

### **Attachment 3 Planning Implications**

#### ***Environmental Protection***

In support of the application, the applicant submitted a Construction Environmental Impact Study (CEIS) prepared by AECOM, dated February 2021. The CEIS provides an overview of the regulatory context of the project as well as a biophysical inventory. Lot 1 is the focus of the CEIS as it includes Morningstar Creek.

The proposed expansion includes a new access across Morningstar Creek as well as vegetation removal in support of the expansion. The project proposes to maintain a 15-metre buffer of existing vegetation adjacent to Morningstar Creek. Site infrastructure will generally be placed more than 15 metres from Morningstar Creek. The applicant is also proposing to design the expansion to keep vegetation clearing close to the creek to a minimum. The applicant is aware of and will satisfy the requirement to obtain regulatory approvals and/or authorization for instream works.

The CEIS also includes recommended Environmental Protection and Mitigation measures designed to minimize the impact of the proposed development (see Attachment 5 – Conditions of Approval).

The applicant also submitted an Environmental Investigation (Report) prepared by D. R. Clough Consulting, dated September 2021. The Report provides an inventory of environmental resources on Lot 1, which contains French Creek. The Report identifies that the reach of French Creek adjacent to Lot 1 has an active channel width of 18-36 metres with a floodplain width of up to 45 metres and states that French Creek was designated a Sensitive Stream under the *Fish Protection Act* in 1997. The Report also states that this reach of French Creek has been prone to debris torrents and significant flooding in recent years, most recently in January 2020 when Emergency Management BC had to authorize removal of a debris jam on the subject property. The Report further identified a small overland flood channel just east of the existing dwelling unit.

In addition to the above, the Report identifies a small, forested wetland in the southeast corner of the property that may be used by wildlife, specifically the blue listed red legged frog.

Also of significance, the Report states that the property is within the Coastal Douglas Fir moist maritime (CDFmm) Biogeoclimatic Zone, one of the most imperilled due to historic logging and human development.

With respect to the potential impacts of the development, the report indicates that the proposed expansion of the FCPCC may require the permanent loss of the forested wetland located on the subject property. This would require provincial approval and typically habitat compensation at a 2:1 ratio.

The Report includes a number of recommendations including the preparation of a Construction Environmental Management Plan and environmental monitoring. In addition, the Report identifies a number of studies that should be completed prior to development including a raptor survey, bird nest survey, amphibian survey, flood hazard assessment, and a Riparian Assessment.

The Report also recommends that no building occur to the west of the existing dwelling unit due to fish habitat and flood protection.

Development in accordance with the Report has been included as a condition of approval to confirm the applicant's commitment to develop the land to the Report's recommendations. As the proposed expansion will comply with the recommended environmental protection and mitigation measures, the overall environmental impacts of the project have been minimized.

### ***Natural Hazard Implications***

A significant portion of the subject properties are affected by the French Creek or Morningstar Creek floodplains.

To address the potential impacts of the development and ensure the properties are safe for the intended use, the applicant has submitted two Geotechnical Assessments as summarized below:

- Geotechnical Assessment Report – Detailed Design Phase (Assessment), prepared by EXP Services Inc., dated April 17, 2019.

The Assessment provides an investigation of Lot A (the location of the existing FCPC) and identifies key geotechnical design issues and includes an assessment of subsurface and seismic considerations. The Assessment also provides a number of construction-related recommendations to ensure that the project is designed to accommodate onsite conditions.

- Preliminary Desktop Geotechnical and Environmental Investigation (Investigation) prepared by Koers & Associates, dated November 29, 2021.

The Investigation provides a desktop level assessment of Lot A (lot nearest French Creek) in relation to hydrological and environmental considerations. The Investigation indicates that the Flood Construction Level (FCL) is 5.3 metres geodetic and a significant portion of the subject property is lower than the FCL meaning flood protection works and design consideration will need to be implemented. The Investigation primarily identifies the future geotechnical evaluations that would be required prior to construction, including:

- A detailed flood hazard assessment that includes a review of potential riverbank erosion and channel migration across the site.
- A cost estimate for the building up of the site to an approved elevation.
- A geotechnical evaluation of the steep slope located on the south side of the subject property.
- A subsurface evaluation to investigate the character of the soils and groundwater conditions to assist in grading and layout.

Note, site conditions or building-related requirements may result in the need for additional geotechnical evaluation.

