

**DATE:** December 18, 2019

**FILE:** 3160-20/FR 4C 19

**TO:** Chair and Directors  
Electoral Areas Services Committee

**FROM:** Russell Dyson  
Chief Administrative Officer

Supported by Russell Dyson  
Chief Administrative Officer

*R. Dyson*

**RE: Site Specific Floodplain Setback Reduction – 9550 Sarmma Road  
(Cleghorn/Goossen)  
Puntledge – Black Creek (Electoral Area C)  
9550 Sarmma Rd  
Lot 20, Block 29, Comox District, Plan VIP79847, PID 026-477-840**

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### **Purpose**

The purpose of this report is to consider a request for a site specific exemption to the floodplain setback that would allow construction of a dwelling and accessory buildings (Appendix A).

### **Recommendation from the Chief Administrative Officer:**

THAT the board grant a site specific exemption of the floodplain specifications that reduces floodplain setback from 60 metres to 30 metres for the proposed buildings on Lot 20, Block 29, Comox District, Plan VIP79847, PID 026-477-840 (9550 Sarmma Road);

AND FINALLY THAT, as a condition of the site specific exemption, the Comox Valley Regional District building services department not issue final occupancy for any buildings on the property described as Lot 20, Block 29, Comox District, Plan VIP79847, PID 026-477-840 (9550 Sarmma Road) until the applicants, at their own expense, register a restrictive covenant under Section 219 of the *Land Title Act*, specifying conditions that would enable the land to be safely used for the use intended according to the terms of the professional engineer's report by Michael de Hart, P.Eng., and Mark DeGagne, P.Eng., of McElhanney Ltd, dated November 13, 2019, which will form part of the restrictive covenant, as well as an acknowledgement that no Disaster Financial Assistance funding is available for the building or its contents and releasing and indemnifying the Comox Valley Regional District from liability in the event any damage is caused by flooding or erosion.

### **Executive Summary**

- The property is a 2.27 hectare lot located between Sarmma Road and the Oyster River.
- The Comox Valley Floodplain Management Bylaw requires a floodplain setback of at least 60 metres from the Oyster River.
- The development of this lot is also restricted by a wetland and its required setback for the purposes of protecting a riparian ecosystem.
- To develop the lot with a house and accessory buildings, the applicants are requesting a site specific exemption of the floodplain specifications to allow for the buildings to be placed 30 metres from the river and have provided a Geotechnical Assessment by a Professional Engineer to support the request (Appendix B).
- Overlaying the floodplain setback adjusted by the recommendations of the Geotechnical Engineer with the riparian setbacks and an area reserved by a covenant for the purposes of sewage disposal, leaves a small buildable area.

- Staff recommends the site specific exemption be granted to enable development in the lot’s buildable area under the conditions of the Geotechnical Assessment by a Professional Engineer.

Prepared by:

**J. MacLean**

Jodi MacLean, RPP, MCIP  
Rural Planner

Concurrence:

**T. Trieu**

Ton Trieu, RPP, MCIP  
Manager of Planning Services

Concurrence:

**S. Smith**

Scott Smith, RPP, MCIP  
General Manager of  
Planning and Development  
Services Branch

**Stakeholder Distribution (Upon Agenda Publication)**

Applicants	✓
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**Background/Current Situation**

The subject property is a 2.27 hectare lot located between Sarmma Road and the Oyster River (Figures 1 and 2). The lot is undeveloped and has a wetland over most of its area. Due to the extent of the wetland, there is an easement on the neighbouring lot with a gravel driveway for accessing the rear of the subject property where there is a covenant area in favour of the Vancouver Island Health Authority. That covenant requires any sewage disposal system installed on the property be located within that covenant area.

The property owners intend on developing the lot with a house and accessory buildings (Figure 3) between the river, a wetland, and a covenant area (Appendix A). They propose to locate the house 30 metres from Oyster River. Because the Comox Valley Regional District (CVRD) Floodplain Management Bylaw states that land within 60 m from the natural boundary of the Oyster River is designated as a floodplain setback, a site specific exemption is required.

**Planning Analysis**

Floodplain Management Bylaw

Section 303(1) of Bylaw No. 2782, being the “Floodplain Management Bylaw, 2005”, states, “*The following distances are specified as floodplain setbacks: (a) 60.0 metres from the natural boundary of Oyster River*” and Section 304(2) states “*A person must site a building or structure according to the floodplain setbacks specified in Section 303.*”

Section 403 allows for a property owner to make an application to the CVRD for a site specific exemption of the floodplain specifications. The application must include a professional engineer’s report that addresses the exemption request and, if approved, the property owner must also waive Disaster Financial Assistance Funding and indemnify the CVRD from liability in the event any damage is caused by flooding or erosion.

In support of their request, the applicants have provided a Geotechnical Assessment prepared by Michael de Hart, P.Eng., and Mark DeGagne, P.Eng., of McElhanney Ltd (Appendix B). The report concludes “*First, the river channel alignment and riverbanks appear to be stable and therefore should not shift significantly. On this basis, the standard 60m setback from the natural boundary of the Oyster River should be reduced to 30m. Second, the Flood Construction Level (FCL) of any development on this site should be 81.5m, in order to stay safely above the estimated 200-year flood levels...*”

### Official Community Plan

Sections 15 and 16 of the Official Community Plan (OCP), Bylaw No. 337, being the “Rural Comox Valley Official Community Plan Bylaw No. 337, 2014”, provides objectives and policies regarding development in the vicinity of natural hazards. Objective 15(2) states “*To direct new development away from hazard areas*” and Policy 16(1) states “*Do not permit new development in hazard areas, including mapped floodplains, steep slopes and areas of active erosion.*” The house and other buildings are proposed to be located outside the mapped floodplain but within the 60 metre floodplain setback.

