands; Areas of Natural and Scientific Interest; significant wildlife habitat.