To: Electoral Area Services Committee
From: Dawn Smith, Planner II
Date: 2018-09-05
File No: 9600-25-2016-02

Subject: Site Specific Exemption for single family dwelling at 51515 Chilliwack Lake Road, Electoral Area “E”

RECOMMENDATION

THAT the Fraser Valley Regional District Board consider the following options for a Site Specific Exemption request at 51515 Chilliwack Lake Road, Electoral Area “E” as outlined in the corporate report dated September 5, 2018:

Option 1 – Approve
THAT the proposed Site Specific Exemption to permit construction not less than 20 metres from the Chilliwack River at 51515 Chilliwack Lake Road be approved for a single family dwelling, as outlined in the Northwest Hydraulic Consultants geohazard reports dated August 6, 2018 and August 8th, 2018;

SUBJECT TO the registration of a restrictive covenant with a priority charge on title of the property pertaining to the floodplain setback exemption at 51515 Chilliwack Lake Road;

AND FURTHER THAT the Fraser Valley Regional District Board authorize its signatories to execute all documents relating to this matter.

Option 2 – Refuse
THAT the Fraser Valley Regional District Board refuse the Site Specific Exemption application to allow construction within 20 metres of the natural boundary of the Chilliwack River for a single family dwelling at 51515 Chilliwack Lake Road;

STRATEGIC AREA(S) OF FOCUS
Provide Responsive & Effective Public Services
Foster a Strong & Diverse Economy

PRIORITIES
Priority #3 Flood Protection & Management
BACKGROUND

The applicants, Alexander Ocean and Kelly Mendonca, propose to build a new single family dwelling at 51515 Chilliwack Lake Rd, Electoral Area “E”. The property in located adjacent to the Chilliwack River. FVRD Flood Management Bylaw No. 681, 2005 requires a 60 metre setback for new construction. This setback requirement includes the entire property and therefore sterilizes development. Therefore the applicants have requested a Site Specific Exemption to reduce the setback to 20 metres. The applicant has provided a geohazard report by Stirling Geoscience and Northwest Hydraulic Consultants (NHC) which provides a detailed mitigation proposal including erosion and bank protection works. The geohazard report also includes a satisfactorily completed FVRD-EGBC GeoHazard Assurance Statement.

| PROPERTY DETAILS |
|------------------|-----------------|-----------------|-----------------|
| Electoral Area   | E               | Address         | 51515 Chilliwack Lake Road |
| PID              | 007-261-624     | Folio           | 733-06608.010    |
| Lot Size         | 1.397 hectares (3.453 acres) | Owner          | Alexander Kocoski Kelly Mendonca |
| Owner            | Alexander Kocoski Kelly Mendonca | Agent         | Alexander Kocoski Kelly Mendonca |
| Current Zoning   | Rural (R)       | Proposed Zoning | No change        |
| Current OCP      | Limited Use (LU) and Forest (F) | Proposed OCP | No change        |
| Current Use      | Vacant residential | Proposed Use | Single family dwelling |
| Development Permit Areas | 2-E, 3-E and 6-E | Agricultural Land Reserve | No |

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Official Community Plan
The Electoral Area “E” Official Community Plan identifies the subject parcel as within Development Area 2-E Chilliwack River, due to known flood and erosion hazards from the Chilliwack River. The OCP references the 1992 Hay & Company overview study of the Chilliwack River flood and erosion hazards. However the property is located just outside the 1992 Hay & Company study boundaries which provided erosion and flood plain limits for settlement areas of the CRV.

The ‘erosion setback line’ is the; estimate of the erosion potential during a single major flood event, assumed to be greater than a 50 year return period, recognizes presence of bank protection, or outflanking of existing protection, and need for access to river bank for maintenance and emergency response.

Since the 1992 Hay & Co study did not extend to this property, the property owner has obtained the services of Northwest Hydraulic Consultants (NHC) to identify a safe building site, including mitigation and erosion setback line for a proposed single family dwelling.