For the purposes of protecting aquatic and riparian ecosystems, the OCP requires a development permit (DP) for any development within 30 metres of a watercourse. A condition of this DP is adherence to the recommendations of a Qualified Environmental Professional (QEP). In the case of this property, the entirety of the lot is within 30 metres of a watercourse and in accordance with the provincial *Riparian Area Protection Regulations* the QEP recommended a 15 metre setback from the wetland and a 30 metre setback from the river. The only remaining buildable area on the lot is the area to the rear between the watercourse setbacks (Figure 3).

### Zoning

The subject property is zoned Rural Eight (RU-8) which allows for residential use to a maximum of two dwellings. The proposal to construct one dwelling with accessory buildings is consistent with the zone.

### **Policy Analysis**

Section 524 of the *Local Government Act* (RSBC, 2015, c. 1) (LGA) authorizes a local government to establish a bylaw to designate a flood plain and specify a setback from a watercourse, body of water or dike to any landfill or structural support required to elevate a floor system or pad above the flood level. Sections 524(7) and (8) allows a local government to grant an exemption to a floodplain bylaw upon receipt of a report by a Qualified Professional that the land may be used safely for the use intended and that the exemption may include terms and conditions the local government considers necessary or advisable.

### **Options**

The board may choose to grant or refuse the site specific exemption of the floodplain specifications.

Staff recommends the site specific exemption of the floodplain specifications be granted on the basis that it provides the conditions for safely building on the lot’s only buildable area.

### **Financial Factors**

Applicable fees have been collected for this application under the “Comox Valley Regional District Planning Procedures and Fees Bylaw No. 328, 2014.”

### **Legal Factors**

This report and recommendation contained herein are in compliance with the LGA and CVRD bylaws.

### **Regional Growth Strategy Implications**

Policy 1D-2 of the Regional Growth Strategy (RGS), Bylaw No. 120, being the “Comox Valley Regional District Regional Growth Strategy Bylaw No. 120, 2010”, pertaining to the public costs of housing states “*Direct new housing away from high risk natural hazard areas such as flood plains, areas exposed to sea-level rise...*” Policy 8F-6 pertaining to planning for climate change adaption states “*All new development within established floodplains should be discouraged and redevelopment of lands within floodplain areas should only be supported where technical analysis by a qualified professional has been undertaken to ensure that lands are safe for use, development will not impact floodplain functions, and construction levels include safety factors to*

*account for climate change and potential sea level rise and associated extreme storm surges.”* The proposed location is outside of the mapped floodplain and is supported by recommendations from a qualified professional.

**Intergovernmental Factors**

There are no intergovernmental factors.

**Interdepartmental Involvement**

This proposal was referred to applicable internal departments.

**Citizen/Public Relations**

There are no citizen and/or public relations factors related to this report.

Attachments: Appendix A – “Letter from Warren Goossen and Jennifer Cleghorn regarding Site Specific Amendment to Floodplain”

Appendix B – “Professional Engineer’s Report by Michael de Hart, P.Eng., and Mark DeGagne, P.Eng., of McElhanney Ltd, dated November 13, 2019”

