# **City of Nanaimo**

# REPORT TO COUNCIL

DATE OF MEETING: 2014-SEP-29

AUTHORED BY: GARY NOBLE, DEVELOPMENT APPROVALS PLANNER

RE: DEVELOPMENT PERMIT NO. DP901 - 178 WESTWOOD ROAD

#### **STAFF RECOMMENDATION:**

That Council issue Development Permit No. DP901 at 178 WESTWOOD ROAD to reduce the watercourse setback to 10m and increase the maximum permitted height for a fence in the front yard to 1.8m.

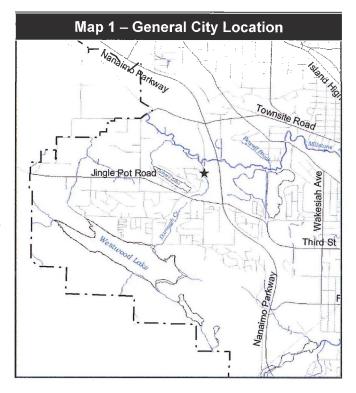
### PURPOSE:

The purpose of this report is to seek Council authorization to issue a development permit in order to remove an existing house, construct a new house, and erect a 1.8m fence.

### **BACKGROUND:**

A development permit application was received from MR. BLAIR DUECK. Staff support the application and the proposed variances.

The Design Advisory Panel did not review the application as a form and character assessment is not a requirement of this application.



### Subject Property

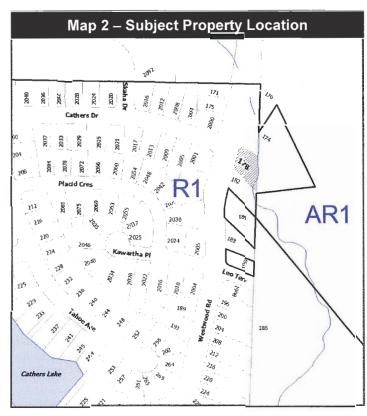
Zoning	R1 – Single Dwelling Residential	
Location	The subject property is located across from the intersection of Cathers Drive and	
	Westwood Road, and backs onto a watercourse.	
Total Area	931m <sup>2</sup>	
Official Community	Map 1 – Future Land Use Plan – Neighbourhood	
Plan (OCP)	Map 3 – Development Permit Area DPA No. 1 – Watercourses	

#### DISCUSSION

#### Proposed Development

The applicant is proposing to remove an old, dilapidated house and construct a new single family dwelling. The new proposed house is to be located 10m from the top of bank of Darrough Creek; further away than the existing house. A copy of the proposed site plan which illustrates the future building envelope is attached as Schedule A.

An executive summary has been prepared by EDI ENVIRONMENTAL DYNAMICS (Mr. Adam Compton, R.P. Bio). This summary notes that the watercourse and its riparian area have been moderately disturbed by historic residential development and use. The Biologist notes that the "proposed development has a minimal potential to negatively impact Darrough Creek and



its riparian area from construction related impacts".

#### The Executive Summary states:

The proposed development represents an opportunity to substantially improve the ecological features, functions and conditions within the subject property. The RAR setback area will be substantially enhanced and restored by the following proposed activities:

- Removal of existing house that is partially within the RAR setback
- Retention of existing native and non-invasive vegetation within the SPEA
- Removal of garbage, debris, shed, and footbridge
- Removal of invasive species
- Planting native riparian species (trees and shrubs) throughout the RAR setback

Mr. Compton concludes, there will be a substantial net gain of riparian habitat associated with the proposed development. A copy of the Executive Summary is attached as Schedule B.

Further, as Westwood Road is identified as a major road in the Official Community Plan, to help mitigate road noise and decrease vehicular light pollution, the applicant requests to increase the maximum permitted fence height from 1.2m to 1.8m in the front yard; a variance of 0.6m.

## Proposed Variances

# • Watercourse Setback

The required watercourse setback is 15.0m. The proposed watercourse setback is 10m, a proposed variance of 5.0m.

### Fence Height

The maximum permitted fence height in a front yard is 1.2m. The proposed fence height is 1.8. a proposed variance of 0.6m.