Hazard Map – NHC July 2018

Floodplain Management Bylaw No. 681, 2005
The site specific exemption process is generally reserved for unique or complex sites within a flood hazard area where the property owner/applicant has no options to avoid the hazard area. To support their site specific exemption request, the FVRD Flood Management Bylaw requires a professional engineer or geoscientist’s report with a complete EGBC-FVRD GeoHazard Assurance Statement. In addition, a restrictive covenant registered to the property is required to acknowledge the risk and disclose the geohazard report.
**Provincial Policy**
The Province of BC’s Flood Hazard Area Land Use Management Guidelines, Section 1.3 supports flood setback reductions in a case of serious hardship and building cannot occur unless requirements are reduced.

The subject property is located entirely in the 60 metre setback area, with no opportunities for alternative siting or design to avoid the hazard. Accordingly the proposed setback reduction is consistent with the Province of BC policy.

**DISCUSSION**

**GeoHazard Report**
The applicant has provided a comprehensive geohazard report by Northwest Hydraulic Consultants (NHC) that addresses the Chilliwack River flood and erosion hazard. The report recommends a protected building site in the southwest corner.

Geohazard design recommendations include:

- **Setback.** 20 metre setback from the natural boundary of the Chilliwack River, provided bank protection works installed;

- **Elevation.** 154.5 m GSC flood construction level (FCL) – property is at 154.2 m GSC, minimal elevation required;

- **Bank/scour protection.** Engineered riprap, designed to 200-year hydraulic forces along the left-bank section of the property to protect from Chilliwack River erosion events.

- **Operation and maintenance practices.** Maintaining access, vegetation removal, and inspections post event or every 5 years whichever comes first by professional engineer or geoscientist.

The professional geoscientist has provided a completed EGBC- FVRD GeoHazard Assurance Statement that the report meets the technical requirements.

**Mitigation Plan – Northwest Hydraulic Consultants (NHC), August 2018**

*Engineered Bank Protection*
Provides building area of approximately 20 metres or greater from natural boundary of the Chilliwack River.

**Restrictive Covenant**
Should the Regional Board grant a site specific exemption a restrictive covenant registered on title is necessary to:

- **acknowledge** the erosion hazard;
- **disclose** the NHC geohazard report;
- **save-harmless** the Regional District in the event of erosion;
- **waive financial assistance** in the case of flood damage as required by the Province;
- **Professional Engineer Commitment for Field Review and Professional Design** of the mitigation works. A formal commitment from P. Eng to ensure the bank protection works are installed and completed under the supervision and design of a Professional Engineer expertise is necessary. FVRD Building Bylaw No. 1188, 2013 does not require building permit for the bank protection works.
- **completion of protective works**: bank protection must be constructed and completed in advance of issuance of building permit for the single family dwelling to ensure safe building site.
- **operations and maintenance plan**.

**Additional Approvals**

Several additional approvals are anticipated should the applicant obtain a Site Specific Exemption, these include:

- FVRD Development Permit; and,
- FVRD Building Permit.

**Options for Consideration**

In considering the request by the applicant to reduce the floodplain setbacks to allow the construction of a single family home at 51515 Chilliwack Lake Road, the FVRD Board may wish to consider the following options:

1. **Approve.** Permit the proposed single family dwelling at not less than 20 metres from the natural boundary of the Chilliwack River, provided bank protection works as recommended in the geohazard report are completed in advance of the house construction, and restrictive covenant is registered.

2. **Refuse.** Refuse the proposal and direct the applicant to consider other properties to accommodate their proposal. The applicant has no alternative siting or design options to avoid the hazard, as the subject property is located entirely in the 60 metre setback area. Therefore this option does not provide options for a building area on the subject property.

**COST**
The Site Specific Exemption application fee of $400 has been paid by the applicant. The costs associated with the registration of the covenant related to the site specific exemption application will be borne by the applicant if the Regional Board approves the exemption.

COMMENTS BY:

Graham Daneluz, Deputy Director of Planning and Development  Reviewed and supported.

Margaret Thornton, Director of Planning & Development  Reviewed and supported.

Mike Veenbaas, Director of Financial Services  No further financial comment.

Paul Gipps, Chief Administrative Officer  Reviewed and supported.