



REGULAR MEETING OF COUNCIL

George Fraser Community Room, Ucluelet Community Centre,
500 Matterson Drive, Ucluelet, and
Electronically via Zoom ([Ucluelet.ca/CouncilMeetings](https://ucluelet.ca/CouncilMeetings))
Tuesday, February 25, 2025 @ 4:00 PM

LATE ITEM(S)

	Page
1. LATE ITEMS	
1.1. Matterson Reservoir Property Non-Market Housing Development <i>Bruce Greig, Director of Community Planning</i> RTC - Matterson Reservoir Property Non-Market Housing Development Appendix A - Site Servicing Cost Appendix B - RTC No. 25-17 February 11, 2025	3 - 79
1.2. Additional Budget Feedback Correspondence 2025-02-21 Budget Feedback ROLIwa	81 - 83



REPORT TO COUNCIL

Council Meeting: February 25, 2025
500 Matterson Drive, Ucluelet, BC V0R 3A0

FROM: BRUCE GREIG, DIRECTOR OF COMMUNITY PLANNING

FILE NO: 0890-20

SUBJECT: MATTERSON RESERVOIR PROPERTY NON-MARKET HOUSING DEVELOPMENT

REPORT NO: 25-21

ATTACHMENTS: APPENDIX A – SITE COST SERVICING
APPENDIX B – REPORT TO COUNCIL NO. 25-17, FEBRUARY 11, 2025

RECOMMENDATION:

THAT Council direct staff to develop and issue a Request for Expressions of Interest for a non-profit housing partner and a grant submission to the Community Housing Fund for the development and operation of a 50-unit affordable housing project on the future Lot A of the Matterson Reservoir Property.

BACKGROUND:

Council received a report on this potential project at its [February 11, 2025, regular meeting](#). Following discussion Council passed the following motions to lay the groundwork for a potential housing development on the Matterson Reservoir Property and adjacent lands owned by School District 70 (SD-70):

1. ***THAT** Council direct staff to develop and bring forward a Zoning Bylaw amendment that would allow the Multi-Family housing uses proposed for the School District -70 lands and the Matterson Reservoir Property.*
2. ***THAT** Council direct staff to work with School District 70 to develop a memorandum of understanding for a subdivision and land swap to facilitate the development of housing in the vicinity of the Matterson Reservoir Property.*
3. ***THAT** Council direct staff to engage a land surveyor to undertake the work necessary in preparation of plans for defining and registering the areas of the potential land swap, road dedication and development parcels.*

During the discussion, Council raised questions that staff recommended could and should be answered before Council considers giving direction on proceeding with a grant application to pursue the development of the subject municipally-owned lands. This report aims to provide additional information and answers to those questions.

A. Cost of servicing the site:

If the full estimated site servicing cost of \$4.73 million (which includes a 50% contingency) were spread across a 50-unit development the per-unit cost would be \$94,600. Note that at that cost, two additional District-owned lots on the Matterson Reservoir site would be fully serviced for future community housing needs – entirely paid for by the first phase project.

Furthermore, it is not proposed that the District bear the full cost of the site servicing for the first phase of the development. As noted in the February 11, 2025, staff report the analysis of the project viability by M’Akola Development Services, an application to the Community Housing Fund (CHF) grant would be more competitive if the District contributed to “fully or *partially* funding the construction of the road”. Staff suggest that funding half or $\frac{3}{4}$ of the servicing cost be considered (\$2 – 3million including the 50% contingency), which would work out to \$40,000 to \$60,000 per unit spread across a 50-unit development. Given that the District owns the land outright, this represents the total land cost per unit ascribed to the potential 50-unit development. That is a competitive land cost for a community housing project, and in addition it would create for the District two fully serviced and fully owned parcels for future community housing needs.

The servicing costs of the site are important to note because if the District were to look at selling the water tower lot, the sales price would likely be discounted by the cost required to service the lot plus an additional profit margin.

B. Target Housing Needs and Concerns of Oversupply

Based on the Housing Needs report Ucluelet requires a significant amount of housing from deep subsidy to affordable and attainable housing. It was not the intention of staff to compare and contrast the 221 Minato development with the proposed Matterson Water Tower Lot development as they target different areas of the District’s housing needs.

Minato Bay, based on the current development proposal could provide access to the following housing types (*based on Feb 14, 2025 update(s))

- **75- Attainable sales** with a maximum sales price of 1- & 2-bedroom \$567,000; 3-bedroom \$865,000 with a target sales price of 1-bedroom \$369,000; 2-bedroom \$535,000 and 3-bedroom \$748,000.
- **75- Attainable Rentals** with a rental cap of \$2483 and target rental rate of \$788 for a 1-bedroom; \$1036 for a 2-bedroom.
- **32 – Affordable Rentals** with rents determined in accordance with the CMHC affordable rental housing rates.
- **11 – Market Single Family homes**
- **50 – Market rental** units with options for short-term rentals.

COMMUNITY HOUSING FUND -- 50 UNIT RENTAL PROJECT:

The CHF is targeted towards increasing housing security and supply for low to middle-income households. Housing built under this program would contain a mix of:

- **10 (20%) of units at Deep Subsidy;** Monthly rental rate- Studio \$375, 1-bedroom \$375, 2-bedroom \$570, 3-bedroom \$665.
- **25 (50%) of units at Rent-Geared-to-Income (RGI);** Rent in RGI units is 30% of gross household income for eligible tenants. For example, a household income of \$50,000 would pay a monthly rent of \$1,250.
- **15 (30%) Near Market;** comparable monthly rental rate (from Headwaters example) - Studio from \$1,150, 1-bedroom from \$1,550, 2-bedroom from \$1,950, 3-bedroom from \$2,300.

The 35 rent-geared-to-income and deep subsidy units would be a significant step toward meeting the need in Ucluelet for 70 units of housing for people experiencing extreme core housing needs or homelessness, as is identified in the updated [Housing Needs Report](#). This type of housing is only feasible with significant ongoing investments from the province such as the CHF grant.

The two development proposals serve different segments of community demand for housing. As shown in the graphic below, the ERIF development proposes a mix of market housing with vacation rentals, attainable ownership and rental housing, and affordable rental housing if CMHC financing is secured (see **Figure 1**). The proposed development of up to 251 units could add to the housing supply and diversify available housing types in Ucluelet but is distinct from the type of non-market affordable housing provided under the CHF grant.