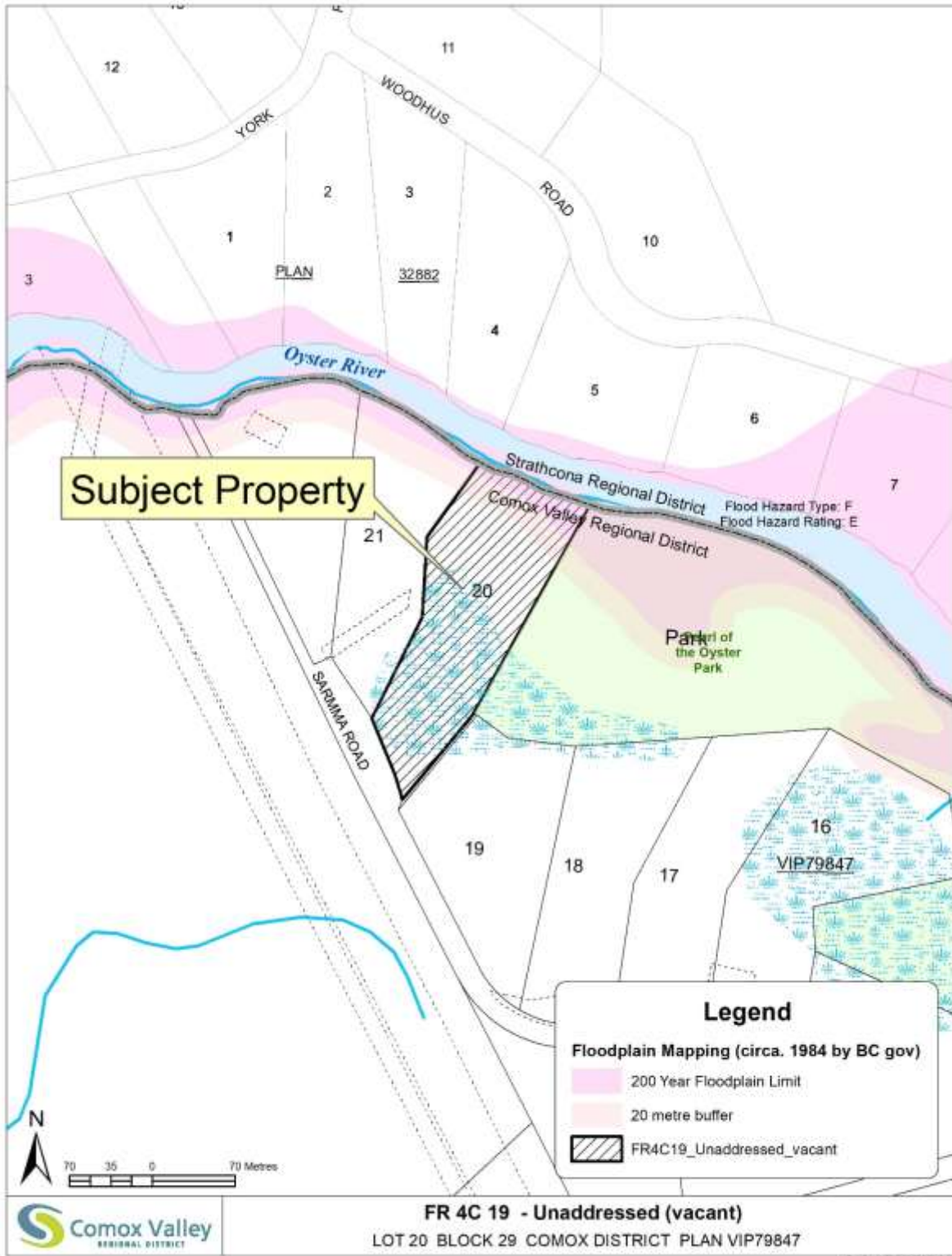


Figure 1: Subject Property with Estimated 200-year Floodplain Illustrated

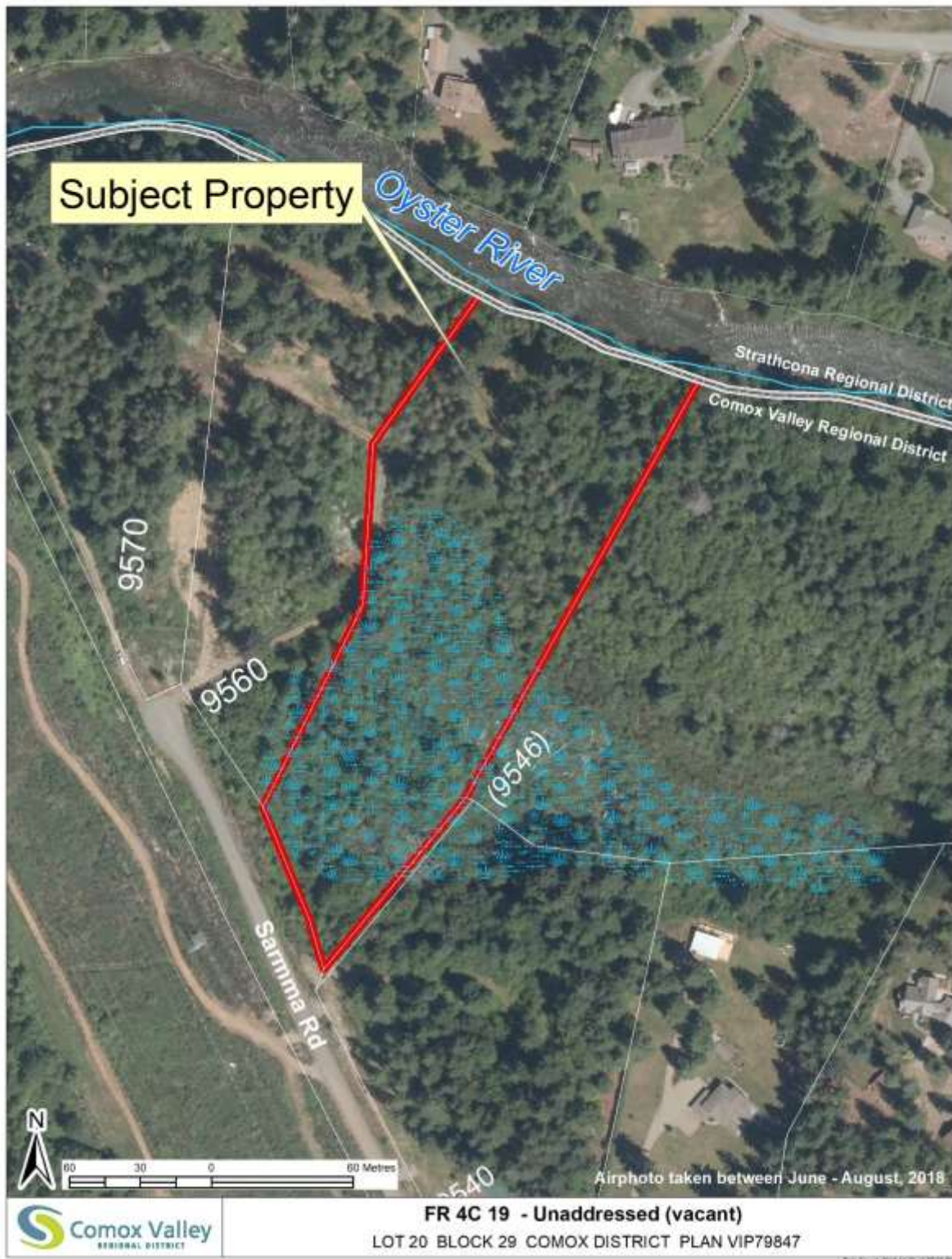


Figure 2: Air Photo

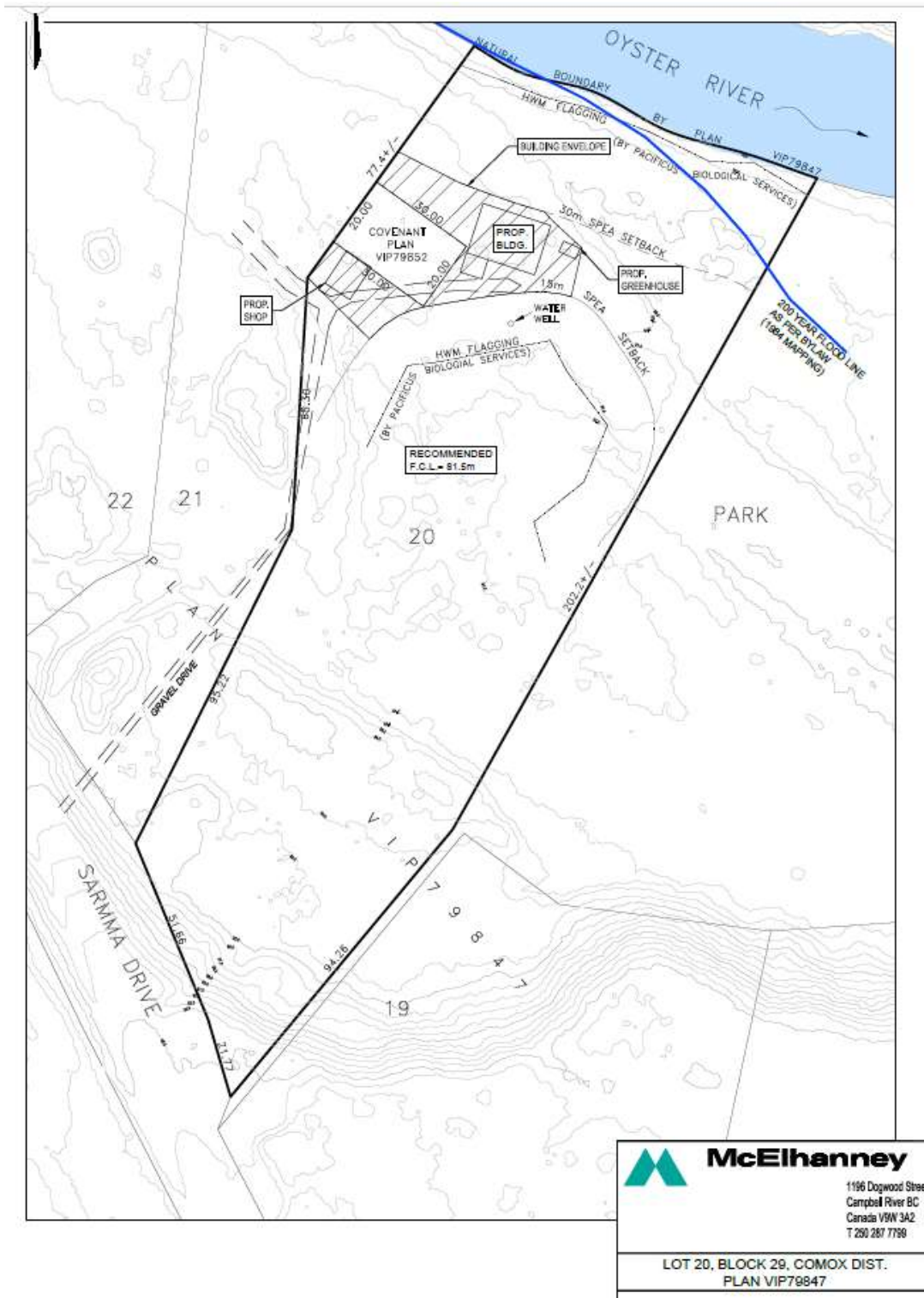


Figure 3: Site Plan Illustrating Developable Area and Proposed Buildings

**To:** Comox Valley Regional District  
**Attn:** Planning Department

October 8, 2019

**From:** Warren Goossen and Jennifer Cleghorn  
727A Erickson Road, Campbell River BC V9W 1S9

**RE:** Floodplain Setback Exemption Request for Lot 20, 9550 Sarmma Road, Black Creek

To Whom It May Concern,

Please accept this letter as request for site specific amendment of the existing 60m floodplain setback from the Oyster River on Lot 20 Sarmma Drive in Black Creek. We are requesting that the setback for this site be reduced to 30m from the present natural boundary (PNB). This reduction is supported in the accompanying memorandum and engineering survey conducted September 5, 2019 by McElhanney engineering company out of their Campbell River office. The property is currently vacant with a shallow well, mostly forested with one access road/driveway extending off a shared easement on Lot 21. Existing on the property is a small clearing which *could* be suitable for the location of a single-family dwelling.

