Tree Conservation Report – Proposed Stittsville II Quarry, Ottawa, Ontario



August 27, 2024

Prepared for: R.W. Tomlinson Limited

Cambium Reference: 19686-001

CAMBIUM INC.

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Tree Conservation Report – Proposed Stittsville II Quarry, Ottawa, Ontario R.W. Tomlinson Limited Cambium Reference: 19686-001 August 27, 2024

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Appendix A City of Ottawa Preconsultation Comments (December 2023)



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1.0 Introduction

Cambium Inc. (Cambium) was retained by R.W. Tomlinson Limited (Tomlinson) to complete a Tree Conservation Report (TCR) for the proposed Stittsville II Quarry, 635 & 891 Jinkinson Road, City of Ottawa, Ontario (the Site; Figure 1 to Figure 3).

This TCR has been prepared in accordance with the City of Ottawa's TCR Guidelines (Ottawa 2022) and the City of Ottawa's Tree Protection By-law (By-law No. 2020-340) adjusted to the scope identified below. It has also been prepared using standard arboriculture techniques, as outlined in the *Tree and Landscape Appraiser's Guide for Plant Appraisal*, 9th Edition (ISA, 2000) and the *Arborists' Certification Study Guide*, 3rd Edition (Lilly, 2010).

This report represents an update to the original TCR, prepared in March 2024. Updates reflect minor changes relating to the placement of berms along the southern boundary of the Site and Jinkinson Road.

1.1 Scope

This TCR was prepared in response to comments from the City of Ottawa (Ottawa December 22, 2023) on the Natural Environment Report and Environmental Impact Study (WSP 2023) that was submitted as part of the *Aggregate Resources Act* (Ontario 1990a) and *Planning Act* (Ontario 1990b) application for the proposed quarry. The City indicated in their comments that the TCR could be "scaled down to a more basic level for this application, applying only to the *Jinkinson ROW and Trans Canada Trail and the associated setback areas. The Tree Conservation Report (TCR) information referenced applies to only City-owned trees in this area, and this information can be provided within the EIS."*

Based on the above comment, the scope of this TCR focuses on the City-owned trees immediately adjacent to the Site along Jinkinson Road and the Trans Canada Trail. For reference, the complete City of Ottawa comments are provided in Appendix A.

1.2 Qualifications

This report was prepared by Fergus Nicoll, Ecological Specialist at Cambium.



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Fergus Nicoll specializes in ecology, with an emphasis on technical work. Fergus has over 20 years of technical experience in collecting botanical and forest inventory data, conducting ecological land classification (ELC), assessing tree health, and completing tree inventories. He has authored several Tree Conservation Reports, many of which were within the City of Ottawa. He is also provincially certified in ELC, the Ontario Wetland Evaluation System, and Butternut Health Assessments, and has been involved in several related workshops. Fergus also receives support from Cambium's certified Arborists as needed.

1.3 General Site Information

The detailed location of the Site is outlined below in Table 1.

Table 1 Site Information

Municipal Address	635 & 891 Jinkinson Road, Ottawa, ON			
Legal Description	Part of Lots 15 and 16, Concession XI, Geographic Township of Goulbourn			
Current Zoning	RU			
Current Site Owner	R.W. Tomlinson Limited			
Contact Information of Site Owner or Representative	Craig Bellinger R.W. Tomlinson Limited 100 Citigate Dr. Ottawa, ON K2J 6K7			



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1.4 Definitions

Table 2 Definitions

Acronym/ Definition	Description
Adjacent Tree	A tree that has a trunk growing on a property with a shared boundary with the Site (Ottawa 2020).
Boundary Tree	A tree, which has a trunk growing on one or more property lines (Ottawa 2020).
Critical Root Zone	The area of land within a radius from the trunk of a tree calculated as 10 centimetres (cm) for every 1 cm of trunk diameter (Ottawa 2020).
DBH	Diameter (in cm) at breast height and is measured at 1.4 metres (m) above the ground for each tree.
Imminently Hazardous Tree	A destabilized or structurally compromised tree that is in imminent danger of causing damage or injury to life or property.
Injure and Injury	Any act that will harm a tree's health, including failure to protect in accordance with standards set by the City (Ottawa 2020).
Municipal Tree	A tree, which is located on or partially on municipal property and includes boundary trees (Ottawa 2020).
Protected Tree	Includes trees to be retained / protected and requires an approval / permit for injury or destruction (Ottawa 2020).
Retained Tree	A tree that is proposed to be retained / protected and for which an approval / permit is not required (Ottawa 2020).
Root Zone	The subterranean area around the tree measured from the trunk up to 2 - 3m beyond the dripline.



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2.0 Methodology

2.1 Tree Inventory and Assessment

At the northern boundary of the Site, all City-owned trees between Jinkinson Road and the Site were assessed individually as few were present. Data collected on individual trees included species, DBH, and condition of the trees.

Along the southern boundary, all trees within 5 m of the Site were inventoried by groupings of trees. Data collected within each grouping included the percent composition of species, the range of DBH, and the overall health of the grouping. Notes were also taken on the presence of shrubs within the groupings, in particular alien invasive species. In addition to these groupings, any trees (within and beyond the 5 m groupings) that had the potential to be affected the quarry development were assessed individually. This essentially included larger trees that had potential to have a CRZ that overlapped works that will occur on the Site (e.g., berm placement and use of heavy equipment).

Poplar species (*Populus* spp.) and willow (*Salix* spp.) species were grouped into genus, in part due to the difficulty in separating some species in winter, and the presence of possible hybrids.

The overall health of trees was assessed using the method outlined in the ISA publication, *A Photographic Guide to the Evaluation of Hazard Trees in Urban Areas*, 2nd Edition (Mattheny and Clark, 1994). Using this guide, an overall condition and hazard rating (i.e., dead, hazard, poor, fair, or good) was given to each tree included in the inventory. For details on each rating refer to Table 3.

Table 3 Condition Ratings

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Condition Rating Description					
Dead	A tree is considered dead when it has no living tissue.				
Hazard	The tree could either be alive or dead but could pose an imminent hazard to people or property during normal weather conditions. These				



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Condition Rating	Description				
	trees have the potential for splitting, breaking and/or falling over during inclement weather, and because of their proximity to various targets (i.e., people or property), could cause personal injury and/or severe damage to municipal infrastructure and/or private property.				
Poor	The tree shows major symptoms of decline. At least 50% of main scaffold branches are dead, missing or in diseased state. The trunk shows evidence of advanced rot, deadwood or is hollow throughout. Twig development on the main branched or throughout the canopy is poor and may have limited sucker growth. Callus growth around wounds is minimal. A tree in poor condition could decline further to become a safety hazard. Removal prior to development should be considered if it is considered a hazard tree.				
Fair	The tree shows moderate symptoms of decline in lower canopy or scaffold branches, but more than 50% of scaffold branches are present and viable. The trunk shows limited evidence of rot or insect damage. Good callus growth is present near wound areas. Removal or preservation of these trees depends on the location of the specimen and associated target potential, and would depend on the species, and its tolerance to grading, trenching, and surviving in an urban environment. Some major arboricultural maintenance may be required and may include major scaffold or secondary branch removal, bracing and/or cabling.				
Good	The tree shows no symptoms of decline in the trunk, and all scaffold branches are present and are in good condition. Most scaffold branches are at right angles to the trunk and show good vigour. Small amounts of dead wood may be present in secondary branches, but				



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Condition Rating	Description
	account for less than 25% of the canopy. Depending on the grading in
	the immediate area, a tree in good condition would be recommended
	for preservation. Such a tree would typically survive to maturity without
	major arboricultural maintenance.