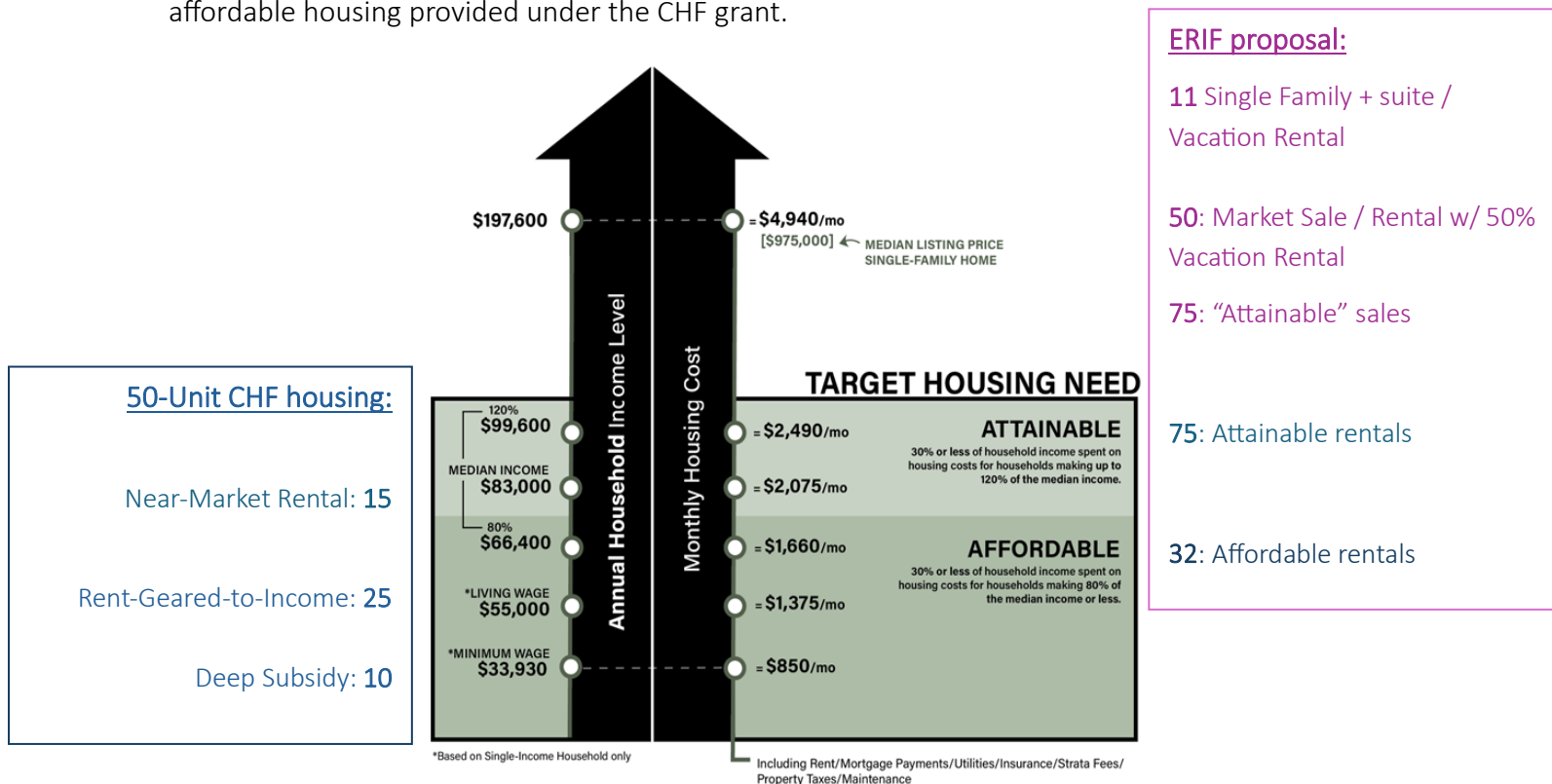


Figure 1. Relative position of the two developments across the housing spectrum

C. Track record obtaining grant funding:

The scale of the 50-unit housing development is tailored to align with the funding criteria for the Community Housing Fund grant. The District indeed has, so far been unsuccessful in obtaining grant funding for a smaller (5-unit) supportive housing development on a separate parcel of land; the feedback from BC Housing is that there was nothing missing from the proposal submitted by the District, rather the limited funding and the scoring criteria favouring larger projects. As a result, those grant competitions saw the bulk of funding awarded to larger communities such as Nanaimo and Victoria.

Over the past five years, the Community Planning Department has been successful in obtaining \$4.2 million in federal and provincial grants – with the majority of the funding going to support local capital (built infrastructure) projects – see **Figure 2**:

BC Housing - Community Housing Fund	_____ Peninsula Road	0	2023
CMHC Rapid Housing Initiative	_____ Peninsula Road	0	2023
CMHC Housing Accelerator Fund		2,095,292	2024
BC Active Transportation	Larch Road MUP	463,750	2023
Tourism Dependant Communities Fund	Village Green	700,000	2022
Canadian Community Revitalization Fund	Peninsula Road MUP	750,000	2021
UBCM	Housing Needs Assessment	15,000	2021
Island Coastal Economic Trust	Land Use Demand Study	27,000	2020
Community Emergency Preparedness Fund	Flood Hazard Mapping	150,000	2019
		\$4,201,042	total funding awarded

Figure 2. Recent grants submitted and received by the Ucluelet Department of Community Planning

Seeking grant funding is a competitive process – there is no guarantee that Ucluelet will be successful in obtaining the requested funding. The chances of success are increased if:

- background work has been completed to support the project (land acquisition, zoning, subdivision, site analysis); and,
- the project is as close to “shovel ready” as possible (engineering, architectural design, cost estimating, permits, procurement strategy, project management team, etc., are all in place).

Some of this groundwork is complete, and staff recommend that Council seriously consider pursuing the CHF grant opportunity available this year. As noted at the February 11th meeting, there is no indication that there will be future intake opportunities through the CHF fund.

D. Capacity and competing priorities:

In simple terms, the Planning department balances a workload of responding to property inquiries, processing development applications, completing long-range planning projects and supporting other departments in their functions within the organisation. With a small team of staff, undertaking a new project will inevitably have an incremental impact on the time to respond and advance all other functions.

Developing the supporting framework and documents for a CHF grant application can be largely completed by external consultants (e.g., survey, engineering, design, cost estimating, contracting and coordination). Some staff time will be necessary to coordinate the procurement and communication with the consulting team. The scale of this project is manageable by the Community Planning team.

As a long-range planning project, a CHF grant application would align with several of Council's strategic priorities and deserves consideration. The active current interest from SD-70 as a partner and the timing of the CHF grant intake may make this an opportunity to create affordable housing that the District may not see again for some time.

To minimize the impact on other files, staff would communicate with interested parties that the timeline of some other projects and initiatives would be extended. Some planning projects that may take longer to complete could include:

- updates to the Marine Industrial zoning,
- developing policy and bylaw amendments for Mobile Vending,
- developing a natural assets management plan as part of the District's climate change initiatives,
- updating development permit area guidelines, etc.

Other long-range planning initiatives- with a committed timeline under the Housing Accelerator Fund agreement- would need to be kept on schedule.

Development applications (particularly those for housing) would continue to move forward apace. Council has been clear that efforts to increase housing supply and affordability for Ucluelet residents is a priority. Staff would continue to balance the department workload to reflect that priority.

E. Site Servicing:

The development will need to be serviced with water and sanitary sewer connections. Sanitary sewer capacity limitations impact this project, as with many sites in Ucluelet; however, significant capacity upgrades are in the works throughout the District which will benefit this development. Within the next 18 months, new force mains, gravity sewers, and lift station upgrades will enhance the system's capacity and provide the needed room for the District's 5-year expansion projections. This project can be approved knowing the needed sewer capacity is anticipated to be online in the summer of 2026.

F. Risk

Council requested additional clarity surrounding the short and long-term risk of pursuing this project to the municipality. Due to the nature of the program, there is limited to no risk to the municipality in pursuing this grant opportunity.

Currently Council has directed staff to undertake a survey, continue engaging with SD-70 for a land swap, and pursue rezoning of the lands. Although this requires dedicated staff time and funding this is not seen as a risk or liability to the municipality as it increases the long-term value of the land regardless of whether or not the municipality is successful in accessing the CHF grant.

With respect to site servicing, the District would only be committed to undertaking the work associated with this site, if the application is successful. If the CHF application is unsuccessful then Council would have an opportunity to determine if continuing to undertake a portion or all of the site servicing (road, sanitary, water, storm) would be beneficial to the municipality at that time. If the District has completed the engineering for the associated servicing of the lot the District would have expended the engineering costs which would add value to the future development of the site.

If the District's grant application was successful BC Housing and the non-profit housing provider would be responsible for the construction and long-term funding of the housing project. The District would be responsible for any financial commitments made in the grant application. The terms and conditions of any funding agreement would also be thoroughly reviewed to ensure there are not additional or unknown potential costs to the municipality prior to executing the agreement. If construction costs increased the Province and housing non-profit would be responsible for any increased costs. With respect to long-term operation and financial aid to the project, this would be provided through the Province's housing programs with no requirements for additional support from the District.

It is important when reviewing the District's outflow of resources to consider whether they are expenses or creating value in assets. The District of Ucluelet can only recognize an asset if it is probable that the future benefits from this item will flow back to the District.

It can be argued that any expenditure on affordable housing is an asset to the community since affordable housing is a benefit that flows back to the community. This is true in theory, however, only during the term of the agreement, there are no guarantees that the agreements will be renewed and that the District will continue to receive the benefits from the expenditure once the term of the agreement is over. By investing in the water tower lot, the District can guarantee that the developed area continues to be used in the best interest of residents of Ucluelet as the control and ownership of the land remains with the District. Once the agreement with BC Housing has concluded, the District maintains control of the asset and can choose to use the site for the best use at that time.

This is an opportunity for the District of Ucluelet to access grant funds to raise equity in one of the few District-owned properties and build value in the asset while also providing deeply discounted housing that will provide shelter to the demographic that is most in need and not serviced by other affordable housing options.

G. Alternative locations:

Discussion of alternative locations, including the possibility of parkland disposition, was raised at the last Council meeting. In its updated strategic priorities Council has indicated that a project to identify lands for acquisition for affordable housing be earmarked for 2028.

Closing parkland is a lengthy (and often controversial) community process and typically follows an extensive public consultation. The initial stages of developing a new Parks and Recreation Master Plan are underway. If park land disposition is seriously considered as a means of freeing up land for housing development, it should be analyzed through that parks master planning process.

The Matterson Reservoir site is one of two District-owned parcels that have been identified and discussed as potential sites for new housing since the development of the housing needs assessment in 2021. A policy review was included in the February 11 staff report that provides a

timeline of past work that has led to the focus on this site. At this point, staff seek Council direction on whether to pursue the current funding opportunity of a CHF grant through BC Housing to develop deeply affordable housing on the Matterson site – or whether to defer this project until further studies are completed.

Concerning the Tugwell field dog park property the field is approximately 75 m by 75 m and may have adequate space to develop a single affordable housing development project of a similar size. In order to transition this land out of a designated park the District would be required to hold an alternative approval process including a significant community engagement process. Depending on how the park was acquired, the District may also be required to purchase a similar-sized park area to replace the removal of the existing parkland. Site servicing and access would be easier and less costly compared to the Matterson property and would bear similar challenges as the water tower lot with respect to the sanitary and water system capacity. The primary limiting factor for this site to be considered at this time would be that the AAP process which would take approximately 6-months. This would make an application to the CHF grant for the development of affordable housing on this site infeasible. In addition, this location would be limited to one development. If the Matterson Reservoir site is developed the District would have access to two additional lots that would be fully serviced and available for future affordable housing development or other priority community use. Additionally, if this grant opportunity is not utilized for the Matterson site, in order to develop the lot in the future the site access and servicing would need to be funded by a capital contribution outside of affordable housing funds.

Respectfully Submitted: Bruce Greig, Director of Community Planning
Jeff Cadman, Chief Financial Officer
James MacIntosh, Director of Engineering
Duane Lawrence, CAO

Cost of servicing the site:

The cost of servicing the lots can be viewed in three ways:

1. Spread the cost of servicing across all three lots and assume similar grant support for the development of lots B and C.