While significant portions of the subject properties are affected by a floodplain, there is ample land area which is located more than 30 metres from the natural boundary or French Creek and more than 15 metres from Morningstar Creek to support the proposed expansion of the FCPC. In addition, the expansion will be designed to mitigate the potential flood risk and to minimize the impact on the floodplain.

While further study is required to determine design parameters to ensure the property is safe for the intended use, no development will proceed prior to completion of the recommended studies. Further, development will only proceed in accordance with the recommendations contained in these studies and under the supervision of appropriately qualified professional engineers.

### ***Future Recreational use and Trail***

Policy 7 of section 6.4 of the OCP states that when the RDN is considering a zoning amendment, it shall consider requiring dedication of land for the purpose of park land, green space, and or natural areas as a condition of rezoning. Further, the OCP identifies French Creek and associated riparian areas as being desirable park/conservation lands due to their environmental value and potential opportunities for low-impact recreation. In addition, Map 4 of the OCP identifies a desirable multi-use trail to connect French Creek Community Park with the Island Highway and the French Creek Estuary Nature Preserve.

In response, the applicant is proposing to designate an area adjacent to the natural boundary of French Creek as Park Land/Green Space/ Natural Areas in the OCP.

While the proposed OCP land use designation is consistent with the OCP policies, it also aligns with the recommendations contained in the Environmental Investigation mentioned above. As mentioned above, French Creek is deemed a sensitive stream and the property is located within the CDFmm Biogeoclimatic Zone. By designating a portion of the property as Park Land/Green Space/ Natural Areas, the intent is to protect the riparian zone adjacent to French Creek, preserve a linear corridor of existing forested area, and to reduce the potential for impacts on the floodplain.

The proposed boundary for the Park Land/Green Space/ Natural Areas land use designation is based on the combination of a 30 metre offset from the right bank of French Creek and the approximate location of a highwater overland route identified in the Environmental Investigation. To simplify the delineation, the transition between these two boundaries is proposed to be smoothed to create a more organic shape with the line which was the greater distance from French Creek taking precedence.

Further, to address the OCP policies that support the creation of a multi-use trail and low impact recreational use, a site planning exercise will be undertaken as part of the FCPC expansion and site design process to address the following objectives:

- ensure that the site can accommodate the future expansion needs of FCPC;
- identify the location and design of a multi-use trail providing a connection from the existing trail located in French Creek Community Park to the Island Highway;
- preserve and protect the riparian zone adjacent to French Creek; and,
- identify opportunities for public use and enjoyment of the property in a way which does not impede the future expansion and operation of the FCPC.

RDN Wastewater Services is anticipated to lead the planning process in cooperation with RDN Parks Services and that a draft plan will be presented to the Board for approval prior to proceeding with the expansion of the FCPC.

### ***Archaeological Considerations***

Due to the presence of two previously recorded archaeological sites in close proximity to Lot A, the applicant submitted an Archaeological Preliminary Field Reconnaissance (PFR), prepared by Aquilla Archaeology, dated December 11, 2018. The purpose of the PFR was to assess the potential of the site for materials of archaeological significance. The PFR did not find any signs of cultural materials where exposures were visible. The PFR found two locations of interest along the northeast boundary of the facility that have low to moderate potential for archaeological remains. The PFR concludes by recommending that an Archaeological Assessment be completed prior to development that focuses on the two identified areas of interest that contain moderate archaeological potential.

In response to the recommendation for additional archaeological assessment of Lot A, the applicant retained Aquilla Archaeology to prepare an Archaeological Impact Assessment (AI Assessment) dated February 2, 2021. The AI Assessment identified a new archaeology site (DiSC-57) in a previously disturbed area on the northern boundary of Lot A. The AI Assessment suggests that the site may represent the periphery of activity associated with the two previously recorded archaeological sites to the north (DiSC-3 and DiSC-29).

The AI Assessment states that it is unlikely that the FCPC expansion project can avoid this archaeological site. The AI Assessment indicates, that for a number of reasons, the new archaeological site has low significance. Notwithstanding, the Assessment indicates that Qualicum and Snaw-Naw-As First Nations should be consulted to determine the ethnic significance of the site.

The AI Assessment states that archaeological monitoring under a *Heritage Conservation Act* and a Site Alteration Permit are required during ground disturbing impacts associated with the FCPC expansion project (See Attachment 5 – Conditions of Approval).

With respect to Lot 1, the applicant has retained Aquilla to prepare an Archaeological Assessment. Submission of an Archeology Assessment and requirement to satisfy any identified recommendations contain therein has been included in the recommended conditions of approval (See Attachment 5 – Conditions of Approval).