2.2 Tree Impact Analysis

Using data collected during the tree inventory and assessment, a tree impact analysis was performed. Determination of a recommended action for each tree (i.e., remove, minor injury and protect, injure, and protect, or retain with or without protection) were based on several factors including each tree's current condition and its location in relation to the project impact area.

Generally, the following guidelines are followed in determining a recommended action:

- Trees with equal to or greater than 40% of its CRZ affected by proposed work activities are recommended for removal as there would likely be negative impacts to the tree that could lead to significant decline or even death of the tree.
- Trees with 25-39% of its CRZ affected by proposed work activities are recommended for injury with protection to mitigate further damage to the tree's below-ground parts and above-ground parts. Survival and minimizing decline is possible with mitigation.
- Trees with 0-24% of its CRZ affected by proposed work activities are recommended for minor injury with protection to mitigate further damage to the tree's below-ground parts and above-ground parts. Survival and minimizing decline is possible with mitigation.
- Trees on the Site with CRZs that are not impacted by the proposed work activities or adjacent trees that are close enough to the property boundary that they may accidentally be damaged, are recommended for retention with protection, to mitigate the chances of accidental injury from adjacent work activities.



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Hazard trees, as well as trees found to be in poor or dead condition that could pose a
hazard, may be recommended for removal, both within and outside of the area of impact.



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3.0 Proposed Works

The development of the Stittsville II Quarry is anticipated to occur concurrent with the operation of the existing Stittsville Quarry. Extraction activities will proceed east and south from the common boundary with the existing Stittsville Quarry. Once excavation in the Stittsville II Quarry to the southern limit has been reached, any remaining bedrock in the extraction area to the north (along Jinkinson Road) will be removed. The proposed quarry will be developed in three lifts, which may operate simultaneously depending on rock quality and market demand. The depth of each lift is dependent on bedrock formation thickness. The anticipated lowest quarry floor elevation will be approximately 101 m above-sea-level (asl).

The project component that is closest to the City-owned trees on adjacent lands is the proposed construction of a visual berm within the 30 m setback along the northern and eastern Site boundary, and within the 15 m setback along the southern Site boundary (along the TransCanada Trail).

The berm along the northern Site boundary will be an extension of the existing Stitsville Quarry berm and will be approximately 15-20 m wide at the base and be located between 9-10 m from the property boundary. It is estimated that the berm along the southern Site boundary will be 9-10 m wide at the base, and approximately 4 m from the boundary. No use of heavy equipment will occur between the berms and the City property, allowing for a buffer to CRZs of adjacent trees. The proposed disturbance related to berm construction is shown on Figure 4 to Figure 6.



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4.0 Existing Plant Communities and Tree Cover

For details on the pre-development plant communities and significant natural features on the Site and adjacent Study Area, refer to the *Natural Environment Report and Environmental Impact Study* (WSP 2023). The focus of this TCR is the City-owned lands and trees along the northern and southern boundaries of the Site. To the north of the Site, on City-owned lands, there is a semi-manicured ditch and roadside right of way along the southern side of Jinkinson Road. Within this area is a narrow band of meadow plants, wetland plants in portions of the ditch, and scattered shrubs and small trees. To the south of the Site, between the Site and the Trans Canada Trail on City-owned lands, is a band of immature forest that includes patches of coniferous, deciduous, and mixed coniferous-deciduous tree cover. Species dominance varies depending on the specific location. No species at risk were identified anywhere near the boundary of the Site. Invasive buckthorn species (*Rhamnus cathartica, Rhamnus frangula*), primarily in shrub form, are abundant and widespread within and adjacent to the forest along the southern edge of the Site.

4.1 Existing Tree Cover

Table 4 and Table 5 provide an inventory of City-owned or trees with shared ownership along and adjacent to the northern and southern boundaries of the Site. The location of trees, tree groupings, and their CRZs is shown on Figure 1 to Figure 6. All trees noted in Table 4 are City-owned except Tree 1 which appears to be right on the property boundary and may have shared ownership.

Table 4 Individual Trees and Recommendations

Tree #	Species	DBH (cm)	Condition/Notes	Recommendation
1	White spruce (<i>Picea glauca</i>)	71	Good. Shared Ownership (boundary tree).	Retain – CRZ outside of berm footprint. Protection per Section 6.0
2	White pine (Pinus strobus)	45	Good	Retain – CRZ outside of Site.



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Tree #	Species	DBH (cm)	Condition/Notes	Recommendation
				Protection per Section 6.0
3	White cedar (<i>Thuja</i> occidentalis)	39	Fair. Some crown dieback and signs of heart rot.	Retain – CRZ outside of Site. Protection per Section 6.0
4	Aspen (<i>Populus</i> sp.)	41	Fair. Some crown dieback and crooked growth.	Retain – CRZ outside of Site. Protection per Section 6.0
5	White pine	43	Good	Retain – CRZ outside of berm footprint. Protection per Section 6.0
6	White pine	42	Good	Retain – CRZ outside of berm footprint. Protection per Section 6.0
7	Willow (<i>Salix</i> sp.)	6 to 16	Good but twisted/gnarly/shrub- like, possibly hybrid, multi-stemmed.	Retain - CRZ outside berm footprint. Protection per Section 6.0
8	Willow	2 to 6	Good but twisted/gnarly/shrub- like, possibly hybrid, multi-stemmed.	Retain - CRZ outside berm footprint. Protection per Section 6.0
9	Willow	3 to 6	Good but twisted/gnarly/shrub- like, possibly hybrid, multi-stemmed.	Retain - CRZ outside berm footprint. Protection per Section 6.0

Note: All trees are City-owned except Tree 1 which appears to be a boundary tree (potentially shared ownership between the City and Tomlinson).



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Table 5 Tree Groupings and Recommendations

Tree Group #	Species and Percent Composition	DBH range	Average DBH	Condition/Notes	Recommendation
1	White cedar (Thuja occidentalis) 70% White spruce (Picea glauca) 20% White pine (Pinus strobus) 10% Poplar (Populus spp.) <1% White birch (Betula papyrifera) <1%	3 to 27	12	Overall good, occasional snag.	Retain: maximum CRZ of the grouping is outside berm footprint. Protection per Section 6.0
2	Poplar (95%) Willows (<i>Salix</i> spp.) 5%	1 to 7	2	Overall good, thicket mixed with invasive buckthorns, etc.	Retain: maximum CRZ of the grouping is outside berm footprint. Protection per Section 6.0
3	White cedar 40% White spruce 30% Poplars 10% White birch <1%	1 to 21	8	Good/fair, many snags. Dense buckthorn along edge on Tomlinson property.	Retain: maximum CRZ of the grouping is outside berm footprint. Protection per Section 6.0
4	Poplar 70% White cedar 30% White spruce <1%	1 to 18	3	Good/fair, interspersed with dense buckthorn/willow shrubs.	Retain: maximum CRZ of the grouping is outside berm footprint. Protection per Section 6.0
5	White cedar 50% White spruce 20% Poplar 20%	1 to 32	15	Good, occasional snag.	Retain: maximum CRZ of grouping is outside berm



