JDCL Reid Road Reservoir Quarry Woodland Edges Information

November 8, 2019 Revised June 18, 2020 Our File 9633'L'

The following memo is intended to address comments #51 and 84 in the JART comment tables received on May 22, 2020. Based on changes made to the site plan, including the reconfiguration of the Buffer Pond in Phase 4 and the addition of the blasting limit shoreline setback, we have revised the woodland edges information originally presented to JART in November 2019. In addition, we have accounted for a very minimal increase in the proposed tree removal in the location of the Conveyor Tunnel.

The woodland edges are areas where the regulatory setback shown on the original site plan overlapped with the boundaries of ELC mapped treed areas. Where these treed areas are adjacent to shorelines that are not being disturbed the actual disturbance area is less than what may have been presumed because of sloping requirements so that the limit of actual extraction (blasting limit) is setback from the shoreline in the lake.

Through these site plan changes/clarifications, an additional 1.19ha of treed area will remain undisturbed. We have updated Table 1 below and compared the original calculated amount of proposed tree removal (November 2019) to the updated calculated amount of proposed tree removal (June 2019). The treed areas proposed to be removed are shown in the attached Figure. For further policy interpretation, please see attached email dated March 19, 2020.

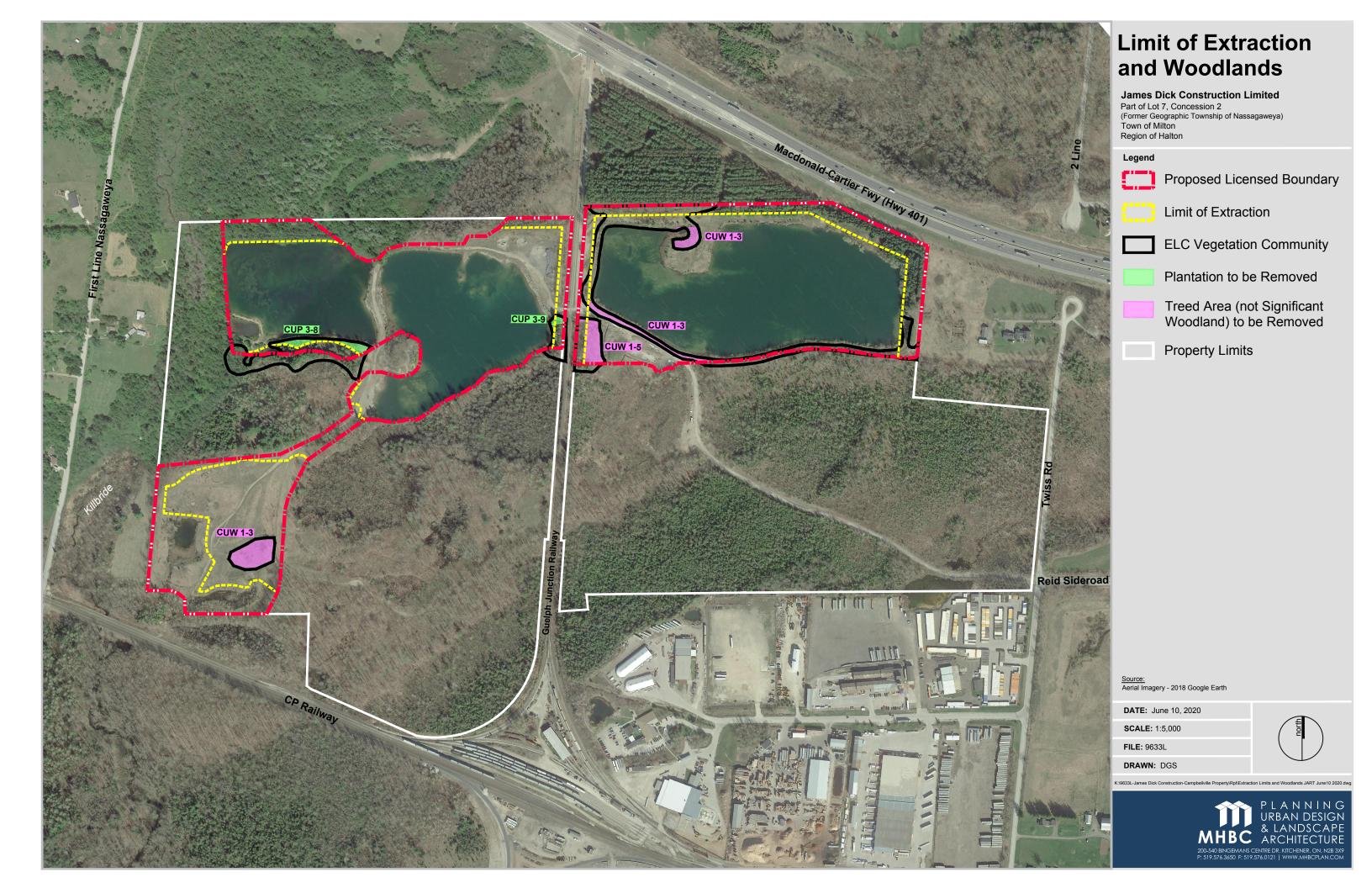
As outlined in Table 1, cultural woodland, existing early successional shoreline vegetation and plantation along the edges of the proposed Licence area are proposed to be removed. These treed edges are a mix of cultural meadow, planted spruce and pine trees, and early successional growth. The cultural woodlands and shoreline areas should not be considered to be woodlands under the Greenbelt Plan NHS policies, primarily because they have insufficient canopy coverage (<60%) and/or a tree density of less than 1000 trees/per hectare of any tree size. ¹

