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Stantec

VIA EMAIL

March 4, 2013

Project No: 1231-10550

First Richmond North Shopping Centres Limited
#201 – 11120 Horseshoe Way
Richmond, BC V7A 5H7

Attention: Alan Lee

Dear Alan:

Reference: ESA Update for Rezoning Application at 9440, 9480, and 9500 Alexandra Road,
Richmond, BC

1 INTRODUCTION

First Richmond North Shopping Centres Limited is submitting a rezoning application to develop a portion of the quarter section 34-5-6 adjacent to Alderbridge Way and Garden City Road in Richmond, British Columbia. A portion of this site is designated as an Environmentally Sensitive Area (ESA) by the City of Richmond (the City).

Stantec Consulting Ltd (operating as Jacques Whitford) conducted a preliminary habitat assessment in 2002 and a desktop review update in 2005 to evaluate the ecological function of the ESA within the proposed development area. As part of the City's requirements for the rezoning application, an additional report was prepared by Stantec in 2010 which summarized the existing habitat and highlighted any changes that had occurred since the previous assessment. The 2010 report also provided an assessment of the existing and potential ecological services provided by the ESA, the implications of removal or relocation of a portion of it, and recommendations for compensation and/or mitigation.

In November 2012, the City adopted their new 2041 Official Community Plan (OCP) Bylaw 9000. A draft technical report included with the 2041 OCP was the 2012 Environmentally Sensitive Area Management Strategy. This strategy expanded the existing ESA outlined in the City's previous OCP to encompass more than half of 9440 Alexandra Road and all of 9480 and 9500 Alexandra Road and was based on 1:4,000 high level orthophoto interpretation. Appendix C and Part 4 of the 2012 Environmentally Sensitive Area Management Strategy suggests that all applicants for development permits involving ESAs should conduct a vegetation survey of the sites to confirm the appropriate ESA boundary.

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This report provides a detailed survey of the vegetation types on the site and makes recommendations for areas that should be included in the ESA.

2 METHODS

Preliminary vegetation polygons were created from orthophoto interpretation and were then ground truthed during the site visit. The three properties were surveyed on January 29, 2013 by two Stantec biologists to determine what the vegetation types were on the site. Dominant understory species within each polygon were recorded and photographs were taken at various locations on the site. Cover was estimated for the dominant species observed. Tree species were recorded during an existing tree assessment (MJM Consulting 2012). There were four different vegetation polygons identified on the site (Figure 1, Appendix A) and descriptions of these are provided below. None of the ecological communities observed on the site are considered at-risk within the province.

3 RESULTS

3.1 Polygon 1—Birch Forest

The southern half of the properties consists of an approximately 1.6 acre upland forest dominated by paper birch (*Betula papyrifera*) with an open understory of grasses and rushes (Photo 1, Appendix A). There are minor amounts of invasive Himalayan blackberry (*Rubus armeniacus*). Table 1 below provides a list of the dominant species within this polygon.

Table 1: Dominant Understory Species within Polygon 1

Common Name	Scientific Name	% Cover
reed canarygrass	<i>Phalaris arundinacea</i>	15
hardhack	<i>Spiraea douglasii</i>	15
common rush	<i>Juncus effusus</i>	15
<u>Himalayan blackberry*</u>	<i>Rubus armeniacus</i>	10
bentgrass	<i>Agrostis sp.</i>	5
bracken fern	<i>Pteridium aquilinum</i>	2

NOTE:

* Invasive species

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3.2 Polygon 2—Japanese Knotweed

Polygon 2 is approximately 0.1 acres and is located on the east boundary of 9500 Alexandra Road. It is entirely composed of Japanese knotweed (*Polygonum cuspidatum*) (Photo 2, Appendix A). Japanese knotweed is a perennial shrub from Asia that is highly invasive because of its rapid growth and reproductive capabilities. Once established it displaces nearly all other vegetation (BC Ministry of Agriculture 2011).

3.3 Polygons 3 and 4—Anthropogenic Disturbance

The remainder 1.4 acres of the site have been disturbed by the current and previous residential developments that occurred on site. Vegetation in this polygon is composed of cultivated lawn and invasive species with few mature trees interspersed throughout (Photos 3 – 7, Appendix A). Table 2 below lists the dominant species in this polygon.

Table 2: Dominant Understory Species within Polygon 3

Common Name	Scientific Name	% Cover
Himalayan blackberry*	<i>Rubus armeniacus</i>	15
creeping buttercup	<i>Ranunculus repens</i>	10
evergreen blackberry*	<i>Rubus laciniatus</i>	5
hardhack	<i>Spiraea douglasii</i>	5
reed canarygrass	<i>Phalaris arundinacea</i>	5

NOTE:

* Invasive species

4 RECOMMENDATIONS

It is Stantec's recommendation that only Polygon 1 be considered for ESA designation among the subject parcels. This polygon contains the least amount of disturbance within the proposed development area and has the highest abundance of native vegetation compared to the other polygons. However, the actual ecological services provided by Polygon 1 are relatively low as a result of surrounding disturbances (roads and existing development), limited connectivity to additional habitat, small polygon patch size, and presence of invasive weeds in the understory. If left unchecked, the highly invasive Himalayan blackberry and the Japanese knotweed on the site will continue to spread and may eventually become dominant within the ESA, choking out native species. The remainder of the site is developed and/or highly disturbed and contains early seral stage vegetation and invasive species. These attributes are not consistent with an ESA designation.

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5 CLOSURE

This ESA update has been prepared for the sole benefit of First Richmond North Shopping Centres Limited. If you have any questions or would like clarification of the results, please do not hesitate to contact the undersigned at (604) 436-3014.

Respectfully submitted,

Stantec Consulting Ltd.



Tracy Anderson, B.Sc., R.P.Bio.
Project Biologist

Reviewed by:



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TA/MR/pf

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6 REFERENCES

BC Ministry of Agriculture. 2011. Field Guide to Noxious and Other Selected Weeds of British Columbia. Accessed (February 2013): <http://www.agf.gov.bc.ca/cropprot/iknotweed.htm>

Michael J. Mills Consulting 2012 Existing Tree Assessment Summary Plan MJM File #923
February 16, 2012