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Tree Group #	Species and Percent Composition	DBH range	Average DBH	Condition/Notes	Recommendation
	White pine 10%				footprint. Protection per Section 6.0
6	White cedar 50% White spruce 20% Poplar 20% White pine 10% Balsam fir (<i>Abies balsamea</i>) <1% White birch <1%	1 to 28	12	Good.	Retain: maximum CRZ of tree grouping is outside berm footprint. Protection per Section 6.0
7	White cedar 70% White spruce 20% Poplar 5% White pine 5% Balsam fir <1% White birch <1% White elm (<i>Ulmus americana</i>) <1%	1 to 32	15	Good.	Retain: maximum CRZ of tree grouping is outside berm footprint. Protection per Section 6.0
8	Poplar 95% White cedar 5%	1 to 9	2	Good, invasive buckthorn and other shrubs mixed in.	Retain: maximum CRZ of tree grouping is outside berm footprint. Protection per Section 6.0
9	White cedar 70% White spruce 10% Poplar 20% White pine 5% Balsam fir <1% White birch <1% Red oak (<i>Quercus rubra</i>) <1%	1 to 34	18	Good.	Retain: maximum CRZ of tree grouping is outside berm footprint. Protection per Section 6.0
10	White pine 40% White spruce 40% White cedar 20%	1 to 35	10	Good, invasive buckthorn and	Retain: maximum CRZ of tree grouping is



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Tree Group #	Species and Percent Composition	DBH range	Average DBH	Condition/Notes	Recommendation
	Poplar <1%			other shrubs	outside berm
	Willow <1%			mixed in.	footprint.
	Green ash (Fraxinus pensylvanica) <1%				



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5.0 Proposed Alterations to Tree Cover and Potential Tree Retention

Of the City-owned trees and tree groupings assessed, none have a CRZ that overlaps the footprint of the proposed development of the Stittsville II Quarry. If mitigations measures described in Section 6.0 are followed, the development is unlikely to negatively affect any of the City-owned or boundary trees, or tree groupings.



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6.0 Recommendations and Mitigation Measures

There are no expected negative effects to City-owned trees or trees with shared ownership because of the development of the proposed Stitsville II Quarry; however, to ensure protection of those trees that do have a CRZ that overlaps with the Site, the following mitigation measures should be followed, as recommended by the City of Ottawa (Ottawa 2020).

- Erect tree protection fencing on the Site at the limit of the CRZs of City-owned or shared ownership trees and tree groupings where the CRZs overlap the Site. The tree protection fencing will start at the boundary fence and will follow the outer boundary of the CRZs. This fence must remain in place until the work is complete (berm installed and stabilized). The CRZ is calculated as the DBH (in cm) multiplied by 10 cm. See Figure 4 to Figure 6 for all CRZs that overlap the Site. Tree protection fencing must be at least 1.2 m high.
- Do not place any material or equipment within the CRZ of the trees.
- Do not raise or lower the existing grade within the CRZ without approval.
- Do not extend hard surfaces, or significantly change landscaping within the CRZ.
- Do not attach any signs, notices or posters to the trees.
- Tunnel or bore when digging within the CRZ of the trees.
- Do not damage the root system, trunk, or branches of the trees.
- Ensure that exhaust fumes from all equipment are not directed towards any tree's canopy.
- If any reduction of the fenced CRZs are required for construction activities, additional
 measures must be proposed by the project Arborist and approved by City Forestry staff.
 Examples of mitigation measures include placement of wood chips, plywood, or steel
 plating over roots or proper pruning methods and care of roots, if encountered (Ottawa
 2020).



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7.0 Closing

We trust this information meets your current needs. If you require anything further, please contact the undersigned.

Sincerely,

Cambium Inc.

-DocuSigned by:

AC17126AFF204FA..

Fergus Nicoll Dip.T Ecological Specialist DocuSigned by:

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Gwendolyn Weeks, H.B.Sc.Env Senior Ecologist/Project Manager

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8.0 References

City of Ottawa. 2020. Tree Protection By-law (By-law No. 2020-340).

Government of Ontario (Ontario). 1990a. Aggregate Resources Act, R.S.O. 1990, c. A. 8

Government of Ontario (Ontario). 1990b. Planning Act, R.S.O. 1990, c. P. 13

ISA. (2000). Tree and Landscapers Guide for Plant Appraisal. International Society of Arboriculture. 9th Edition.

Lilly, S. (2010). The Arborists' Certification Study Guide. International Society of Arboriculture, 3rd Edition

Matheny, N.P and Clark, J.R. 1994. *A Photographic Guide to the Evaluation of Hazard Trees in Urban Areas*. International Society of Arboriculture. 85 pp.

WSP Inc. 2023. *Natural Environment Report and Environmental Impact Study Proposed Stittsville 2 Quarry, Ottawa Ontario.* +101 pp.



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9.0 Standard Limitations

Limited Warranty

In performing work on behalf of a client, Cambium relies on its client to provide instructions on the scope of its retainer and, on that basis, Cambium determines the precise nature of the work to be performed. Cambium undertakes all work in accordance with applicable accepted industry practices and standards. Unless required under local laws, other than as expressly stated herein, no other warranties or conditions, either expressed or implied, are made regarding the services, work or reports provided.

Reliance on Materials and Information

The findings and results presented in reports prepared by Cambium are based on the materials and information provided by the client to Cambium and on the facts, conditions and circumstances encountered by Cambium during the performance of the work requested by the client. In formulating its findings and results into a report, Cambium assumes that the information and materials provided by the client or obtained by Cambium from the client or otherwise are factual, accurate and represent a true depiction of the circumstances that exist. Cambium relies on its client to inform Cambium if there are changes to any such information and materials. Cambium does not review, analyze or attempt to verify the accuracy or completeness of the information or materials provided, or circumstances encountered, other than in accordance with applicable accepted industry practice. Cambium will not be responsible for matters arising from incomplete, incorrect or misleading information or from facts or circumstances that are not fully disclosed to or that are concealed from Cambium during the provision of services, work or reports.

Facts, conditions, information and circumstances may vary with time and locations and Cambium's work is based on a review of such matters as they existed at the particular time and location indicated in its reports. No assurance is made by Cambium that the facts, conditions, information, circumstances or any underlying assumptions made by Cambium in connection with the work performed will not change after the work is completed and a report is submitted. If any such changes occur or additional information is obtained, Cambium should be advised and requested to consider if the changes or additional information affect its findings or results.

When preparing reports, Cambium considers applicable legislation, regulations, governmental guidelines and policies to the extent they are within its knowledge, but Cambium is not qualified to advise with respect to legal matters. The presentation of information regarding applicable legislation, regulations, governmental guidelines and policies is for information only and is not intended to and should not be interpreted as constituting a legal opinion concerning the work completed or conditions outlined in a report. All legal matters should be reviewed and considered by an appropriately qualified legal practitioner.

Site Assessments

A site assessment is created using data and information collected during the investigation of a site and based on conditions encountered at the time and particular locations at which fieldwork is conducted. The information, sample results and data collected represent the conditions only at the specific times at which and at those specific locations from which the information, samples and data were obtained and the information, sample results and data may vary at other locations and times. To the extent that Cambium's work or report considers any locations or times other than those from which information, sample results and data was specifically received, the work or report is based on a reasonable extrapolation from such information, sample results and data but the actual conditions encountered may vary from those extrapolations.

Only conditions at the site and locations chosen for study by the client are evaluated; no adjacent or other properties are evaluated unless specifically requested by the client. Any physical or other aspects of the site chosen for study by the client, or any other matter not specifically addressed in a report prepared by Cambium, are beyond the scope of the work performed by Cambium and such matters have not been investigated or addressed.