	Cost	Grant Portion	District Portion	Site A	Site B	Site C
Road and Detention Pond	\$3,981,041.00	\$1,990,520.50	\$1,990,520.50	\$865,443.70	\$865,443.70	\$259,633.11
Offsite Storm & Sanitary	\$324,300.00	\$162,150.00	\$162,150.00	\$70,500.00	\$70,500.00	\$21,150.00
Firelane	\$427,628.00	\$213,814.00	\$213,814.00	\$92,962.61	\$92,962.61	\$27,888.78
Lot A Development Site	\$1,255,369.00	\$627,684.50	\$627,684.50	\$272,906.30	\$272,906.30	\$81,871.89
Lot B Development	\$1,813,191.00	\$906,595.50	\$906,595.50	\$394,171.96	\$394,171.96	\$118,251.59
Lot C Development	\$1,255,369.00	\$627,684.50	\$627,684.50	\$272,906.30	\$272,906.30	\$81,871.89
Total Costs	\$9,056,898.00	\$4,528,449.00	\$4,528,449.00	\$1,968,890.87	\$1,968,890.87	\$590,667.26
Units per building				50	50	15
Cost per unit				\$39,377.82	\$39,377.82	\$39,377.82

2. Allocate the full cost of servicing to Lot A and assume similar grant support for development of lots B and C.

	Cost	Grant Portion	District Portion	Site A	Site B	Site C
Road and Detention Pond	\$3,981,041.00	\$1,990,520.50	\$1,990,520.50	\$1,990,520.50		
Offsite Storm & Sanitary	\$324,300.00	\$162,150.00	\$162,150.00	\$162,150.00		
Firelane	\$427,628.00	\$213,814.00	\$213,814.00	\$213,814.00		
Lot A Development Site	\$1,255,369.00	\$627,684.50	\$627,684.50	\$627,684.50		
Lot B Development	\$1,813,191.00	\$906,595.50	\$906,595.50		906,595.50	
Lot C Development	\$1,255,369.00	\$627,684.50	\$627,684.50			627,684.50
Total Costs	\$9,056,898.00	\$4,528,449.00	\$4,528,449.00	\$2,994,169.00	\$906,595.50	\$627,684.50
Units per building				50	50	15
Cost per unit				\$59,883.38	\$18,131.91	\$41,845.63

3. Allocate the full cost of servicing to Lot A with no grant support for lots B and C.

	Cost	Grant Portion	District Portion	Site A	Site B	Site C
Road and Detention Pond	\$3,981,041.00	\$1,990,520.50	\$1,990,520.50	\$1,990,520.50		
Offsite Storm & Sanitary	\$324,300.00	\$162,150.00	\$162,150.00	\$162,150.00		
Firelane	\$427,628.00	\$213,814.00	\$213,814.00	\$213,814.00		
Lot A Development Site	\$1,255,369.00	\$627,684.50	\$627,684.50	\$627,684.50		
Lot B Development	\$1,813,191.00		\$1,813,191.00		\$1,813,191.00	
Lot C Development	\$1,255,369.00		\$1,255,369.00			\$1,255,369.00
Total Costs	\$9,056,898.00	\$2,994,169.00	\$6,062,729.00	\$1,968,890.87	\$1,813,191.00	\$1,255,369.00
Units per building				50	50	15
Cost per unit				\$59,883.38	\$36,263.82	\$83,691.27



REPORT TO COUNCIL

Council Meeting: February 11, 2025
500 Matterson Drive, Ucluelet, BC V0R 3A0

FROM: JOHN TOWGOOD, MUNICIPAL PLANNER

FILE NO: 0890-20

SUBJECT: MATTERSON RESERVOIR PROPERTY NON-MARKET HOUSING DEVELOPMENT

REPORT NO: 25-17

ATTACHMENT(S): APPENDIX A - ENVIRONMENTAL ASSESSMENT
APPENDIX B - ARCHAEOLOGICAL PRELIMINARY FIELD RECONNAISSANCE
APPENDIX C - PRELIMINARY SERVICING REVIEW
APPENDIX D - GRANT MODELING BRIEF

RECOMMENDATION(S):

1. **THAT** Council direct staff to develop and bring forward a Zoning Bylaw amendment that would allow the Multi-Family housing uses proposed for the School District-70 lands and the Matterson Reservoir Property.
2. **THAT** Council direct staff to work with School District 70 to develop a memorandum of understanding for a subdivision and land swap to facilitate the development of housing in the vicinity of the Matterson Reservoir Property.
3. **THAT** Council direct staff to engage a land surveyor to undertake the work necessary in preparation of plans for defining and registering the areas of the potential land swap, road dedication and development parcels.
4. **THAT** Council indicate support to prioritize developing a Request for Expressions of Interest document for a grant submission to the Community Housing Fund for development and operation of a 50-unit affordable housing project on the future Lot A of the Matterson Reservoir Property.

BACKGROUND:

INTRODUCTION:

Ucluelet, like many communities across Canada, is in the midst of a housing crisis – deepening the need to strategically address this complex issue using the regulatory tools available to local governments. Ucluelet’s challenges with a lack of affordable housing began to escalate in 2001, and factors such as increases in tourism and the COVID-19 pandemic have exacerbated the issue,

which is felt disproportionately by lower income and more vulnerable community members. In response, the District of Ucluelet has updated plans, enacted bylaws, and implemented policies to address the issue, including the Official Community Plan Short-term Housing Action Plan, OCP Affordable Housing Policies, Ucluelet Housing Needs Report (2021), and Zoning Bylaw updates.

This report is being brought forward because the plans and policies mentioned above have led to an opportunity for a District-owned property located off Matterson Drive behind the School District 70 (SD-70) (the “**subject property**”; See **Figure 1**) as a well-suited site for a District-initiated affordable housing development, similar to the newly created Headwaters Affordable Housing project in Tofino. This report will explore who the development would serve, how it would address a critical need within the community, logistics of site design, construction, and operations, funding sources, and overall feasibility.



Figure 1. Location of the subject property.

REGULATORY REVIEW:

A public sector affordable housing project on this site has been identified by plans and policy objectives and pursued through direction from Council over the past seven years. Below is a summary of the key supportive policy guidance and directives for this project:

- **The Short-Term Housing Action Plan (2018):** Called for a District Land and Development Strategy for affordable housing, which has been integrated into OCP Policies 3.131 A-L.
- **Ucluelet Housing Needs Report (2021):** Identified Land Acquisition and Disposal as a tool to incentivize new affordable housing development, and states that land contribution by local government is valuable in seeing affordable housing projects happen. The report identified the subject property as a promising site for affordable ownership and rental housing.
- **Official Community Plan (2022):** Designated the subject property for Multi-Family Residential, Parks & Open Space and institutional (See **Figure 2**) use with the intent for the site to be utilized as an affordable housing project if an opportunity became available.
- **2023 Budget:** Council allocated \$200,000 (for 2025) to assess the site's feasibility.
- **Interim Housing Needs Report Update (2024):** Identified a total of **794** housing units required to meet housing units within the next 20 years. 75% of units (**596**) should be attainable and approximately 30% (**240** units) must be affordable to meet the identified demand.
- **SD-70 Land Swap Discussions:** On September 24, 2024, Council was presented a report that discussed a possible land swap with SD-70 to help facilitate SD-70's potential development of the northwestern corner of their property for teaching housing and improved access to the subject property. Staff have now completed the tasks listed in the latest direction from Council and are in a position to rise and report on the potential for a land swap with SD-70 and the feasibility of an affordable housing development on the subject property.

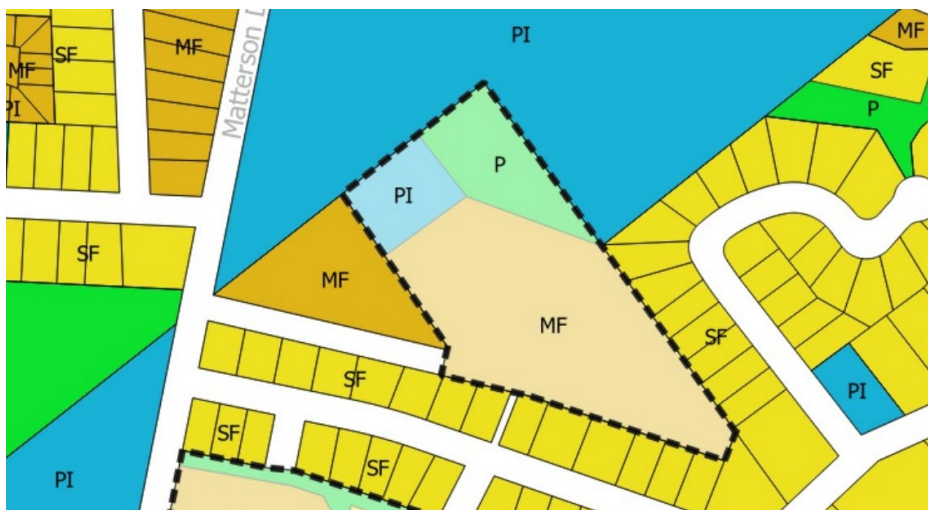


Figure 2. OCP (2022) Long-Range Land Use Plan Designation of subject property.