We are requesting the exemption for the following reasons:

- We are in the process of purchasing the property and attempting to protect our interests as well as those of the CVRD and neighboring properties.
- Respecting that floodplain setbacks are in place to protect homeowners from destructive acts of nature we feel that we would be minimally impacted should a major rain or flood event occur for the following reasons:
  - the bedrock in this area of the river provides long-term stability
  - there is extensive vegetation growth along the banks which protects against erosion
  - there are large coniferous trees adjacent to the river and throughout the property which would not be supported in a flood zone
  - future dwelling(s) would be constructed well out of danger and above floodplain risk levels
- In addition to the professional engineering services provided by McElhanney, we have also retained Pacificus Biologists for their recommendations regarding the wetland area on the property.
- Lot 20 contains a very large riparian zone on the south side which encompasses approximately two thirds of this parcel. Although adding another level of complexity, we are excited about the possibility of being the custodians of this wetland area, and do not consider it to be a deterrent.
- We do not plan to develop the property beyond what is shown on the attached Sketch Plan, we want to leave as many trees as possible unless removal is required for safety reasons or to satisfy building or other property conditions.

Although challenging, this is a beautiful piece of property which we have grown quite attached to over the past 6 months. The relaxations for the river and riparian setbacks will be key to us moving forward with the purchase. We trust the recommendations made by the professionals and feel confident that the proposed building area is well within the flood safe zone as supported by the engineering report.

Thank you for your consideration in this matter, we look forward to hearing from you.

Regards,

Warren Goossen and Jennifer Cleghorn



**MEMORANDUM****McElhanney**

<b>To</b>	<b>From</b>
Jennifer Cleghorn and Warren Goossen	Michael de Hart, Project Engineer
	Our File: 2222-02048-00
<b>Re</b>	<b>Date</b>
Lot 20, Block 29, Comox District, Plan VIP79847 – 9550 Sarmma Road – Recommended Flood Construction Level and Riverbank Setback (Floodplain Exemption) (Rev 1)	November 13, 2019

**1. INTRODUCTION**

In response to your request, we have completed an engineering review of the Oyster River in the vicinity of 9550 Sarmma Road in order to provide you information in support of a reduction in the required 60m development setback per the Comox Valley Regional District (CVRD) Floodplain Management Bylaw (No. 2782, 2005).

The purpose of the review is to assess the appropriate flood construction level (FCL) at the lot to conform to the bylaw, as well as recommend an appropriate building setback from the present natural boundary (PNB) of the Oyster River. It is also the intent of this letter to review the proposed land use of the property.

Our review included two main sources of background information, included as enclosures to this letter:

- Historical Aerial Imagery for 1994 to 2012 (Comox Valley Regional District: iMap 3.1, <http://imap2.comoxvalleyrd.ca/>); and
- Sheet 2 of Preliminary Floodplain Mapping: Oyster River (Province of British Columbia, Ministry of Environment – Water Management Branch, May 1984), as found in the CVRD Floodplain Management Bylaw 2782, 2005 (Schedule C);

**2. OYSTER RIVER GEOMORPHOLOGY**

The following items were considered in assessing the geomorphology of the Oyster River within the vicinity of 9550 Sarmma Road:

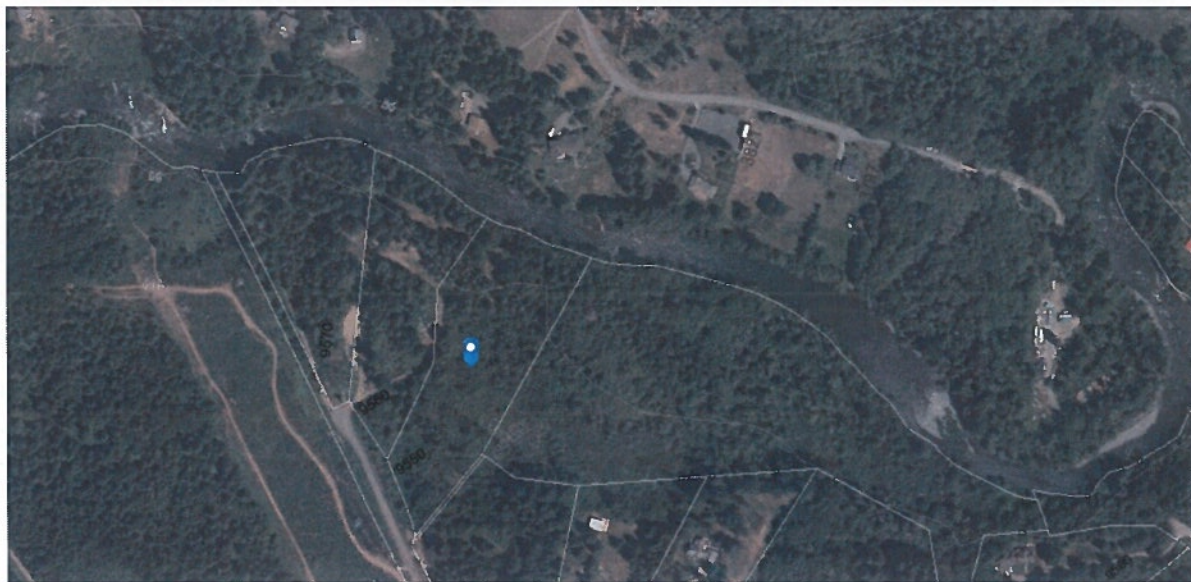
- Historical aerial imagery, to look for evidence of erosion or shifting of the river channel;
- Geology and erodibility of the river bed and banks, to estimate future stability; and
- River geometry, to estimate areas of high flow velocities.