Reliance

Cambium's services, work and reports may be relied on by the client and its corporate directors and officers, employees, and professional advisors. Cambium is not responsible for the use of its work or reports by any other party, or for the reliance on, or for any decision which is made by any party using the services or work performed by or a report prepared by Cambium without Cambium's express written consent. Any party that relies on services or work performed by Cambium or a report prepared by Cambium without Cambium's express written consent, does so at its own risk. No report of Cambium may be disclosed or referred to in any public document without Cambium's express prior written consent. Cambium specifically disclaims any liability or responsibility to any such party for any loss, damage, expense, fine, penalty or other such thing which may arise or result from the use of any information, recommendation or other matter arising from the services, work or reports provided by Cambium.

Limitation of Liability

Potential liability to the client arising out of the report is limited to the amount of Cambium's professional liability insurance coverage. Cambium shall only be liable for direct damages to the extent caused by Cambium's negligence and/or breach of contract. Cambium shall not be liable for consequential damages.

Personal Liability

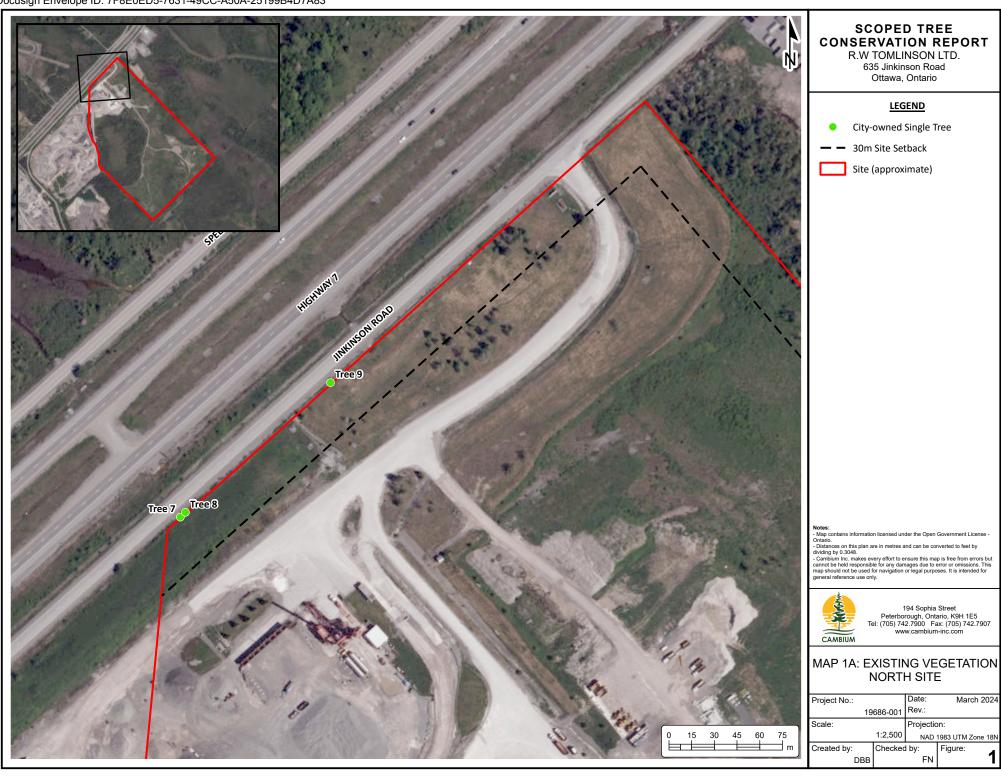
The client expressly agrees that Cambium employees shall have no personal liability to the client with respect to a claim, whether in contract, tort and/or other cause of action in law. Furthermore, the client agrees that it will bring no proceedings nor take any action in any court of law against Cambium employees in their personal capacity.