Respectfully submitted,

B. Anderson MANAGER

PLANNING & DESIGN SECTION

Concurrence by:

D. Lindsay

COMMUNITY DEVELOPMENT

T. Seward

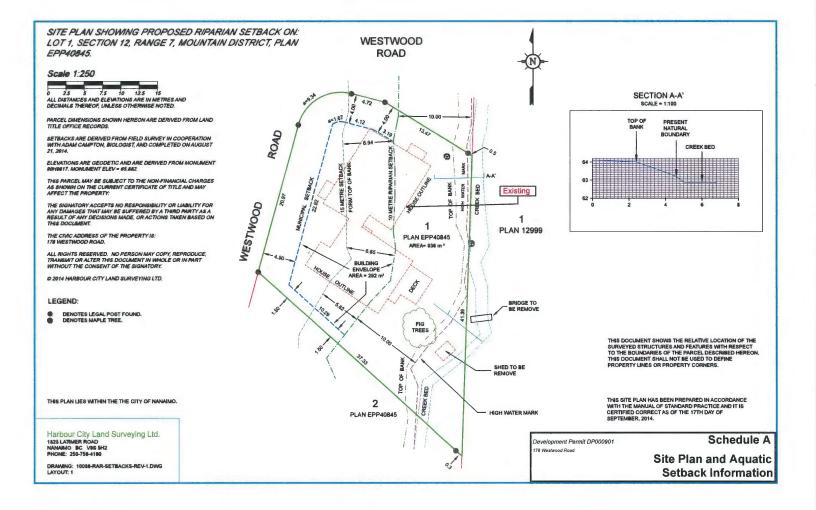
ACTING GENERAL MANAGER COMMUNITY DEVELOPMENT & PROTECTIVE SERVICES

#### CITY MANAGER COMMENT:

I concur with the staff recommendation.

#### GN/jc/lb

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Development Permit DP000901
178 Westwood Road

Schedule B

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**RAR Executive Summary** 



208A - 2520 Bowen Road

Nanaimo, BC V9T 3L3

P: (250) 751-9070 = F: (250) 751-9068

September 2, 2014

EDI Job Number: 14-N-0572

Blair Dueck Dueck General Contracting 3 4515 Uplands Dr Nanaimo, BC V9T 6M8

Re: Executive Summary for watercourse setback variance at 178 Westwood Road, Nanaimo

EDI Environmental Dynamics Inc. (EDI) was retained to review the subject property (178 Westwood Road) and provide an opinion on whether seeking a watercourse setback variance for future development of the site was feasible. Through an assessment of the site, it was determined that seeking a setback variance was both feasible and ecologically appropriate. The following is an executive summary as required by City of Nanaimo for the proposed variance request.

# **Executive Summary**

The proposed variance request is needed to accommodate demolition of a dilapidated house and construction of a new home on a lot that that is substantially constrained by the 15 m watercourse setback from Darrough Creek that is specified by Zoning Bylaw No. 4000.

Within the subject property, the watercourse and its riparian area have been moderately disturbed by historic residential development and use. The proposed development has a minimal potential to negatively impact Darrough Creek and its riparian area from construction related impacts, which can easily be mitigated as described in Section 4 of the Detailed Riparian Areas Regulation (RAR) Assessment Report prepared for this development. The proposed development will not require the loss of additional riparian vegetation. The new house would be located further from the creek than the existing house: outside of the riparian setback required by the RAR (10 m from the high water mark).

With the exception of installing a stormwater drain from the rock pit to the left bank (west bank) of the stream, all activities planned within the RAR setback are associated with riparian enhancement and restoration, the only provincial or federal agency review that is needed to support the proposed enhancements is submission of the finalized RAR Assessment Report to the online RAR Notification System. For the installation of the stormwater discharge, a Section 9 Notification under the BC Water Act is not required as per the Users' Guide to Working in and Around Water: "perimeter drain discharges include





proposed new discharges from independent single-lot, single-family residential properties only, and do not require notification".

The proposed development represents an opportunity to substantially improve the ecological features, functions and conditions within the subject property. The RAR setback area will be substantially enhanced and restored by the following proposed activities:

- o Removal of existing house that is partially within the RAR setback.
- Retention of existing native and non-invasive vegetation within the SPEA (trees, shrubs and herbaceous plants).
- Removal of garbage, debris, shed and footbridge.
- o Removal of invasive species (Daphne laurel, holly, Himalayan blackberry).
- O Planting native riparian species (trees and shrubs) throughout the RAR setback.