No evidence of erosion or shifting of the river channel in the vicinity of the subject site is evident in the historical aerial imagery for the area, which spans from 1992 to 2018. Therefore, the river appears to be stable throughout this reach and is expected to remain stable in the future. Also evident in both the aerial imagery and photos from a recent site visit is the mature vegetation along the river bank in front of the subject property. This mature vegetation has persisted throughout the period of available historical imagery and, based on the size of some of the mature trees, has likely been growing here since well before 1992. This shows that there has been little to no erosion to the river bank and if it is retained, this vegetation will help

protect the river bank from erosion during any high flow events. The consistency of the river channel is shown in **Figures 1** and **2** below.



*Figure 1: 1992 Aerial Imagery*



*Figure 2: 2018 Aerial Imagery*

The geology of the river bed and banks in the immediate vicinity of the subject site reinforces the conclusion that the river is stable throughout this river reach. An outcropping of bedrock occurs in the river bed is present along the frontage, upstream and down of the subject site. This geological feature can be seen in the attached site photos. This bedrock layer is at or very near the surface of the river bed, and contributes



significantly to the stability of the river channel throughout this area due to its high resistance to erosion. The riverbanks are comprised of glacial till overlaying this bedrock layer and appear to be stable due to the extensive vegetation growth and low propensity for the till material to be eroded.

As seen in **Figures 1 and 2**, the subject site is located along a relatively straight portion of the river. The bedrock shelf upstream of the site evenly distributes the flow across the channel, preventing the typical concentration of river flows along the bank at the subject site that would be seen in a river with a granular/erodible river bottom. The bedrock riverbed ensures long-term stability for this reach of the river during the majority of flow events.

The mid to higher bank vegetation seen in Photo 3 (attached), provides excellent erosion protection during less frequent, high flow events. There is no evidence of any recent bank slips or slope failures from ground observations or aerial photo interpretations. Therefore, it can be concluded that the embankment is stable now and will remain so over the long-term ( $\pm$  50 to 100 years).

On the basis of the above discussion, a reduction of the required 60m setback to 30m is considered to be justified and the property is well protected from any long term bank instabilities or erosion.

### 3. FLOODPLAIN MAPPING

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The attached Preliminary Floodplain Mapping: Oyster River (May 1984) presents the required Flood Construction Levels (FCLs) for this section of the Oyster River, as per the CVRD's Floodplain Management Bylaw No. 2782 (2005). These FCLs are based on the 200-year flood levels plus 0.6m freeboard. Based on the above geomorphological assessment of the Oyster River near this subject property, we feel the river has been stable and undergone very little change since 1984 and therefore these floodplain elevations remain valid for use in determining the FCL for this site.

The attached Site Plan, also completed by McElhanney, was compiled based on recent survey of the subject property and includes the floodplain mapping boundary from the above noted CVRD Floodplain Management Bylaw. Most of the subject property is outside the 200-year floodplain of the Oyster River. This site plan shows the maximum building envelope based on the current zoning and the 30m setback from the present natural boundary of the Oyster River. Based on this proposed maximum building envelope and the flooding elevations that intersect the building envelope, an FCL of 81.5m is recommended.

The EGBC Guidelines require specification for the method of achieving the FCL with structural fill material. In this regard, any fill material used to achieve the recommended FCL and to support the building foundation shall be clean free draining granular materials meeting the requirements of the Master Municipal Construction Documents (MMCD) specification for Pit Run Gravel (MMCD Section 31 05 17, Clause 2.3). The material shall be placed on approved subgrade material suitable for building bearing capacity and compacted to 95% Modified Proctor Density.

## 4. EXEMPTION PRECEDENTS

As per the Comox Valley Regional District (CVRD) Floodplain Management Bylaw (No. 2782, 2005) Section 403, Sub-Section 2, the Professional Engineer's Report is required to address "exemption precedents in the surrounding area". For this study, there are 2 nearby precedents for the floodplain setback. They are the neighbouring 2 properties upstream of the subject property along Sarmma Road and addressed at:

- Lot 21 – 9560 Sarmma Road, where the setback was recommended at 30m; and
- Lot 22 – 9570 Sarmma Road, where the setback was recommended 30m.

As shown, these setbacks are consistent with the recommendation contained herein.

## 5. ASSURANCE STATEMENT

McElhanney certifies that the land is considered safe for the use intended (defined for the purposes of this report as the construction of a single family residence and outbuildings horizontally offset 30m from the natural high water mark as identified by Pacificus Biological Services, with a Flood Construction Level (FCL) of 81.5m above Geodetic Survey of Canada Datum), with probability of failure resulting in property damage of less than a 1 in 200 year probability of occurrence flood event. The EGBC Flood Assurance Statement is provided herewith as required by the CVRD for reports of this nature.

## 6. CONCLUSION

Our review of the geomorphology of the Oyster River in the vicinity of 9550 Sarmma Road has arrived at two conclusions in support of development at this site. First, the river channel alignment and riverbanks appear to be stable and therefore should not shift significantly. On this basis, the standard 60m setback from the natural boundary of the Oyster River should be reduced to 30m.

Second, the Flood Construction Level (FCL) of any development on this site should be 81.5m, in order to stay safely above the estimated 200-year flood levels and to comply with the CVRD's Floodplain Management Bylaw No. 2782 (2005). In order to ensure the ongoing stability of the riverbank, vegetation within the 30m setback of the property and the Oyster River should be maintained in its present condition.

If you have questions or concerns with regards to the information provided herein, please do not hesitate to contact the undersigned.

Sincerely, McElhanney Ltd.