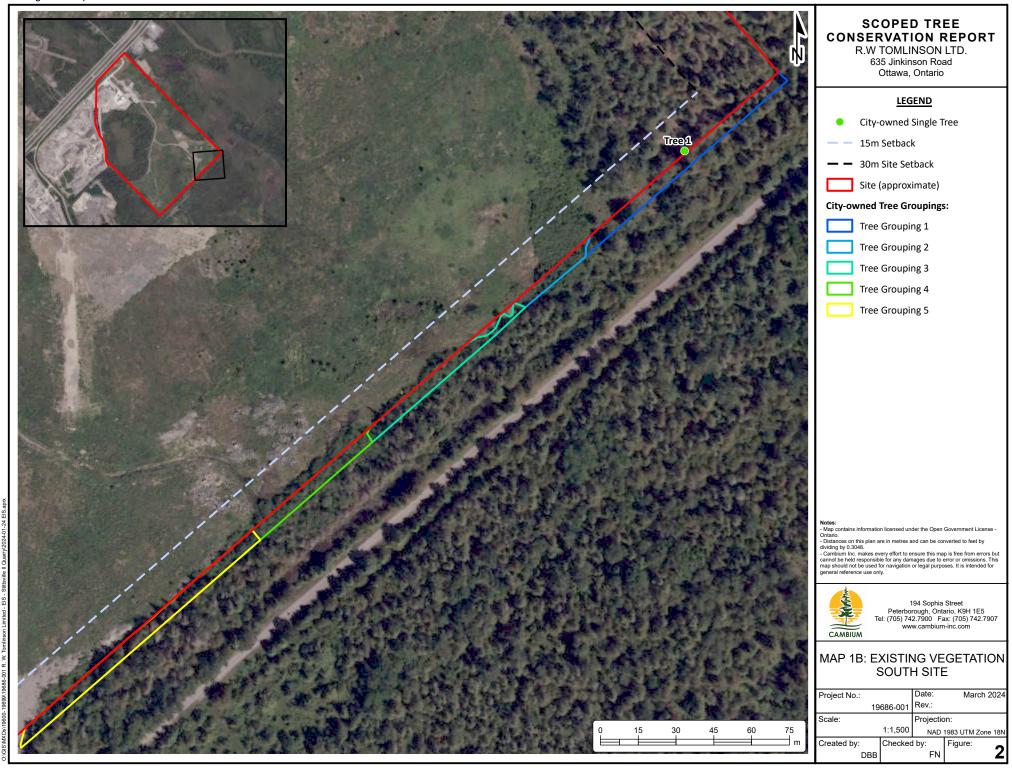


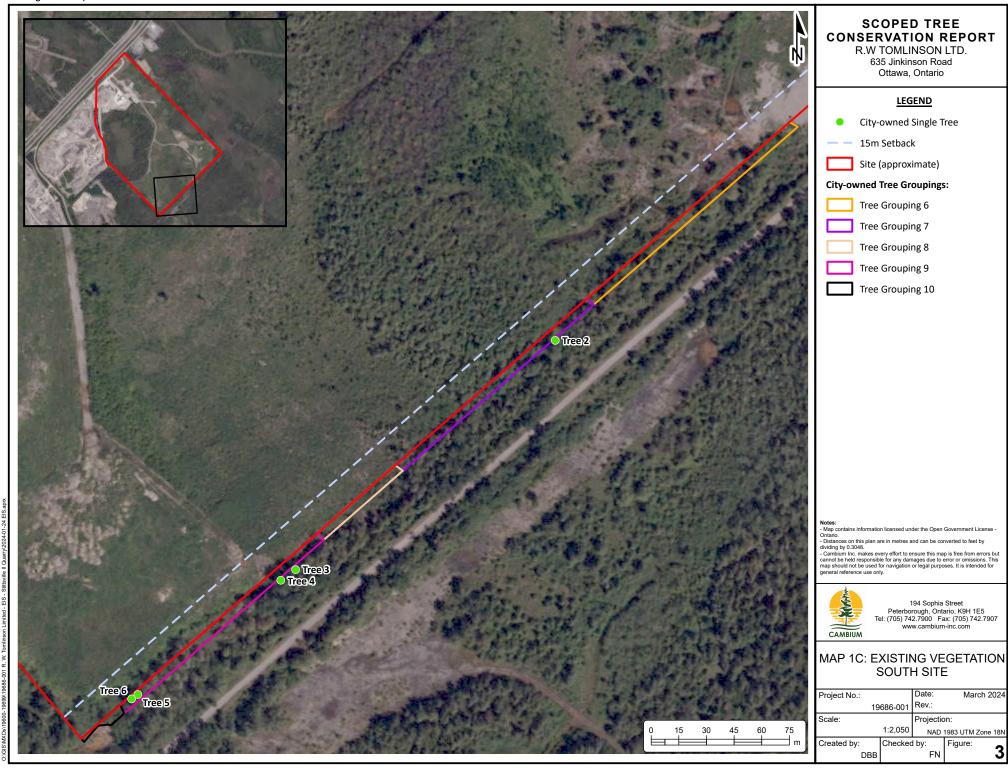
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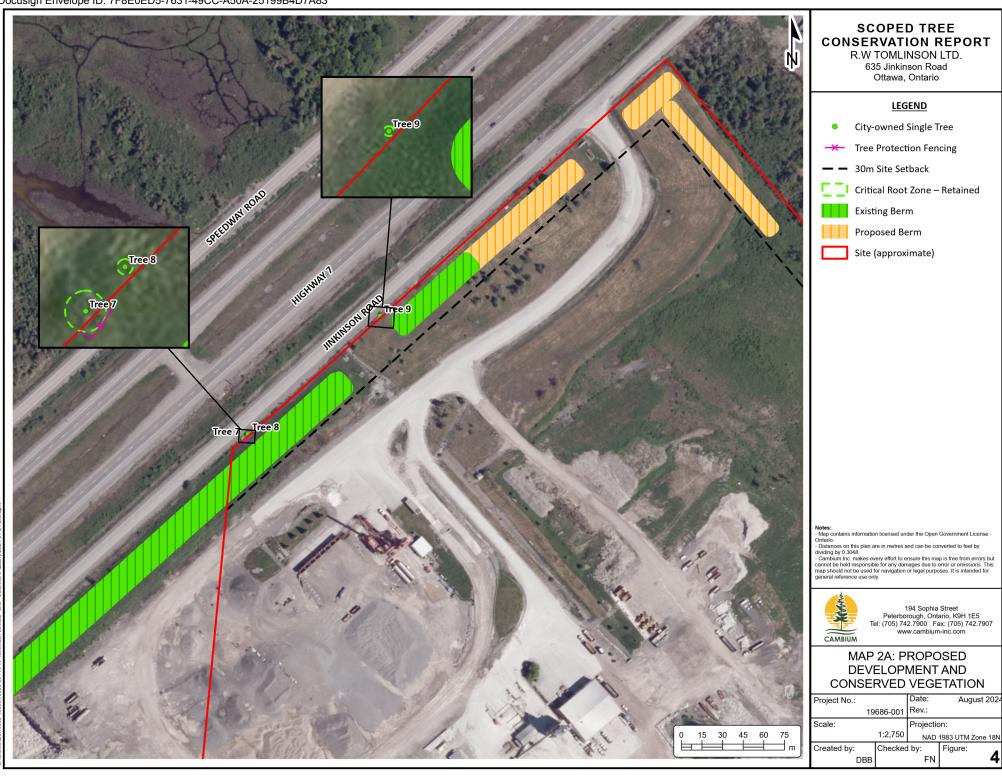
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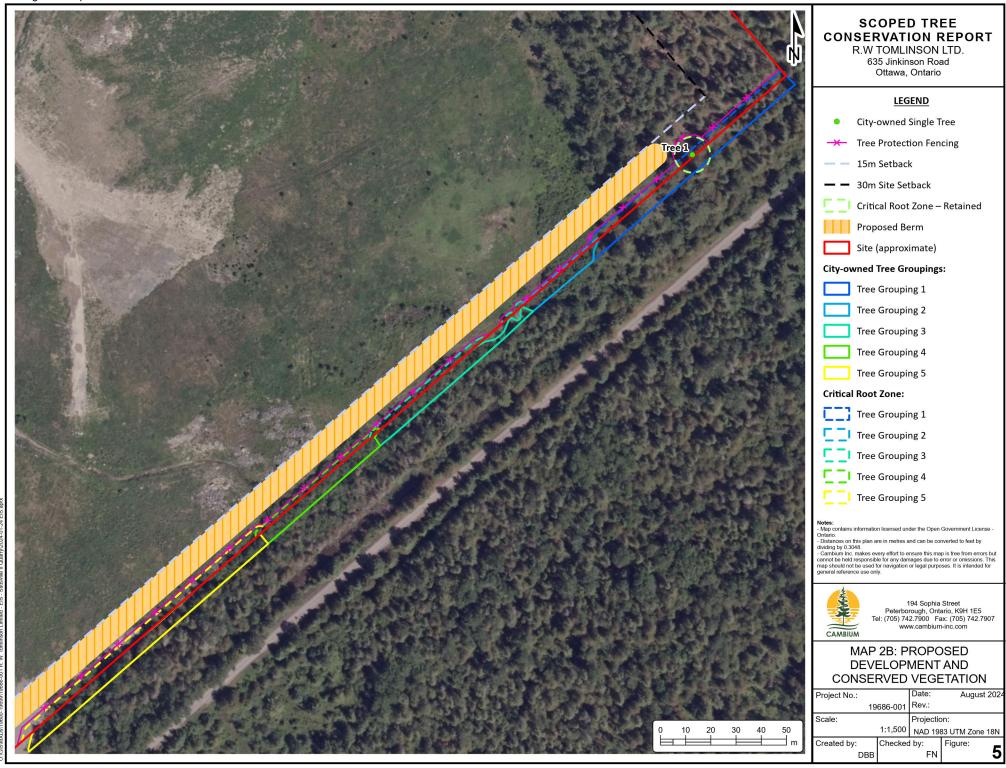
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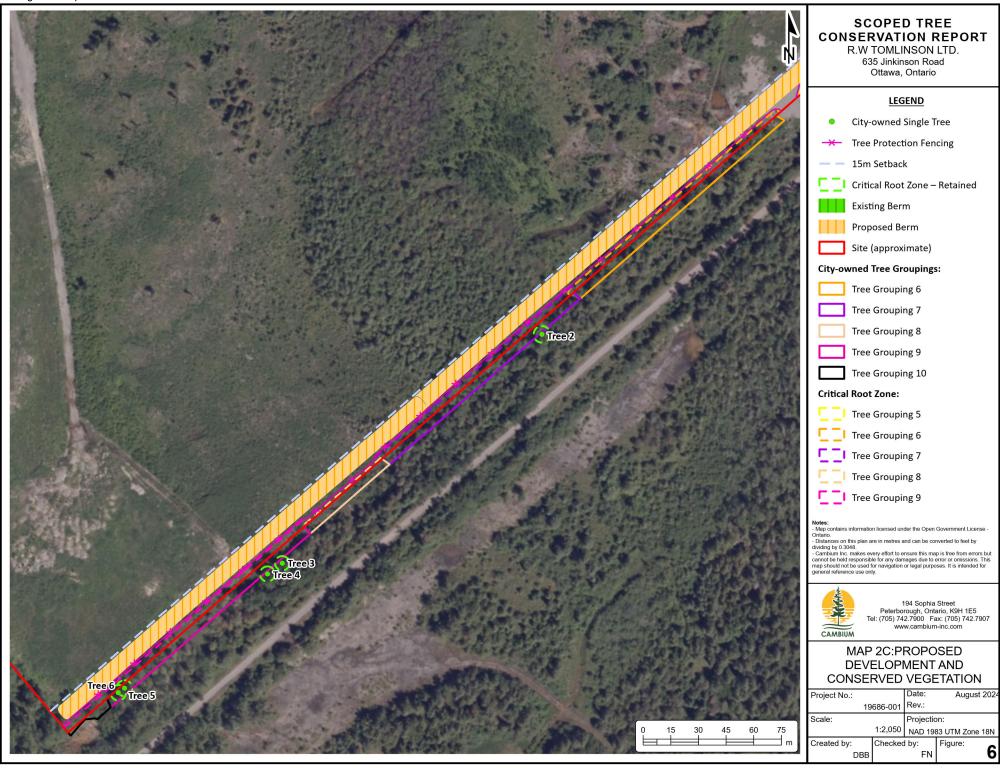