A NEED FOR PUBLIC SECTOR INVOLVEMENT:

Non-market housing can be created through two approaches: leveraging the private sector to incorporate affordable housing into development (i.e. via density bonusing) or through direct public sector involvement. The District of Tofino's 72-unit Headwaters Affordable Housing project is a good example of a public-sector project which involved significant financial and oversight commitments from local government, resulting in a mix of housing options ranging from deep subsidy to market rental. This project is seen by local residents and social agencies as a success in addressing imminent community need for more diverse, secure, and affordable housing. This project provides a good comparison for the potential for the District of Ucluelet to follow suit and bridge the gap of housing needs for Ucluelet residents (see more detail in **Feasibility** section below).

Within Ucluelet, most housing supply has been developed by the private sector. While private-sector development remains vital in meeting Ucluelet's housing needs, rising land values and construction costs are increasingly making it difficult for the private sector to provide units that are affordable to local residents. In addition, overall project and construction timelines are ultimately at the discretion of the developer. Even after a proposal receives the permits, zoning, and approvals required to break ground, there are no mechanisms available to ensure that housing, affordable or not, is actually built.

Therefore, public sector projects increase stability towards delivering affordable housing through:

- Control over timelines and expenditure of funds.
- Transparency through procurement processes with respect to obtaining experienced consultants and contractors.
- Access to government funding.
- Ability to reduce costs by using public land.

Given the urgent need for affordable units, pursuing the creation of a public-sector housing project is strongly advisable, and is being pursued by communities across Canada.

ADDRESSING TARGET HOUSING NEED: WHO IS THIS FOR?

As a general marker, housing is considered “affordable” if it costs less than 30% of a household’s before-tax income. Ucluelet’s OCP and housing policy introduce additional affordability thresholds to more specifically address the needs of households falling within median and lower income ranges:

- **Affordable Housing:** *“A household not spending more than 30% of gross income, based on a household earning 80% of the median income.”*
- **Attainable Housing:** *“Housing costs not exceeding 30% of gross income for a household earning 120% of the median income.”*

These thresholds highlight the Ucluelet residents who are most unlikely to meet their housing needs with the current housing supply. For this report, this range will be described as the “Target Housing Need” as illustrated by the green box in **Figure 3**. This figure describes affordable and attainable housing costs based on income level and presents a visual to understand the target housing need.

In Ucluelet, the gap between housing costs and what is considered affordable/attainable has widened substantially over the past decade, making affordable rentals and home ownership increasingly out of reach for Ucluelet residents near or below the median household income range. While there is evidently still demand to meet the housing needs of residents at or above the 120% median income threshold, this is more likely to be met by the private-sector. However, delivering housing that meets the target housing need—particularly for residents on the lower end of the affordability threshold—can make private sector development more challenging and less financially feasible.

The major advantage of public sector projects lies in the ability to meet the housing needs of lower income residents, beyond what the private sector can typically reach. Specifically, this project would include supporting residents making 80% or less of the median income such as those identified in the Interim HNR Report (2024) as experiencing extreme core housing needs, homelessness, and suppressed household formation. This could include seniors on fixed incomes, the seasonal and transient workforce, dual and single-income households, families, single parents, couples without children, women fleeing violence, and people who are experiencing or are at risk of homelessness. Similar to the Headwater project in Tofino, the opportunity to meet a range of housing needs from deep subsidy to market would be possible.

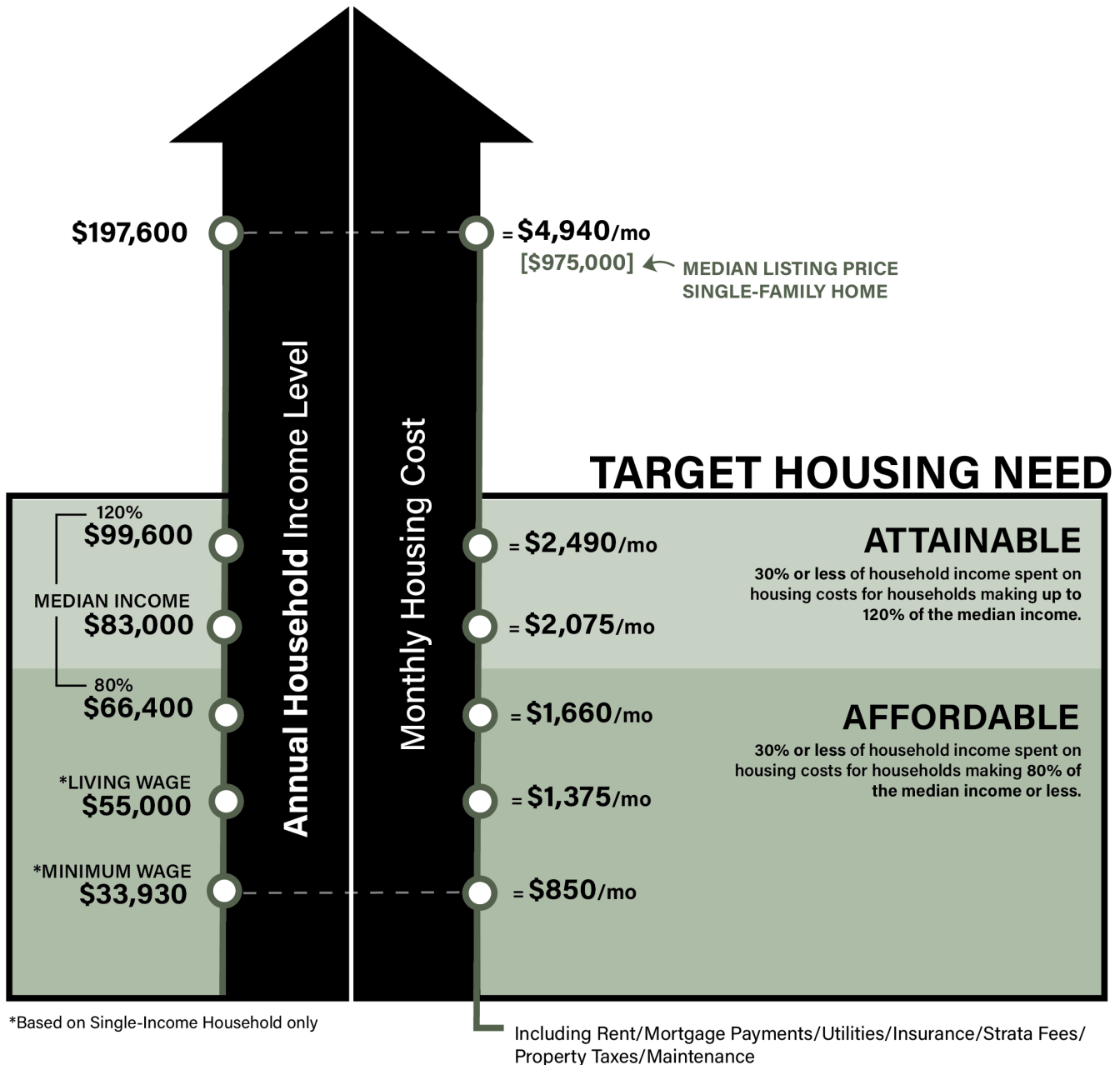


Figure 3. Visualization of Target Housing Need.

PROJECT FEASIBILITY:

The following sections include a breakdown of the site's attributes and the various preliminary feasibility studies and assessments completed:

LOCATION:

The subject property is extremely well placed within the community in a central location next door to the schools, Big Beach Park with access to the Wild Pacific Trail, and the CO-OP grocery store. This central location can encourage walkability where residence can easily leave their cars at home to shop, work, and recreate. A central location can equitably serve populations without cars.

SCHOOL DISTRICT-70 LAND SWAP:

In July of 2024, the Assistant Director of Operations for the Pacific Rim School District (SD-70) initiated discussion regarding the potential subdivision of a section of the SD-70 property for the purposes of developing up to 12 units of teacher housing. The only feasible location for SD-70 to develop their project is the site of the existing BMX Park (Lot D and Lot E in **Figure 4**).

In review of the proposal, it was noted that there is an encroachment of the school's running track onto the subject property (shown in blue in the northeast corner above Lot B in **Figure 4**). As the access to the subject property through Short Road would be difficult (due to the steep westward slope of the end section of Short Road), a land swap between SD-70 and the District emerged as a mutually beneficial solution in which both parties could swap lands and share costs associated to the subdivision of these lands.

In September 2024, staff presented Council with a preliminary land swap plan. Part of the direction given to staff at that meeting was to continue engagement with SD-70 on the possibility of a joint land swap and subdivision application. These discussions have since progressed, and the SD-70 Board made a motion to continue these discussions and advance the land swap and potential subdivision project.

A preliminary subdivision plan showing the two proposed SD-70 housing lots and the running track land to be transferred to SD-70 (all indicated in blue), as well as proposed park spaces, road dedication, and three developable District lots is presented in **Figure 4**. In this land trade agreement, the District would acquire more land than SD-70. If this land area imbalance is a concern to SD-70, portions of the areas shown as "park" adjacent to the school grounds could be transferred to SD-70 to create an equal land trade.