Table 1. Description of shoreline areas, cultural woodlands and plantation areas to be removed

ELC Community	Phase	Area (ha) Nov. 2019	Area (ha) June 2020	ELC Community Description	June 2020 Comment
CUW1-3 Shoreline Area	3 and 5	1.16	0.27	This successional community has developed on the sideslopes of the eastern pit pond. Mostly poplar and willow regeneration. Average diameter of <10cm and less than 60% canopy cover.	shoreline blasting set- back Remaining area also
CUW1-3 Phase 1	1	0.26	0.26	This successional community has developed around a rock pile. Mostly poplar and willow regeneration. Average diameter of <10cm and less	

¹ See Technical Definitions and Criteria for Key Natural Heritage Features in the Natural Heritage System of the Protected Countryside Area – Pg. 17 definition of "woodlands".

				than 60% canopy cover.	
CUW1-5	5	0.18	0.18	Mostly ash, white birch, poplar and willow regeneration. Average diameter of 10-24cm with less than 60% tree crown cover. Areas has been significantly disturbed by railway and previous extraction activities. Soil conditions and corresponding vegetation are variable.	No measurable change
CUP3-8	2	0.16	0.13	Edge of mid-age white spruce plantation. Trees with an average diameter of 10-24cm and a height of 10-25m.	reduced due to re-
CUP3-12	3/5	0.29	0 ha	Edge of mid-age White Spruce, White Pine Plantation. Average diameter of 10-24cm and height of 10-25m.	Revised based on estimate of shoreline blasting set- back
CUP3-9	4	0.02	0.04	Edge of middle age Norway Spruce plantation. Average diameter of 25-50cm and height of 10-25m	Small area added to account for tree removal in set-back for the conveyor system
TOTAL		2.07	0.88		Decrease in 1.19ha of tree removal



Caitlin Port

Subject: FW: woodlands discussion rrrq

From: James Parkin < jparkin@mhbcplan.com>

Sent: March-19-20 11:19 AM

To: Steven Hill <shill@dougan.ca>; Joe Nethery <Joe.Nethery@halton.ca>; Kellie McCormack

<kmccormack@hrca.on.ca>; Reinholt, Ron <Ron.Reinholt@halton.ca>; Stirling.Todd@milton.ca; Ali, Gena