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Appendix A

City of Ottawa Preconsultation Comments (December 2023)



File No.: PC2023-0367

Neal DeRuyter MHBC Planning

Via email: nderuyter@mhbcplan.com

Subject: Phase 2 Pre-Consultation: Meeting Feedback

Proposed Official Plan and Zoning By-law Applications

635 & 891 Jinkinson Road

Please find below information regarding next steps as well as consolidated comments from the above-noted pre-consultation meeting held on December 13, 2023.

<u>Pre-Consultation Preliminary Assessment</u>

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One (1) indicates that considerable major revisions are required while five (5) suggests that the proposal appears to meet the City's key land use policies and guidelines. This assessment is purely advisory and does not consider technical aspects of the proposal or in any way guarantee application approval.

Next Steps

- A review of the materials submitted for the above-noted pre-consultation has been undertaken and staff have identified deficiencies needing to be resolved. Please proceed to complete a Pre-consultation Application Form for another Phase 2 review and submit together with the necessary revised studies and/or plans to planningcirculations@ottawa.ca.
- In your subsequent Phase 2 pre-consultation submission, please ensure that all
 comments or issues detailed herein are addressed. A detailed cover letter stating
 how each issue has been addressed must be included with the submission
 materials. Please coordinate the numbering of your responses within the cover
 letter with the comment number(s) herein.

Supporting Information and Material Requirements

- The attached Study and Plan Identification List outlines the information and material that has been further identified and/or confirmed, during this phase of pre-consultation, as <u>required</u> (R) or <u>advised</u> (A) as part of a future complete application submission.
 - The required plans and studies must meet the City's Terms of Reference (ToR) and/or Guidelines, as available on <u>Ottawa.ca</u>. These ToR and Guidelines outline the specific requirements that must be met for each plan or study to be deemed adequate.



Consultation with Technical Agencies

 You are encouraged to consult with technical agencies early in the development process and throughout the development of your project concept. A list of technical agencies and their contact information is enclosed.

Planning

List of Studies and Plans Reviewed:

Existing Features Plan , Drawing No. 1 of 5, prepared by MHBC, dated November 2023.
Operational Plan , Drawing No. 2 of 5, prepared by MHBC, dated November 2023.
Operational Plan Notes , Drawing No. 3 of 5, prepared by MHBC, dated November 2023.
Rehabilitation Plan , Drawing No. 4 of 5, prepared by MHBC, dated November 2023.
Cross Section Plan , Drawing No. 5 of 5, prepared by MHBC, dated November 2023.
Planning Report & Aggregate Resources Act Summary Statement , prepared by MacNaughton Hermsen Britton Clarkson Planning Limited (MHBC), dated November 2023.
Stage 1 Archaeological Assessment, prepared by Heritage Quest Inc., dated November 29, 1999.
Stage 1 Archaeological Assessment, prepared by Matrix Heritage, dated January 27, 2023.

Comments:

1. Official Plan policy 7.3.2) a) states the City shall initiate an Official Plan amendment within six months of the identification or revision of a provincially significant wetland by the Province of Ontario. The City is proceeding with a Citywide amendment to address a number of provincially significant wetland changes across the City. Please see the Natural System and Rural Affairs section below for more details. Should the applicant wish to proceed at a timeline independent of the City-initiated amendment, the revisions to the provincially significant wetlands on site could be incorporated in the Official Plan Amendment application made by the applicant.



- 2. The existing Official Plan designation on site include Rural Countryside and Greenspace. The proposed amendment to extend the Bedrock Resource Overlay would permit the operation of a quarry on site. The permitted uses are those of the underlying designation and those of the overlay. Once a quarry is no longer in operation, the underlying designation applies.
- 3. The Trans Canada Trail along the rear of the property is a Protected Transportation Corridor as per Schedule C2 of the Official Plan. Policies 4.1.2. 21) and 4.1.7. 3) are applicable.
- 4. Why does the boundary of the licensed area include the eastern wetland? Can the boundary be amended to remain outside the wetland limits?
- 5. The limits of the eastern provincially significant wetland should be zoned Environmental Protection 3 (EP3) to remain consistent with the remainder of the wetland complex to the east.
- 6. Please provide more clarity regarding the immediate compensation Tomlinson is proposing to offset any temporary effects until rehabilitation occurs. The Draft Compensation Package Concept, included in the Planning Report, discusses a couple different options, which will Tomlinson be pursuing? How will the impacts of the quarry operation (e.g. dewatering) be mitigated to limit impacts to the areas to the east where conservation agreements and/or stewardship plans are being proposed?
- 7. In the Planning Report, at the end of Section 1.3 Planning History (page 5) the final sentence states: "Therefore the completed evaluations which determined that the Western Wetland and Eastern Wetland are not provincially significant wetlands is in full force and effect." Please review. The Western and Southern Wetlands should be referenced.
- 8. In the Planning Report, section 3.2.5 Natural Heritage (4.8), third paragraph, please clarify that the City will also be updating the designation boundary of the eastern wetland to reflect the wetland evaluation completed.
- 9. Through the progressive rehabilitation proposed for extraction is it possible to incorporate revegetation of those area where the extent of extraction has occurred?
- 10. The notes on the Operational Plan for Phases 4, 5 & 6 do not identify how the blasting restrictions will be implemented during extraction.
- 11. The berm along the Trans Canada Trail should continue for the full length of the property. The Operational Plan also depicts this berm as an Optional Storage Berm, as per the legend. A Visual Berm should be installed along the Trans Canada Trail, as noted on the Operational Notes Plan Note F.1.



- 12. Will the visual berm along the Trans Canada Trail be fully constructed along the length of the southern property line at Phase 3, or will a portion of the berm be constructed subsequently at Phase 6? The Phase Notes 6 does not note berm construction.
- 13. Please provide more detailed plans for the berms proposed along Jinkinson Road and the Trans Canada Trail. The typical cross section shown on the Operation Plan does not provide sufficient information to demonstrate how planting and berms will be accommodated within only a 15 metre setback along the Trans Canada Trail. Is it possible to increase the setback along the Trans Canada Trail? Protection of existing trees along the Trans Canada Trail should be incorporated in the berm design.
- 14. On the Rehabilitation Plan, no rehabilitation is noted between the Trans Canada Trail and the Wetland Area. Some rehabilitation should be proposed in this 15 metre area.
- 15. On the Rehabilitation Plan note D.2. identifies that the measures of restoration success will be developed as a part of the rehabilitation plan. When will the rehabilitation plan be prepared? Will it be available for review as a part of the Official Plan and Zoning By-law Amendment applications?