Figure 4. Preliminary Subdivision Plan

ENVIRONMENTAL ASSESSMENT:

On January 30, 2025, Redd Fish Restoration Society (Redd Fish) completed a biophysical assessment of the subject property. The Report is included as **Appendix A**. In an earlier draft of this report Redd Fish noted that the proposed access road conflicted with a group of large mature trees. The road was subsequently moved to avoid these trees. For a complete understanding of the biophysical assessment and recommendations please see **Appendix A**. Overall, the report finds the proposal to align with the environmental attributes of the site through avoiding steep slopes and retaining green space connectivity.

ARCHAEOLOGICAL ASSESSMENT:

The District of Ucluelet contacted Carey Cunneyworth, the Director of Culture, Language & Heritage / Archaeologist for the Ucluelet First Nation and requested a Preliminary Field Reconnaissance (PFR) for the proposed development. Carey subsequently forwarded the Preliminary Field Reconnaissance completed for the frisbee golf course in December of 2022 (**Appendix B**) and indicated that the area proposed for this project overlapped the area covered by the prior PFR. For a complete understanding of the PFR see **Appendix B**. The following are the PFR's recommendations:

- *Based on the results of this assessment, no further archaeological work is required. However, the following recommendations are made should any unidentified archaeological feature or site be encountered after this survey.*
- *That the District of Ucluelet inform all contractors who will be involved with building activities in the proposed development area that archaeological remains in the Province of British Columbia are protected from disturbance, intentional or inadvertent, by the Heritage Conservation Act (RSBC 1996, Chapter 87) and Section 51 of the Forest Practices Code Act (1995);*
- *That the District of Ucluelet inform contractors that, in the event that previously unidentified archaeological remains (including culturally modified trees) are encountered during building activities, that all activities with potential impacts to the remains must be halted, and the Ucluelet First Nation must be contacted upon discovery, and be informed of the location, the type/s of archaeological remains encountered, and the nature of the disturbance.*

ENVIRONMENTAL VALUE OF THE SITE:

Housing is a key consideration for the community; however, the preservation of the environment should also be held high in policy and development decisions. The current forested area of the subject property has an inherent community value in its minimally disturbed state. Given the site's central location and the limited property that the municipality holds to develop affordable housing projects, this site's value for the proposed development is very high. Within the

conceptual design for the proposed development and access road, care was taken to preserve as much of the forested area as possible while maximising the potential affordable housing density. Careful consideration should be given to final site layout to ensure the most environmentally sensitive areas are safeguarded.

It should also be noted that the subdivision was designed with three development sites to allow a phasing of the development if desired. One phase (Lot A) could be built while the other two development sites could be left in their natural state.

FRISBEE GOLF COURSE AND BMX TRACK:

Both the Frisbee Golf Course and the BMX Track are valued community amenities. The BMX track is located on the SD-70 property and is in an area where SD-70 is contemplating locating housing for its teachers. This is early days for this proposal but if this project gains momentum, consideration should be given to the track's relocation.

The newly created frisbee golf course would be in part displaced by the proposed access road. Like the BMX Track, consideration should be given to rerouting the course around the proposed road and buildings, or relocation to another site if necessary.

ROUGH GRADING AND SERVICING ESTIMATE:

SERVICING:

Koers and Associates Engineering was engaged to complete a Civil Servicing Cost Estimate for the proposed development. They provided a conceptual civil servicing design and accompanying high-level cost estimate for the potential 100+ unit multi-family residential development on the subject property.

This report is a preliminary estimating exercise, relying on LIDAR-based topography and geotechnical assumptions, resulting in a Class D estimate that includes large contingencies. To comprehensively understand all details, the full report and estimate should be reviewed (see **Appendix C**).

In summary, the property can be serviced and developed as proposed with the estimated cost of the road and servicing of the three proposed lots at \$2,654,028, plus a 50% contingency. With the high fluctuation of municipal project costs, it would be reasonable to use the larger figure which includes contingency and brings road costs to approximately \$4 million.

GRADING:

The proposed road would create three large developable properties, with the upper stories of the building attaining views. A stepped lower half-storey building design would help mitigate the site's sloped terrain, making parking and building construction comparable to typical

developments with a 5-meter change in grade. The estimated rough grading costs for Lot A and Lot B would align with standard development cost of projects of this scope.

OFF SITE WORKS:

SEWER:

The subject property is served by what is generally considered some of Ucluelet's more reliable sewer infrastructure, as discussed in a report on sewer system upgrades presented at the [November 12, 2024](#) Council Meeting. The Koers estimate lists the off-site storm, sewer and water costs at \$216,000, with contingency totalling \$324,000. As relayed in the report, additional analysis should be conducted in conjunction with the ongoing sanitary sewer system upgrade.

WATER:

Water pressure is a noted concern for the site but can be overcome by connecting to a high-pressure segment of water infrastructure and by boosting pressure in the individual buildings by way of a jet pump. See **Appendix C** for further details.

FUNDING OPTIONS:

M'akola Development Services was engaged to conduct a high-level feasibility brief assessing the viability of an affordable housing development project on the subject property (see **Appendix D**). This brief evaluates different funding scenarios for the development under two programs; BC Housing's [Community Housing Fund](#) (CHF) and [BC Builds](#). Note that the following rental scenarios are high-level and based on preliminary site analysis, a Class D Cost Estimate for the road and civil works (assuming that the full cost of the road is carried by the building's budget for each funding scenario), and market rental rates based on Tofino's Headwaters Development 2025 rents.

SCENARIO 1 / BC BUILDS – 50 UNIT RENTAL PROJECT:

BC Builds is targeted towards increasing housing supply for middle-income households, with the goal of delivering building permits within 18-months of project initiation. Housing built under this program would contain at least 20% of units with rent that is 20% below market-rate, achieved through a per unit grant of up to \$225,000 and low-interest financing.

Financial modelling under the BC Builds program suggests that a 50-unit rental project is likely unfeasible if the expense of the road is carried by the project. However, should road cost be reduced or eliminated, the project could become viable under BC Builds.

SCENARIO 2 / COMMUNITY HOUSING FUND -- 50 UNIT RENTAL PROJECT:

The CHF is targeted towards increasing housing supply for low to middle-income households. Housing built under this program would contain a mix of:

- **20% of units at Deep Subsidy;** Studio \$375, 1-Bedroom \$375, 2-Bedroom \$570, 3-Bedroom \$665 – Monthly rental rate (*per Headwater Application Form*)
- **50% of units at Rent-Geared-to-Income (RGI);** Studio \$1,750 to \$5,167, 1-Bedroom \$1,750 to \$5,167, 2-Bedroom \$2,167 to \$6,208, 3-Bedroom \$2,167 to \$6,958 – Monthly rental rate (*per Headwater Application Form*). Note that actual rent in RGI units is 30% of gross household income for eligible tenants.
- **30% Near Market;** Studio \$1,150, 1-Bedroom \$1,550, 2-Bedroom \$1,950, 3-Bedroom \$2,300 – Monthly rental rate (*per Headwater Application Form*).

Financial modeling under the CHF program indicates that a 50-unit rental project could be a strong fit under the CHF program and is consistent with successful CHF submission for the previous intakes.

SCENARIO 3 / 100 UNIT RENTAL PROJECT:

Financial modeling was also completed for 100-units to be funded under BC Builds, CHF or jointly. A larger project with increased density could be more cost efficient, however further modelling is necessary.

FUNDING OVERVIEW & CONSIDERATIONS:

The project is primarily grant-dependent, aside from municipal contributions. Regardless of Council's approach to grant funding, the cost of the road could be a disadvantage moving forward with a funding application, as BC Housing typically prioritizes sites that are fully serviced and accessible. Council should consider exploring funding options to address the infrastructure requirement.

The District of Ucluelet has access to roughly \$1.5 million in affordable housing funds between the District's affordable housing reserve and the funds held in trust with Tourism Ucluelet. There is a further \$2.6 million in the Barkley Community Forest Reserve and Barkley Community Forest Trust Reserves which totals \$4.1 million in accessible dollars. It is conservatively estimated that the OAP will generate between \$350,000 to \$500,000 annually. If the Province allows it, the District can potentially use a portion of the \$4.1 million in reserves to front the cost and use the annual OAP revenue to pay back the reserves with interest.

Given that the proforma analysis indicates BC Builds funding is currently unfeasible, pursuing funding support for both buildings through the CHF may offer a more viable path. To enhance

the project's competitiveness within the application process, engaging a consultant team and advancing the design as much as possible is highly recommended.

If concurrent development on Lots A and B is pursued, an absorption study should be conducted to assess potential risks associated with increasing Ucluelet's rental stock by approximately 100 units, including possible delays in leasing units and broader impacts on the local rental market.

OPERATING THE PROJECT:

Operative components of public sector housing projects vary by municipality. Typical models involve partnerships between:

- The local government;
- A government-owned local or regional housing corporation (e.g. Tofino Housing Corporation, Whistler Housing Authority); and,
- A non-profit, charity, institutional, or private housing provider (e.g. West Coast Community Resource Society, Catalyst Community Development Society, Ballenas Housing Society, M'akola Housing Society).

Unlike Tofino (See **Table 1**), the District of Ucluelet has not created a local housing corporation. However, to demonstrate the typical processes, the following section explores Tofino's operative structure of the Headwaters project as a framework that Ucluelet could mirror.