The existing, functional riparian area between the old house and the stream is narrow (~5 m) and is limited to a few areas that are naturally vegetated. The goal of the proposed restoration activities is to create a functional riparian ecosystem within the 10 m RAR setback. As such, there will be a substantial net gain of riparian habitat associated with the proposed development.

As described in Section 5 of the RAR Assessment Report, environmental monitoring will be conducted during demolition, construction and riparian restoration activities on an as-needed basis. Follow up monitoring will be completed for two years following riparian planting to ensure that the goals and objectives of the restoration plan are achieved. All environmental monitoring shall be provided by a Qualified Environmental Professional from EDI.

Please let me know if you have any questions regarding this executive summary.

Yours truly,

EDI ENVIRONMENTAL DYNAMICS INC.

Adam Compton, R.P. Bio.

Project Manager/Senior Biologist

Original agred + sealed sen 2/14

Development Permit DP000901 178 Westwood Road Schedule C

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Riparian Restoration Works



208A - 2520 Bowen Road

Nanaimo, BC V9T 3L3

P: (250) 751-9070 • F: (250) 751-9068

September 2, 2014

EDI Job Number: 14-N-0572

Blair Dueck Dueck General Contracting 3 4515 Uplands Dr Nanaimo, BC V9T 6M8

Re: Proposed riparian restoration works at 178 Westwood Road, Nanaimo

EDI Environmental Dynamics Inc. (EDI) has been retained to review the subject property (178 Westwood Road) and provide a riparian restoration plan associated with proposed redevelopment of the property. This plan shall be reviewed and approved by City of Nanaimo staff prior to implementation.

# **Proposed Riparian Restoration Works**

Riparian restoration includes the following activities associated with demolition of an existing house, construction of a new house and enhancing the existing riparian area:

- 1. Removal of existing house that is partially within the RAR setback.
- Retention of existing native and non-invasive vegetation within the SPEA (trees, shrubs and herbaceous plants).
- 3. Removal of garbage, debris, shed and footbridge.
- 4. Removal of invasive species (Daphne laurel, holly, Himalayan blackberry).
- 5. Planting native riparian species (trees and shrubs).

The focus of this plan is to describe the specific details associated with items 4 and 5 above.

### Prepare the Site for Planting

The following site preparation activities shall be done prior to planting:

- Remove existing house and foundation, garbage, debris, shed and footbridge.
- Remove invasive species throughout the 10 m riparian setback on the west side of the creek:
  - All Himalayan blackberry, Daphne laurel and holly shall be removed using hand tools. Care shall be taken during laurel removal as its sap can be irritating to humans.



- O Stems and roots must be pulled out by hand and removed from the soil. Shovels may need to be used to loosen soil around roots to ensure that all roots are removed.
- O All parts of blackberry can produce a new plant; therefore, all parts of removed blackberry and other invasive plants must be bagged and disposed of at the local landfill.
- o Existing fig tree clump can be left as it is not an invasive species and is not harming the features, functions and conditions of the riparian area.
- Where subsurface structures have been removed (concrete slab beneath shed and house foundations), soil shall be brought up to grade and topsoil shall be placed. At least 10 cm of topsoil shall be placed as the surface layer.
- Immediately following placement of topsoil, seed all exposed soil areas throughout the 10 m riparian setback with a reclamation seed mix and cover with a 2 to 3 cm layer of straw mulch.

## Riparian Planting

- 1) Plant native trees and shrubs throughout the RAR setback area.
  - Only areas that are not already vegetated with native species shall be revegetated. For example, riparian planning is not necessary within 0.75 m of native shrubs along the stream bank or within the two moderate sized patches of coltsfoot (*Petasites frigidus var. palmatus*) present near the middle of the property. Planting of native trees is not required within 3 m of the trunk of existing trees.
  - All trees to be planted shall be at least 1 Gallon pot size.
  - All shrubs to be planted shall be at least 4" pot size.
  - All trees to be planted at an average spacing interval of 3.0 m.
  - All shrubs to be planted at an average spacing interval of 0.75 m.
  - The number of trees and shrubs required to meet the spacing requirements listed above shall be determined prior to ordering the plants.
  - All trees and shrubs to be planted with a teabag style fertilizer pouch.
  - All trees and shrubs that are edible by deer shall be sprayed with repellent prior to planting.
  - All trees and shrubs to be planted such that the level of the soil from the pot is approximately 2 cm below the adjacent soil elevation. Soil excavated to create a hole for each plant shall then be used to cover the soil from the pot (to prevent soil from the pot from drying out or becoming oversaturated).