Feel free to contact Erica Ogden-Fedak, Planner II, for follow-up questions.

Urban Design

Comments:

- 16. A conceptual landscape plan is needed and should show approximately how many trees will be replanted and where.
- 17. Please provide significant landscaped buffers along the Trans Canada Trail and along Jinkinson Road.

Feel free to contact Nader Kadri, Urban Designer, for follow-up questions.

Engineering

List of Studies and Plans Reviewed:

Existing Features Plan , Plan 9137AI, prepared by MHBC Planning, dated November 2023.
Operational Plan , Plan 9137AI, prepared by MHBC Planning, dated November 2023.
Operational Notes Plan , Plan 9137AI, prepared by MHBC Planning, dated November 2023.



Rehabilitation Plan , Plan 9137AI, prepared by MHBC Planning, dated November 2023.
Cross Section Plan , Plan 9137AI, prepared by MHBC Planning, dated November 2023.
Acoustic Assessment Report for the Stittsville II Quarry , prepared by Freefield Ltd., dated October 30, 2023.
Level 1 and Level 2 Water Report , prepared by WSP Canada Inc., dated October 2023.
Maximum Predicted Water Table Report , prepared by WSP Canada Inc., dated October 25, 2023.
Stormwater Management Brief and Sediment and Erosion Control Plan, prepared by WSP Canada Inc., dated October 26, 2023.

Comments:

- 18. Level 1 and Level 2 Water Report
 - a. In section 7.1.1 of the Level 1 and Level 2 Water Report, it is noted that the well associated with the commercial building, 7314134, is anticipated to experience 8.7 meters of drawdown as a result of the proposed works. The report notes that "The well owner would not perceive the reduction in available drawdown in the well" but does not provide supporting rationale or justification for this assumption. The site in question would rely on sufficient groundwater quantity for any future development applications, which does not seem to be considered in this report.
- 19. Stormwater Management Brief and Sediment and Erosion Control Plan
 - a. The reporting in the Stormwater Management Brief and Sediment and Erosion Control Plan should reference and outline the contents, requirements, and recommendations of the Upper Poole Creek Subwatershed Study. It appears that at a minimum, the study recommends that sediment fencing be installed around the entire development area and around any topsoil stockpiles.
- 20. Grading and Slope Stability
 - a. It is suggested that the visual and optional storage berm side slopes not exceed 3H:1V, but also consider the slope stability considerations. Please refer to City Standard Detail Drawing R18 – Benching of Earth Slopes, though not specifically applicable, which visualizes the requirement for benching (terracing) of earth slopes where the slope exceeds 3H:1V if it is deemed required.



- b. Slope Stability Guidelines for Development Applications notes that existing or proposed slopes greater than 2 meters in height, with a gradient greater than 5H:1V require a Slope Stability Report. This criterion appears to be exceeded in the proposed berms which are proposed between 3 5.5 meters in height with side slopes ranging from 2H:1V to 1.5H:1V.
- c. The existing berm and proposed berm locations do not seem to provide enough clearance from the property line to enact the tree screen shown in the Typical Berm Detail.

21. Erosion and Sediment Control

- a. The Upper Poole Creek Subwatershed Study appears to recommend limiting the number of entrances and utilizing mud mats. Please contemplate whether this can be accommodated in the current development.
- b. The Upper Poole Creek Subwatershed Study appears to recommend placing sediment fencing surrounding any topsoil berms or stockpiles. Sediment fencing appears to be missing surrounding the optional storage berm, visual berm, and front property line.

22. Noise

- a. Throughout the reporting, the discussion and assessment should include reference to the City of Ottawa's Environmental Noise Control Guidelines and the Noise Control Study Terms of Reference. It is not anticipated that the reference will change the contents of the report.
- b. The Optional Berm is recommended to be changed to mandatory/proposed for the mitigation of noise related impacts on the neighboring property and future development at 577 Jinkinson.

Feel free to contact Travis Smith, Infrastructure Project Manager, for follow-up questions.

Transportation

<u>List of Studies and Plans Reviewed:</u>

R.W. Tomlinson Stittsville II Proposed Quarry Expansion Traffic Impact Study, prepared by Castleglenn Consultants, October 10, 2023.

Comments:

23. Please provide turning truck template for trucks entering/exiting the site and internal movements to ensure truck deliveries can be safely accommodated.

Feel free to contact Neeti Paudel, Transportation Project Manager, for follow-up questions.



Natural Systems and Rural Affairs

Comments:

- 24. The updates to the Significant Wetland sub-designation for the western wetland and the boundary updates to the eastern wetland have not yet been brought into the City's Official Plan. However, we will proceed under the basis of the reevaluated wetlands and revised boundaries as per Section 7.3 Policy 2b) of the Official Plan which says, "The City shall consider the identification or revision of a provincially significant wetland by the Province in any applicable Planning Act process."
- 25. The City's Natural Systems and Rural Affairs (NSRA) unit will be initiating an Official Plan Amendment (OPA) to bring the revisions to the significant wetlands at 635 and 891 Jinkinson Road (western and eastern wetlands) into Schedule C11-A of the Official Plan. This OPA will be undertaken as part of a wetland omnibus which will include similar updates to significant wetlands on other properties across the City. The precise timing of this OPA has yet to be determined, but City staff intend to formally initiate the process early in the new year. A concurrent Zoning By-law Amendment will also be brought forward to address the wetland changes.
- 26. As part of the above-mentioned OPA, NSRA staff will redesignate the existing Greenspace designation in Schedule B9 to Rural Countryside.
- 27. The southern wetland was redesignated from Greenspace to Rural Countryside as part of the Omnibus Official Plan Amendment 5, which was approved by Council on September 13, 2023. NSRA staff will confirm the timing of mapping updates in the relevant Official Plan schedules.
- 28. The Natural Heritage Features overlay that borders the western wetland (representing an area of significant woodland) will be removed as well through the upcoming City OPA.
- 29. The Natural Heritage System Core Area overlay that affects 635 and 891 Jinkinson Road will remain and will not be updated or modified in any way.
- 30. During the Phase II pre-consultation meeting, there was some discussion regarding the application of a designation or overlay to recognize future rehabilitation plans for the site once the aggregate operations have concluded. The Province's Natural Heritage Reference Manual (NHRM) recommends the use of an overlay to identify natural heritage systems and to ensure that these areas are given appropriate consideration when a *Planning Act* application for a new land use or expansion to the boundary of a settlement area is submitted. The existing Natural Heritage System Core Area overlay is already fulfilling the recommendations in the NHRM, and no changes are proposed for this overlay. It is not necessary to add additional overlays or designations to the proposed rehabilitation area at this time.



- 31. In addition, Policy 6 in Section 5.6.4.1 of the Official Plan states "Where development or alteration is for the establishment or expansion of mineral aggregate operations within or adjacent to the Natural Heritage System Overlay or the Natural Heritage Feature Overlay, the demonstration of no negative impact or no net negative impact may take into consideration final rehabilitation of the mineral aggregate operation. Rehabilitation of the mineral aggregate operation would need to be planned to occur as soon as possible and be suited to the local natural environment." This policy also supports the use of the NHS overlay to ensure that appropriate protections remain in place for the natural environment following the conclusion of aggregate extraction.
- 32. Any future designations reverting to Greenspace, Significant Wetlands, or the Natural Heritage Features overlay would need to be considered much later once the site rehabilitation plans are finalized.

Feel free to contact Tara Redpath, Senior Planner, for follow-up questions.