CASE STUDY: TOFINO

BACKGROUND ON TOFINO HOUSING CORPORATION:

In 2017 The District of Tofino recognized the needed to take a proactive role in creating affordable housing, which led to the revival of the Tofino Housing Corporation (**THC**). The THC is a private non-profit corporation owned in full by the District of Tofino. It is run by a volunteer Board of Directors, with one half-time executive Director. Their mission is to facilitate development and operation of below-market housing in Tofino (See **Figure 5**) and they've identified housing development, funding, communications and advocacy, and organizational development as their four focus areas.

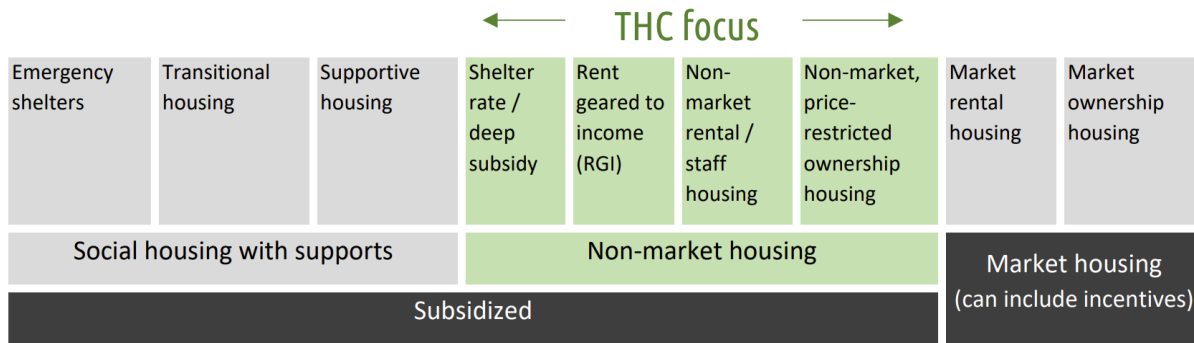


Figure 5. Range on the Housing Continuum that the TCH focuses on.

HEADWATERS PROJECT OPERATIVE MODEL:

The Tofino Headwaters project is a two-building rental complex offering 72 units ranging from studio to 3-bedrooms, with market, rent-geared-to-income (RGI), and deep subsidy rent options. This project is very similar to the project proposed in this report and understanding the details of development, funding, organizational structures, and operations of this project provides an opportunity for Staff, Council, and the public to realistically understand what is involved in public sector housing projects.

The THC found a suitable land parcel, identified a housing gap, and developed the Headwaters concept. They sent out an Expression of Interest (RFEOI) to look for a qualified partner to develop two apartment buildings on two separate legal parcels for affordable rental housing. Some of the standard review criteria include the Proponent’s purpose and mission statement, current social housing portfolio size with examples from the past five years, types of tenant groups served, latest audited financial statements, details of the proposed service delivery plan, including building maintenance, tenant supports, and any additional programming, ability to conform to requirements of complex legal agreements, and WorkSafe BC clearance- to name a few. The RFEOI led to a partnership between the District of Tofino, the THC, and Catalyst Community Development Society, with additional local property management support provided by Ardent Properties (See **Table 1**). Catalyst Community Development Society holds a 60-year lease on the property, owns the building, and operates the Headwaters complex, and there is a 7-year buy back option if the THC or the District of Tofino wished to take over the complex.

Organization	Role	Responsibility
District of Tofino ↓	Municipal Government	• Landowner (Lessor), municipal regulator
Tofino Housing Corporation (THC) ↓	Housing Corporation	• Identifies projects, preliminary project management, evaluate and contract housing providers
Catalyst Community Development Society ↓	Housing Provider	• Contracted project manager/operator (funding applications, coordinate construction, operations, tenancing, long-term maintenance etc.) • Building owner (Land Leaseholder)
Ardent Properties Inc.	Contractor	• Local property management support

Table 1. Tofino Operating Structure

The affordability of Headwaters is to the CHF fund model with 20% of the units at a deep subsidy, 50% of the units at a Rent Geared to Income (**RGI**), and 30% of the units at market rates. The funding for the project is as follows (source BC housing):

- *The Province, through BC Housing, provided approximately \$7.9 million for the two buildings from the Building BC: Community Housing Fund and will provide \$430,000 in annual operating funding.*
- *The federal government, through the Canada Mortgage and Housing Corporation provided approximately \$9.4 million through the Affordable Housing Fund for the two projects.*
- *The Tofino Housing Corporation provided the land valued at approximately \$1.8 million for both projects and \$780,000 in funding.*
- *Catalyst Community Developments provided \$180,000 for both projects.*



Figure 6. Preliminary Concept Drawings of Headwaters South.

APPLICABILITY OF HEADWATERS OPERATIVE MODEL TO UCLUELET:

The lack of a Ucluelet Housing Authority does not limit the ability for the community to deliver similar affordable housing services. For the project described in this report, preliminary work typically taken on by a housing corporation is already underway by District staff and Council. For example, the site and target housing needs has been identified, and preliminary feasibility studies have been completed. If Council supports the project, next steps will involve Staff developing a Request for Expression of Interest that would seek a qualified non-profit housing operator to manage and operate the project. The housing operator would be required to secure funding through the funding options presented earlier in this report. In this instance, the District of Ucluelet has undertaken a role similar to what has been done by the THC, however this would not limit the District's future ability to one day create its own municipally-owned housing corporation, or collaborate with the THC, First Nations, or the Alberni Clayoquot Regional District (ACRD) to coordinate affordable housing delivery on a regional level. There are benefits to having a government-owned housing corporation at arm's length from District and Council operations to advocate and build momentum for future public sector affordable housing projects.

SUMMARY:

The District of Ucluelet has very limited developable land suitable for a project of this scale, making the proposed site the most ideal location for the municipality to directly create public affordable housing. The CHF is a grant opportunity that is very attractive in terms of the funding provided and for its affordability program. The feasibility analysis found that the BC Builds program would only be viable if the municipality contributed to road cost, whereas the CHF indicates a cost per unit that aligns with successful applications from the last funding round, making it a more feasible option regardless of the road.

The CHF is one of the most substantial housing grants available and the program could support a diverse range of Ucluelet's needs. Its deep-subsidy units can provide affordable housing for seniors on limited pensions, single parents, women fleeing violence, and other vulnerable populations. The Rent Geared to Income units would ensure that affordability aligns to a range of individual household incomes, while the near-market rental units help address local demand and could contribute to overall rent stabilization in Ucluelet.

The funding brief provided two key recommendations. First, the cost of the road could be seen as a disadvantage to the scoring of a successful grant application. A contribution for the road construction would not only strengthen the funding application but also provides long-term access to one or two additional serviced District-owned properties for future housing projects. Second, absorbing approximately 100 new rental units presents potential risks. While increased rental inventory could increase inventory and lower rents, a sharp decline in rental rates and a high vacancy rate could challenge the project's financial viability and impact other housing providers within the community, such as Lot 13 and secondary suite owners.

A phased approach, beginning with the development of a single 50-unit CHF project and municipal support for road construction, would be a strategic path forward. This would result in two large, developable properties for future housing needs. A housing project like this is an intensive undertaking involving an informed and well-considered approach. With CHF grant submissions expected in late spring or early summer of this year, advancing the project now will be essential to meeting the tight timeline.

ANALYSIS OF OPTIONS:

Regardless of whether road construction is funded or if a grant submission is prepared, there is a current opportunity to work with SD-70 to reconfigure the parcel boundaries to better serve both public agencies. Staff recommend moving forward with survey work and a zoning bylaw amendment to better align the properties for the anticipated long-term housing and park uses. Staff recommend that Council consider the first 3 motions provided at the top of this report to move this forward.

If Council has questions or needs additional information and discussion prior to considering the fourth motion – to direct and prioritize preparing a RFEOI and grant application to the Community Housing Fund – this motion could be tabled and brought back to be considered at the next Council meeting.

A	Move forward toward a land swap with SD70 and grant application to the CHF fund.	<u>Pros</u>	<ul style="list-style-type: none"> • Takes advantage of current opportunities. • Regardless of grant outcome, would create value for the community by better configuration of publicly-owned land for future uses. • Would facilitate the SD-70 plans for developing teacher housing on their property. • Pursues an opportunity to create a supply of the most-needed types of housing in a project where the community has control over the timeline.
		<u>Cons</u>	<ul style="list-style-type: none"> • Will require prioritizing over other District projects.
		<u>Implications</u>	<ul style="list-style-type: none"> • Considerable staff time would be devoted in the coming months to prepare for grant submission. • Survey, consulting and legal fees for completing land swap.
B	Move forward toward a land swap with SD70, defer grant application.	<u>Pros</u>	<ul style="list-style-type: none"> • Takes advantage of current opportunity. • Regardless of grant outcome, would create value for the community by better configuring publicly-owned land for future uses. • Would facilitate the SD-70 plans for developing teacher housing on their property.
		<u>Cons</u>	<ul style="list-style-type: none"> • Uncertain whether the CHF fund grant opportunity will be available in future years.
		<u>Implications</u>	<ul style="list-style-type: none"> • Staff time to coordinate land reconfiguration and swap • Survey, consulting and legal fees.
		<u>Suggested Motion</u>	[Council consider motions number 1, 2 and 3 at the outset of this report]
C	Not pursue the land swap or grant application.	<u>Pros</u>	<ul style="list-style-type: none"> • Staff time and District funds could be concentrated on other projects.
		<u>Cons</u>	<ul style="list-style-type: none"> • Would not take advantage of current opportunity and receptiveness from SD-70 to reconfigure adjacent lands to provide road access to the municipally-owned property. • Would negatively impact SD-70 plans for developing teacher housing on their property. • Few other opportunities to create non-market housing where the community can control the timeline of construction.
		<u>Implications</u>	<ul style="list-style-type: none"> • Would make future development of the Matterson Reservoir property expensive or not feasible.
		<u>Suggested Motion</u>	No motion required.