<Gena.Ali@halton.ca>

Cc: Greg Scheifele <gwsefs@sympatico.ca>; Caitlin Port <<u>cport@mhbcplan.com</u>>; Al Sandilands (grayowlenvironmental@sympatico.ca) <grayowlenvironmental@sympatico.ca>; Greg Sweetnam (gsweetnam@jamesdick.com) <gsweetnam@jamesdick.com>; Leigh Mugford <<u>lmugford@jamesdick.com</u>>

Subject: woodlands discussion rrrq

Hello, I hope this finds everyone well in trying times. Could you please forward this to any other members of your team involved in this issue.

The following is an updated response to JART Natural Environment comments 51 and 84 taking into account our March 5th meeting discussions.

The intent of the application is to avoid the removal of trees in significant woodlands. Changes have been made to the Site Plan to remove small areas of woodland edge from the extraction area.

While there are some small trees within the extraction area these are not considered to be woodland or significant woodland due to low canopy cover, low stem count, history of disturbance, size and/or shape (narrow).

Through our discussions with JART we understand that this conclusion is being questioned for two ELC communities on either side of the railway that could be considered part of larger woodland areas to the south:

CUW1-5 on the east side of the track is a .18 Ha community adjacent to the block of wetland/woodland to the south. It is a previously disturbed area with remnant spoil and aggregate piles; mostly ash, white birch, poplar and willow regeneration. Canopy cover is less than 60%.

CUP3-9 on the west side is a .2 Ha previously disturbed area on the edge of middle age Norway spruce plantation.

For purposes of discussion <u>if</u> the ROP were to be applied and <u>if</u> these communities were to be treated as significant woodland under the ROP policies they would be allowed to be removed.

Significant woodlands are not a feature where aggregate extraction is prohibited in the ROP. They are a key feature where proponents are required to demonstrate no negative impact on the feature or ecological functions.

Based on the features and functions characterization of the woodlands to the south (that these communities could be considered to be part of) it should be evident that these two ELC communities can be removed without negative impact to the features or function of the area woodlots. These two small and disturbed communities do not support any of the key ecological functions that are listed for significant woodlands as documented in the GWS natural Environment Report (Section 8).

Even though these communities can be removed without negative impact to significant woodlands there will be net enhancements including the proposed tree planting areas as outlined and described on the rehabilitation plan will meet the ROP policies and enhance the long term ecological function and biodiversity of the natural heritage systems surrounding the site.

The tree planting species will include red oak, bur oak and cottonwood. A total of 3,000 tree seedlings will be planted on approximately 2.0 ha of open disturbed land on the property. Where the soil is infertile and compacted it will be scarified and have at least 20cm of topsoil applied to these areas. The proposed species mix will be

white pine 25%, red pine 20%, white spruce 15%, white cedar 15%, cottonwood 15%, red oak 5% and bur oak 5%. White and red pine will be planted in a mixture on dry to fresh sites with red oak interspersed throughout. On fresh to moist sites white spruce and white cedar will be comingled with bur oak. Cottonwood will only be planted in the 10m setback around SWT2-2 (Pond 4).

In addition, several areas will be rehabilitated to a wet-meadow community and shoreline areas will be reestablished. Limited tree planting is proposed in these areas as they are intended to provide important early successional/pollinator habitat. No tree planting is proposed in the existing cultural meadow located outside of the Licence boundary adjacent to Phase 1, as this area currently contributes greatly to the diversity of the site by providing habitat for birds, butterflies, and dragonflies.

In summary, if tree areas on the site are to be treated as significant woodlands and if the ROP policies are applied, the information provided by the JDCL project team demonstrates that ROP policy tests can be met and these tree areas can be removed without causing negative impacts to the ROP natural heritage systems. JDCL's proposal includes several enhancements which will contribute to overall ecosystem diversity and function.

Please let us know if this addresses the provided comments or further discussion is required.

James Parkin MHBC Planning 519 576 3650 x725