Environment

List of Studies and Plans Reviewed:

□ **Natural Environmental Report and Environmental Impact Study**, prepared by WSP, dated October 2, 2023.

Deficiencies:

- 33. The description of the project needs more information regarding the operation, phasing and a description of the compensation/mitigation.
- 34. The EIS should include a plan that illustrates the proposed mitigation and rehabilitation of the site and how the rehabilitation of the site will be implemented.
- 35. The EIS needs to define the setbacks including where the setback to the wetland drawn from?
- 36. Setback areas need to be clearly identified on the site plans and within other reports.
- 37. The EIS needs to provide a full description of the impacts to the water levels within the wetland and how it impacts the ecological functions. The EIS needs to quantify the change in water levels.
- 38. The EIS indicates that no monitoring is required, please support this with a rational.



Comments:

39. The setbacks to the significant wetland have been selected by the EIS to be 30 m, however at this setback the material provided in the EIS indicated there is a moderate risk of not achieving the desired buffer function. It would be preferable if it were a low risk as this would meet the no negative impact test for the significant wetland.

Feel free to contact Matthew Hayley, Environmental Planner, for follow-up questions.

Forestry

Comments:

- 40. In this area the Tree Protection By-law applies to City-owned trees, and tree protection information must be provided within the EIS to determine the impacts and permits required for any tree removals in the Right of Way and Trans Canada Trail.
- 41. The berms along both Jinkinson and the Trans Canada Trail must be designed and set back sufficiently from existing trees to allow for their adequate protection.
- 42. A tree permit and compensation planting will be required for any City trees which must be removed. No tree removals shall take place during bird breeding or active bat season, as described in the EIS.
- 43. A conceptual Landscape Plan is required showing any planting opportunities on site as well as within the ROW/frontage on Jinkinson and bordering the Trans Canada Trail to aid in screening of the industrial use, as well as to contribute to the Official Plan target of 40% canopy cover.
 - a. If the berms are to be landscaped, they must be designed with appropriate heights and slopes for this purpose, with tree species that can survive planting in this condition.
 - b. The setback areas from the north, south, and east property lines will be considered high priorities for tree planting within the Landscape Plan.
- 44. The following are requirements with the submission, but they can be scaled down to a more basic level for this application, applying only to the Jinkinson ROW and Trans Canada Trail and the associated setback areas. The Tree Conservation Report (TCR) information referenced applies to only City-owned trees in this area, and this information can be provided within the EIS. The items in **bold** are the most important to address with this application.



Tree Conservation Report Requirements:

- a. A Tree Conservation Report (TCR) must be supplied for review along with the suite of other plans/reports required by the City
- b. An approved TCR is a requirement of Site Plan approval.
- c. The TCR may be combined with the LP provided all information is supplied
- d. Any removal of privately-owned trees 10cm or larger in diameter, or city-owned trees of any diameter requires a tree permit issued under the Tree Protection Bylaw (Bylaw 2020 340); the permit will be based on an approved TCR and made available at or near plan approval.
- e. Compensation may be required for the removal of city owned trees.
- f. The TCR must contain 2 separate plans:
 - i. Plan/Map 1 show existing conditions with tree cover information
 - ii. Plan/Map 2 show proposed development with tree cover information
 - iii. Please ensure retained trees are shown on the landscape plan
- g. The TCR must list all trees on site, as well as off-site trees if the CRZ extends into the developed area, by species, diameter and health condition
 - i. please identify trees by ownership private onsite, private on adjoining site, city owned, co-owned (trees on a property line)
- h. If trees are to be removed, the TCR must clearly show where they are, and document the reason they cannot be retained
- All retained trees must be shown, and all retained trees within the area impacted by the development process must be protected as per City guidelines available at <u>Tree Protection Specification</u> or by searching Ottawa.ca
 - i. The location of tree protection fencing must be shown on the plan
 - ii. Show the critical root zone of the retained trees
- j. The City encourages the retention of healthy trees; if possible, please seek opportunities for retention of trees that will contribute to the design/function of the site.

Landscape Plan Tree Planting Requirements:

- k. Minimum Setbacks
 - i. Maintain 1.5m from sidewalk or MUP/cycle track or water service laterals.



- ii. Maintain 2.5m from curb
- iii. Coniferous species require a minimum 4.5m setback from curb, sidewalk or MUP/cycle track/pathway.
- iv. Maintain 7.5m between large growing trees, and 4m between small growing trees. Park or open space planting should consider 10m spacing, except where otherwise approved in naturalization / afforestation areas. Adhere to Ottawa Hydro's planting guidelines (species and setbacks) when planting around overhead primary conductors.

I. Tree specifications

- i. Minimum stock size: 50mm tree caliper for deciduous, 200cm height for coniferous.
- ii. Maximize the use of large deciduous species wherever possible to maximize future canopy coverage
- iii. Tree planting on city property shall be in accordance with the City of Ottawa's Tree Planting Specification; and include watering and warranty as described in the specification (can be provided by Forestry Services).
- iv. Plant native trees whenever possible
- v. No root barriers, dead-man anchor systems, or planters are permitted.
- vi. No tree stakes unless necessary (and only 1 on the prevailing winds side of the tree)

m. Hard surface planting

- i. Curb style planter is highly recommended
- ii. No grates are to be used and if guards are required, City of Ottawa standard (which can be provided) shall be used.
- iii. Trees are to be planted at grade

n. Soil Volume

 Please document on the LP that adequate soil volumes can be met:

Tree	Single Tree Soil	Multiple Tree Soil
Type/Size	Volume (m3)	Volume (m3/tree)
Ornamental	15	9
Columnar	15	9
Small	20	12
Medium	25	15
Large	30	18
Conifer	25	15



- o. Sensitive Marine Clay
 - i. Please follow the City's 2017 Tree Planting in Sensitive Marine Clay guidelines
- p. Tree Canopy
 - i. The landscape plan shall show how the proposed tree planting will replace and increase canopy cover on the site over time, to support the City's 40% urban forest canopy cover target.
 - ii. At a site level, efforts shall be made to provide as much canopy cover as possible, through tree planting and tree retention, with an aim of 40% canopy cover at 40 years, as appropriate. Indicate on the plan the projected future canopy cover at 40 years for the site.

Feel free to contact Nancy Young, Forester, for follow-up questions.

Conservation Authority

Comments:

- 45. The submission should clarify how hydrologic function of the PSW will be maintained. The hydrogeologic report estimated that the water table would be lowered as a result of excavation works which is inconsistent with the expectation that function will be preserved.
- 46. The non-provincially significant wetland (west cell) on the property was scored to have strong hydrologic function, the proposal should demonstrate how that hydrologic function is being mitigated.
- 47. It was recommended that improved setbacks to the Provincially Significant Wetlands, could be beneficial at addressing both concerns noted above.

Feel free to contact Eric Lalande, Rideau Valley Conservation Authority, for follow-up questions.

Should there be any questions, please do not hesitate to contact myself or the contact identified for the above areas / disciplines.

Yours Truly,

Erica Ogden-Fedak, MCIP, RPP

duca C Ogdin-Tedak

Planner II



c.c. Nader Kadri, Urban Design
Travis Smith, Project Manager
Michel Kearney, Hydrogeologist
Neeti Paudel, Transportation
Nancy Young, Forestry
Tara Redpath, Natural Systems
Matthew Hayley, Environmental Planner
Eric Lalande, Rideau Valley Conservation Authority

Encl. Study and Plan Identification List
List of Technical Agencies to Consult
Supplementary Development Information