Prepared by

*M de Hart*

Michael de Hart, P.Eng.  
Project Engineer

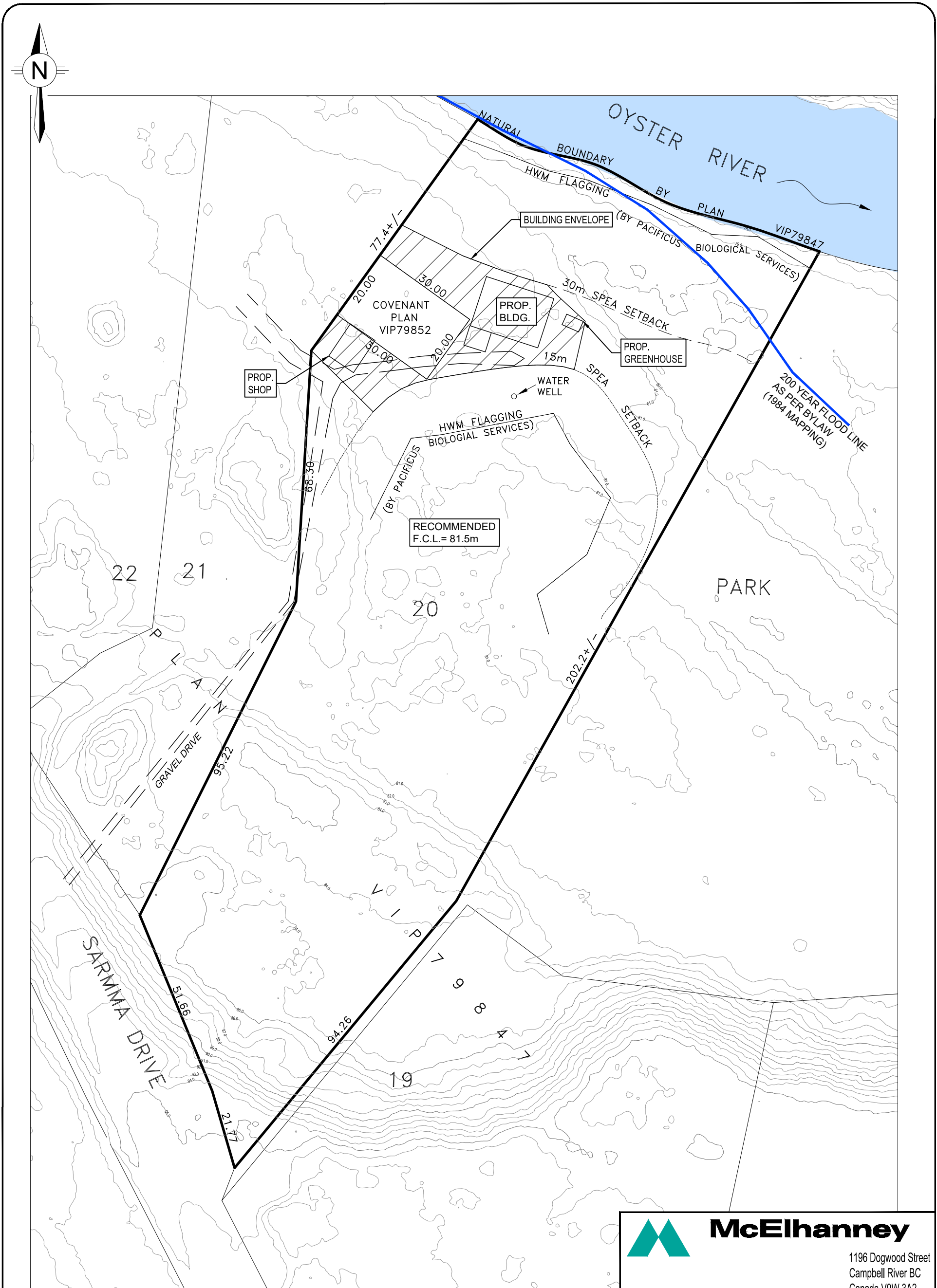
Reviewed by



Mark DeGagne, P.Eng.  
Branch Engineer

## SITE PLAN

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**McElhanney**  
 1196 Dogwood Street  
 Campbell River BC  
 Canada V9W 3A2  
 T 250 287 7799

LOT 20, BLOCK 29, COMOX DIST.  
 PLAN VIP79847

SITE PLAN

DATE : 2019-11-13	Project No.
SCALE 1:1000	<b>2222-02408</b>
DRAWN BY: TM	Drawing No.
CHECKED: MdH	<b>SK-1</b>

**NOT FOR CONSTRUCTION**

0 10 20 30 40 50

SCALE: 1:1000

## SITE PHOTOS

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*Photo 1: Bedrock Riverbed*



*Photo 2: River Channel with Bedrock Outcropping on Far Riverbank*



*Photo 3: Vegetated Riverbanks*





**FLOOD HAZARD AND RISK ASSESSMENT ASSURANCE STATEMENT**

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## FLOOD ASSURANCE STATEMENT

Note: This statement is to be read and completed in conjunction with the current Engineers and Geoscientists BC *Professional Practice Guidelines – Legislated Flood Assessments in a Changing Climate in BC* ("the guidelines") and is to be provided for flood assessments for the purposes of the *Land Title Act*, Community Charter, or the *Local Government Act*. Defined terms are capitalized; see the Defined Terms section of the guidelines for definitions.