POLICY OR LEGISLATIVE IMPACTS:

Amending the zoning of the Matterson Reservoir Property to allow multi-family residential and park uses would be consistent with the long-range land uses in the OCP. Staff recommend that a bylaw amendment be initiated by the District for this purpose.

NEXT STEPS:

As noted above, if Council requires further information before committing to a grant application process this matter could be tabled until another upcoming Council meeting. Staff recommend moving forward with at least furthering the survey work and agreement with SD-70 at this time.

Respectfully Submitted: John Towgood, Municipal Planner
Bruce Greig, Director of Community Planning
Duane Lawrence, CAO



REDD FISH
RESTORATION

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January 30, 2025

John Towgood – Municipal Planner
District of Ucluelet
200 Main St.
Ucluelet, BC
V0R 3A0

RE: BIOPHYSICAL ASSESSMENT OF A PROPOSED HOUSING DEVELOPMENT ON DISTRICT LAND NEAR THE MATHERSON WATER TOWER, UCLUELET, BC

Dear Mr. Towgood,

Introduction

Redd Fish Restoration Society (Redd Fish) was asked by the District of Ucluelet (the District) to conduct a biophysical assessment of a proposed housing development on a District-owned lot south of Matterson Drive in central Ucluelet (PID 009-397-809; Figure 1). The property is within the traditional territory of the Yuuʔuʔiʔatʔ Nation.

The District of Ucluelet is proposing to develop approximately 100 housing units and associated parking on its property between Victoria Road, Matterson Drive and the Ucluelet Secondary School fields. The lot is approximately 6 ha in size and currently consists of a frisbee golf course and a municipal water tower at the north end. The area is within the Terrestrial Development Permit Area per Schedule E of the District of Ucluelet Official Community Plan (2020). This project is currently in the feasibility stage of planning; this assessment was completed based on a preliminary site plan provided by the District of Ucluelet (Figure 1). This biophysical assessment was completed to meet the requirement of the District of Ucluelet Official Community Plan (2020) including:

- the General Guidelines Applicable to all Environmental Development Permit Areas (DPAs); and
- the DPA V – Terrestrial Ecosystems (Mature Forest) Category.

Methods

A background review of readily available public information sources was conducted for the property including:

- a query of the BC Conservation Data Center iMap database for known occurrence records of species at risk within one kilometer of the property;
- a review of the provincial Habitat Wizard database for known fish streams in the area of the project; and,

- a review of Schedule E of the Ucluelet OCP.

The provincial Ecosystems Explorer Database was queried for potential species occurrences in the region based on the following criteria: Red or Blue-listed OR SARA listed Animals OR Plants OR Ecosystem; AND 'Municipalities': Ucluelet.

The results of this query (Appendix B) produce some obscure results that included species well outside of their home ranges. This list was sorted into species with potential to occur and those that are considered very unlikely based on one or both of the following conditions:

- The study area is outside of known range for the species or species is not known in the area; and,
- There is no suitable habitat for the species within or adjacent to the study area.

Note that the invertebrates identified in this query were beyond the scope of this assessment and were not assessed.

On October 24, 2024 Chris Dolphin of Redd Fish visited the site to assess ecological resources and potential site sensitivities. The study area boundaries were essentially the boundaries of the lot. The study area was assessed for ecological values (e.g., streams, wetlands, old growth forest, listed species and ecosystems or habitat with the potential to support species at risk) and important wildlife features (nests, dens, wildlife trees, etc.). Conditions were documented with field notes and site photographs. A georeferenced PDF map uploaded to Avenza Maps™ on a GPS enabled handheld device was used to navigate the study area and georeference important features.

Results

The study area is located within the Coastal Western Hemlock Very Wet Hypermaritime biogeoclimatic zone (CWHvh1; iMap BC). The proposed development area hosts young regenerating coniferous forest dominated by western hemlock (*Tsuga heterophylla*) with scattered western redcedar (*Thuja plicata*) as a sub-dominant species in the understory (Photo 1). A few mature trees were noted at the northeast area where holes 1 and 2 of the frisbee golf course are located (see Figure 1). The shrub layer is relatively undeveloped as the canopy is dense and restricts light penetration. Scattered salal (*Gaultheria shallon*), evergreen huckleberry (*Vaccinium ovatum*) and deer fern (*Struthiopteris spicant*) are present in trace amounts.

The west portion of the lot, near the west ends of holes 5 and 6, is on a slight west-aspect and hosts a richer understory, mostly dominated by evergreen huckleberry.

The proposed development is within an urban forest area in the central area of the town of Ucluelet. The area is adjacent to the Ucluelet Secondary School and there are trails and evidence of heavy pedestrian traffic throughout the area (Photo 2). Some recent clearing and thinning has occurred for the development of the frisbee gold course in 2022 (Photo 3). The value of the area as wildlife habitat is likely limited. The area is expected to support breeding birds, however. In particular, there is a patch of mixed forest with dense shrub understory to the south-east of the east end of hole 2 that is particularly good

nesting habitat. This area is dense young mixed forest dominated by red alder (*Alnus rubra*) with scattered western red cedar and a dense salmonberry (*Rubus spectabilis*) understory.

The property is likely unsuitable for denning medium and large-bodied mammals (i.e., bears) as it likely receives too much disturbance and human activity. Given the proximity of the school and residents, denning in this area should be deterred for safety reasons.

The study area generally hosts a low diversity of vegetation species and is unlikely to support rare or endangered vegetation species given the nature of the ecosystem and the current level of disturbance. No rare or endangered vegetation species were noted during the field work; however, species-specific surveys were not conducted and the survey was conducted too late in the season to detect many listed annuals.

No ecosystems at risk (Attachment B: Table B3) were identified within the proposed development area.

At the time of the assessment, no suitable breeding habitat for amphibians was noted. The ditch along the western boundary of the adjacent school fields may support breeding nearby. The area has very little in the way of coarse woody debris or other potential habitat structures. There were some scattered low-quality wildlife trees. The few large scattered western redcedar trees around hole 2 may provide roosting habitat for migratory tree bats as well as birds.

The BC Conservation Data Center (BC CDC) iMap application was queried for marked known occurrence records of species at risk. Two occurrence records overlap the site:

1. Tall woolly-heads (*Psilocarphus elatior*) is a provincially red-listed species and is federally listed as Endangered on Schedule 1 of the *Species At Risk Act* (SARA). This plant occurs in wet areas and vernal wetlands (Klinkenberg 2020). No suitable habitat to support this species was noted within the study area.
2. Northern red-legged frog (*Rana aurora*) is provincially blue-listed and listed as 'Special Concern' under the federal SARA. This species is relatively common in the region based on professional experience. The development area is unlikely to support breeding habitat for this species (they are obligate aquatic breeders). If there is suitable breeding habitat nearby, the development area may support overwintering.

There are a number of records of California wax-myrtle (*Morella californica*) to the south of the site scattered along the Ucluelet peninsula. This species is provincially blue-listed and is relatively common in the region. No California wax-myrtle plants were noted within the proposed development area.

No streams or wetlands were observed within the study area. The provincial Habitat Wizard (2024) does not indicate any streams within one kilometer of the study area. Schedule E of the District of Ucluelet OCP (2021) indicates three streams just to the south of the property which appear to be originating from adjacent lots. They are identified as streams 22, 25 and 26 and are all marked as 'Not Identified' in the schedule. All three appear to be first order stream draining southeastward. These features were not assessed in the field. No impacts are anticipated based on the distance between these features and the proposed development.

The BC Ecosystems Explorer Query data is provided in Appendix B. Note that the wildlife query included some obscure results. The list was sorted into species with potential for occurrence in the study area based on the criteria above, these are provided below in Table 1.

Table 1. Wildlife species at risk from the BC Ecosystems Explorer Query (Appendix A) with potential of occurring in the Study Area.