EDI Project #: 14-N-0572

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• All trees and shrubs to be planted by November 15, 2014.

# **Plant Species**

At least 3 species of trees and 4 species of shrubs shall be used from the list of appropriate species provided in Table 1.

Table 1. Appropriate tree and shrub species to be planted.

Trees	Shrubs and ferns
bigleaf maple (Acer macrophyllum)	beaked hazelnut (Corylus cornuta)
Indian plum (Oemleria cerasiformis)	ocean spray (Holodiscus discolor)
Pacific dogwood (Cornus nuttallii)	red flowering currant (Ribes sanguineum var. sanguineum)
Douglas fir (Pseudotsuga menziesii var. menziesii)	red huckleberry (Vaccinium parvifolium)
Pacific crabapple* (Malus fusca)	Saskatoonberry (Amelanchier alnifolia)
bitter cherry (Prunus emarginata)	tall Oregon grape (Mahonia aquifolium)
choke cherry (Prunus virginiana)	snowberry (Symphoricarpos albus)
western redcedar (Thuja plicata)	thimbleberry (Rubus parviflorus)
shore pine (Pinus contorta var. contorta)	red elderberry* (Sambucus racemosa var. arborescens)
	Nootka Rose (Rosa nutkana)
	salmonberry* (Rubus spectabilis)
	high bush cranberry (Viburnum edule)
	salal (Gaultheria shallon)
	red osier dogwood* (Cornus stolonifera)
	twinberry* (Lonicera involucrata)
	sword fern (Polystichum munitum)

<sup>\*</sup> Species is appropriate for area below High Water Mark in which shed is currently located.

#### Notes:

Site selection will be important to ensure that soil moisture and sunlight conditions are suitable for the species planted in a given area.

Some substitutions may need to be made based on stock availability.

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## Maintenance and Inspection

- Install irrigation system so that site will be adequately watered during the first two growing seasons (June to September).
- Implement annual monitoring and maintenance to ensure survival targets are met and invasive species colonization is controlled.
  - A two year maintenance and inspection period is considered to be appropriate. Monitoring may be extended if survival targets are not achieved after the first two years.
  - Each spring (2015 and 2016), invasive plants shall be removed by the owner following the guidance provided in Attachment 1 for non-chemical control of invasive plants.
  - EDI shall inspect the site annually in the fall for 2 years (ending fall of 2017). Each inspection shall include:
    - i) An estimate of percent survival of trees and percent survival of shrubs.
    - ii) An estimate of percent area coverage of invasive plants.
    - iii) EDI shall provide a brief summary report with a list of recommendations to the owner following each site inspection. The report shall also be sent to the City of Nanaimo for their records. The report shall include general observations, overall health and growth of plants (poor, fair, moderate, good etc.), number and species of replacement plants needed, where replacement plants are needed, areas in which invasive species removal is needed and watering needs. The summary shall list when each of the recommendations should be completed.
    - iv) The owner shall then follow the recommendations made in each annual report.
    - v) Provided that the results of the second annual inspection are favorable, the final postdevelopment report shall be submitted to the City of Nanaimo to complete the restoration requirements for this project.

The target survival rate of trees and shrubs shall be 80%. When less than 80% survival is observed in a given year, replacement planting shall be recommended to bring the areas back up to at least 90% survival. After two years, the site shall be considered to be successfully restored if:

- At least 80% of trees and 80% of shrubs are established and healthy.
- No invasive plants are present.



Please let me know if you have any questions regarding this letter.

Yours truly,

EDI ENVIRONMENTAL DYNAMICS INC.

Adam Compton, R.P. Bio.

Project Manager/Scnior Biologist

Attachments: Invasive Plant Removal Methods