To: The Approving Authority  
Comox Valley Regional District

Date: Nov 8, 2019

8600 Comox Road, Courtenay, BC, V9N 3P6

Jurisdiction and address

With reference to (CHECK ONE):

- Land Title Act* (Section 86) – Subdivision Approval
- Local Government Act* (Part 14, Division 7) – Development Permit
- Community Charter (Section 56) – Building Permit
- Local Government Act* (Section 524) – Flood Plain Bylaw Variance
- Local Government Act* (Section 524) – Flood Plain Bylaw Exemption

For the following property ("the Property"):

Lot 20, Block 29, Comox District, Plan VIP79847, 9550 Sarmma Road

Legal description and civic address of the Property

The undersigned hereby gives assurance that he/she is a Qualified Professional and is a Professional Engineer or Professional Geoscientist who fulfils the education, training, and experience requirements as outlined in the guidelines.

I have signed, sealed, and dated, and thereby certified, the attached Flood Assessment Report on the Property in accordance with the guidelines. That report and this statement must be read in conjunction with each other. In preparing that Flood Assessment Report I have:

[CHECK TO THE LEFT OF APPLICABLE ITEMS]

1. Consulted with representatives of the following government organizations:  
\_\_\_\_\_
2. Collected and reviewed appropriate background information
3. Reviewed the Proposed Development on the Property
4. Investigated the presence of Covenants on the Property, and reported any relevant information
5. Conducted field work on and, if required, beyond the Property
6. Reported on the results of the field work on and, if required, beyond the Property
7. Considered any changed conditions on and, if required, beyond the Property
8. For a Flood Hazard analysis I have:
  - 8.1 Reviewed and characterized, if appropriate, Flood Hazard that may affect the Property
  - 8.2 Estimated the Flood Hazard on the Property
  - 8.3 Considered (if appropriate) the effects of climate change and land use change
  - 8.4 Relied on a previous Flood Hazard Assessment (FHA) by others
  - 8.5 Identified any potential hazards that are not addressed by the Flood Assessment Report
9. For a Flood Risk analysis I have:
  - 9.1 Estimated the Flood Risk on the Property
  - 9.2 Identified existing and anticipated future Elements at Risk on and, if required, beyond the Property
  - 9.3 Estimated the Consequences to those Elements at Risk

## FLOOD ASSURANCE STATEMENT

10. In order to mitigate the estimated Flood Hazard for the Property, the following approach is taken:

- 10.1 A standard-based approach
- 10.2 A Risk-based approach
- 10.3 The approach outlined in the guidelines, Appendix F: Flood Assessment Considerations for Development Approvals
- 10.4 No mitigation is required because the completed flood assessment determined that the site is not subject to a Flood Hazard

11. Where the Approving Authority has adopted a specific level of Flood Hazard or Flood Risk tolerance, I have:

- 11.1 Made a finding on the level of Flood Hazard or Flood Risk on the Property
- 11.2 Compared the level of Flood Hazard or Flood Risk tolerance adopted by the Approving Authority with my findings
- 11.3 Made recommendations to reduce the Flood Hazard or Flood Risk on the Property

12. Where the Approving Authority has not adopted a level of Flood Hazard or Flood Risk tolerance, I have:

- 12.1 Described the method of Flood Hazard analysis or Flood Risk analysis used
- 12.2 Referred to an appropriate and identified provincial or national guideline for level of Flood Hazard or Flood Risk
- 12.3 Made a finding on the level of Flood Hazard or Flood Risk tolerance on the Property
- 12.4 Compared the guidelines with the findings of my flood assessment
- 12.5 Made recommendations to reduce the Flood Hazard or Flood Risk

13. Considered the potential for transfer of Flood Risk and the potential impacts to adjacent properties

14. Reported on the requirements for implementation of the mitigation recommendations, including the need for subsequent professional certifications and future inspections.

Based on my comparison between:

[CHECK ONE]

- The findings from the flood assessment and the adopted level of Flood Hazard or Flood Risk tolerance (item 11.2 above)
- The findings from the flood assessment and the appropriate and identified provincial or national guideline for level of Flood Hazard or Flood Risk tolerance (item 12.4 above)

I hereby give my assurance that, based on the conditions contained in the attached Flood Assessment Report:

[CHECK ONE]

- For subdivision approval, as required by the *Land Title Act* (Section 86), "that the land may be used safely for the use intended":

[CHECK ONE]

- With one or more recommended registered Covenants.
- Without any registered Covenant.

- For a development permit, as required by the *Local Government Act* (Part 14, Division 7), my Flood Assessment Report will "assist the local government in determining what conditions or requirements it will impose under subsection (2) of this section [Section 491 (4)]".

- For a building permit, as required by the *Community Charter* (Section 56), "the land may be used safely for the use intended":

[CHECK ONE]

- With one or more recommended registered Covenants.
- Without any registered Covenant.

- For flood plain bylaw variance, as required by the *Flood Hazard Area Land Use Management Guidelines* and the *Amendment Section 3.5 and 3.6* associated with the *Local Government Act* (Section 524), "the development may occur safely".

For flood plain bylaw exemption, as required by the *Local Government Act* (Section 524), "the land may be used safely for the use intended".

### FLOOD ASSURANCE STATEMENT

I certify that I am a Qualified Professional as defined below.

EGBC Professional Engineer - PEng

Date

November 8, 2019

Prepared by

Mark DeGagne

Name (print)



Signature

1196 Dogwood Street

Address

Campbell River, BC, V9W 3A2

250-287-7799

Telephone

mdegagne@mcelhanney

Email

Reviewed by

Michael deHart

Name (print)



Signature



(Affix PROFESSIONAL SEAL here)

If the Qualified Professional is a member of a firm, complete the following:

I am a member of the firm McElhanney Limited

and I sign this letter on behalf of the firm.

(Name of firm)