Group	Common Name	Scientific Name	BC List	SARA Schedule	
				Schedule	Designation
amphibians	Northern Red-legged Frog	<i>Rana aurora</i>	Blue	1	Special Concern
amphibians	Wandering Salamander	<i>Aneides vagrans</i>	Blue	1	Special Concern
amphibians	Western Toad	<i>Anaxyrus boreas</i>	Yellow	1	Special Concern
birds	Band-tailed Pigeon	<i>Patagioenas fasciata</i>	Blue	1	Special Concern
birds	Barn Swallow	<i>Hirundo rustica</i>	Yellow	1	Threatened
birds	Black Swift	<i>Cypseloides niger</i>	Blue	1	Endangered
birds	Black-throated Green Warbler	<i>Setophaga virens</i>	Blue		
birds	Evening Grosbeak	<i>Coccothraustes vespertinus</i>	Yellow	1	Special Concern
birds	Great Blue Heron, <i>fannini</i> subspecies	<i>Ardea herodias fannini</i>	Blue	1	Special Concern
birds	Olive-sided Flycatcher	<i>Contopus cooperi</i>	Yellow	1	Threatened
birds	Pine Grosbeak, <i>carlottae</i> subspecies	<i>Pinicola enucleator carlottae</i>	Blue		
birds	Purple Martin	<i>Progne subis</i>	Blue		
birds	Rough-legged Hawk	<i>Buteo lagopus</i>	Blue		
birds	Western Screech-Owl, <i>kennicottii</i> subspecies	<i>Megascops kennicottii</i>	Blue	1	Threatened
mammals	Little Brown Myotis	<i>Myotis lucifugus</i>	Blue	1	Endangered
mammals	Townsend's Big-eared Bat	<i>Corynorhinus townsendii</i>	Blue		

SARA = Species at Risk Act

Of the species in Table 1, northern red-legged frog and western toad (*Anaxyrus boreas*) have a moderate likelihood of occurring on the site based on the likelihood of suitable breeding habitat in the area (e.g., road ditches, vernal pools, lentic streams, etc.); however, the habitat is of low value. Wandering salamander (*Aneides vagrans*) are considered of low likelihood based on a lack of requisite habitat features (wet mature forest understory). Potential impacts to amphibians from the proposed project is expected to be negligible. Most of the birds in Appendix B: Table B1 are considered to have a low likelihood of occurrence in the region, are uncommon migrants or are unlikely to interact with the proposed project. However, the habitat may support Band-tailed Pigeon (*Patagionas fasciata*) and Great

Blue Heron (*Ardea Herodias*). Band-tailed Pigeon commonly use mature forest edges in the region. Great Blue Heron occasionally build solitary nests in mature trees. Habitat suitability for nesting Great Blue Heron is considered low. The habitat within the proposed development area may provide suitable summer roosting habitat for Little Brown Myotis (*Myotis lucifugus*), Yuma myotis (*Myotis yumanensis*) and Townsend's Big-eared Bat (*Corynorhinus townsendii*).

No nests, dens or other critical wildlife habitat features were detected within the development area; however, the area does support suitable nesting habitat for breeding birds. The regional nesting period is March 26 to August 7 according to Environment Canada (2024) for forested ecosystems in the region (within the A1 Nesting Zone). No large stick nests or cavities of Piliated Woodpecker (*Dryocopus pileatus*; now under specific protections within the Migratory Bird Regulations [2024]) were noted within the proposed development area and the area does not host habitat suitable for tree-nesting seabirds whose nests are also now protected year-round (Migratory Bird Regulation 2024).

Recommendations

Any vegetation clearing should be conducted outside of the breeding bird season (March 26 to August 7). If any clearing is required during this period, a pre-clearing nesting bird survey will be required to assess the risk of contravening the *Migratory Bird Convention Act* and the provincial *Wildlife Act*.

Any veteran trees should be retained, where feasible, in the design to provide greenery, shading, rain intercept and urban habitat for wildlife. Veteran trees that are taller than the canopy are generally more windfirm and are good candidates for retention. Western redcedar in particular are long-lived, windfirm trees that can provide a number of benefits in a residential setting. Good candidates for retention are shown on Figure 1.

An early draft of the road routing conflicted with a stand of approximately 4 veteran hemlock and western red cedar trees. Once identified, the proposed road route was adjusted to avoid these trees as shown on Figure 1.

An engineered stormwater management scheme will be required to manage runoff and avoid flooding and erosion. It is assumed that the development would be connected to the municipal water and sewer systems.

The preliminary layout avoids the steeper slopes and retains green space to the west of the project. Maintaining connected green corridors through urban and residential areas benefits regional wildlife.

Closure

We trust that the above meets your current requirements, if you have any questions, please contact the undersigned.

Regards,

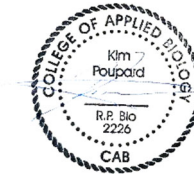
Redd Fish Restoration

Prepared by:



Chris Dolphin, B.Sc

Reviewed by:



Kim Poupard, R.P. Bio

Attachments: Figure 1
Site Photographs
BC Ecosystems Explorer Query Results

References:

Environment Canada. 2021. General Nesting Periods of Migratory Birds. Available online: <https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/general-nesting-periods/nesting-periods.html> (accessed October 28, 2024).

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Acts and Regulations

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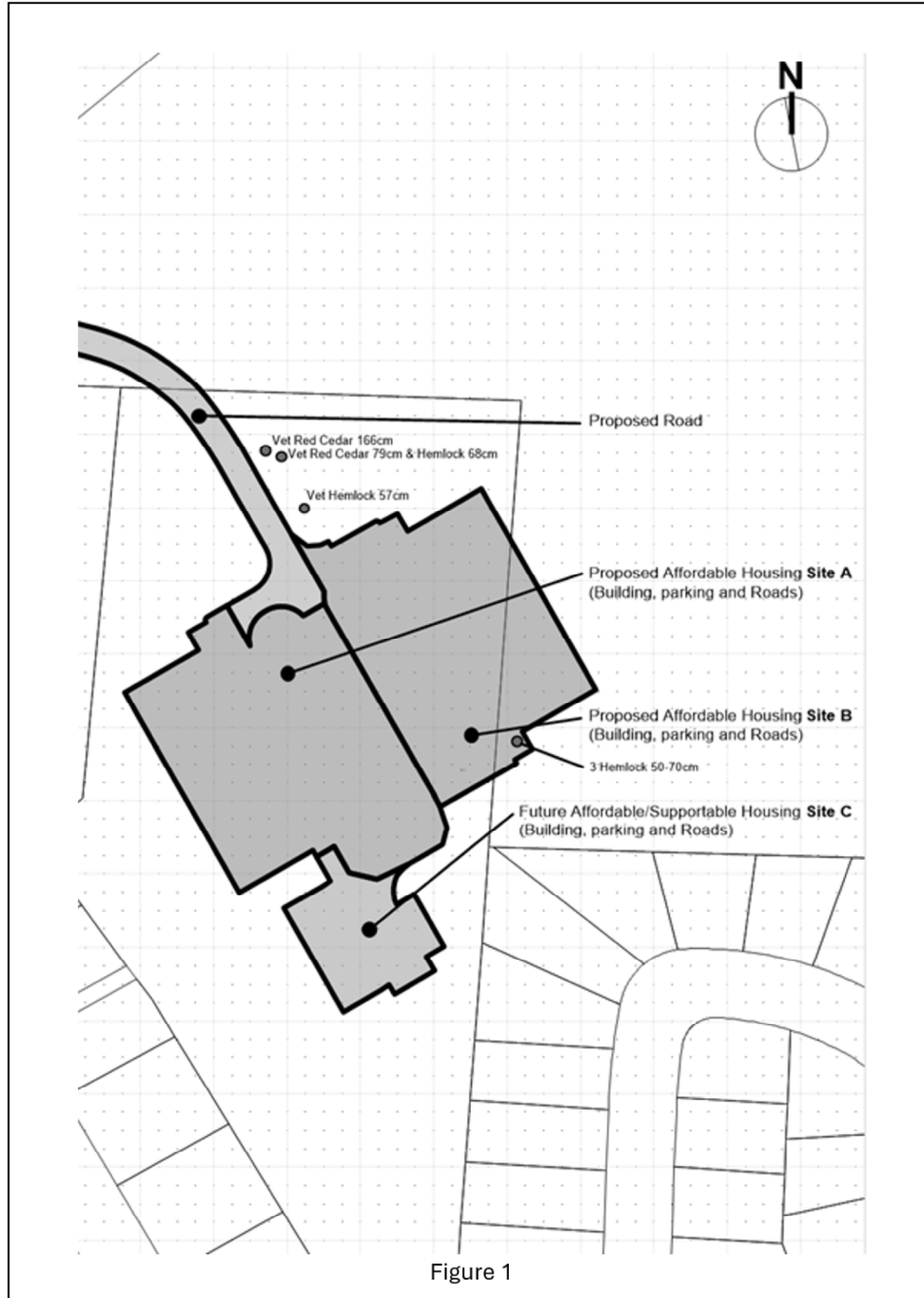


Figure 1



Photo 1. Showing habitat conditions within the proposed development area on the southeast side of the site.



Photo 2. Showing trampled forest floor conditions present through much of the proposed development area.



Photo 3. Showing clearing and thinning on the subject lot that occurred for the development of the frisbee golf course.

APPENDIX B:

BC ECOSYSTEMS EXPLORER SEARCH RESULTS

Table B1. BC Ecosystems Explorer Query Results and Likelihood of Occurrence Assessment.

Group	English Name	Scientific Name	BC List	SARA* Schedule	SARA Status	MBCA*	Likelihood of Occurrence (Yes / No)	Rational (If No) ¹
amphibians	Coastal Tailed Frog	<i>Ascaphus truei</i>	Yellow	1	Special Concern		No	1
amphibians	Northern Red-legged Frog	<i>Rana aurora</i>	Blue	1	Special Concern		Yes	
amphibians	Wandering Salamander	<i>Aneides vagrans</i>	Blue	1	Special Concern		Yes	
amphibians	Western Toad	<i>Anaxyrus boreas</i>	Yellow	1	Special Concern		Yes	
birds	American Avocet	<i>Recurvirostra americana</i>	Blue			Y	No	2
birds	American Bittern	<i>Botaurus lentiginosus</i>	Blue			Y	No	2
birds	American Golden-Plover	<i>Pluvialis dominica</i>	Blue			Y	No	2
birds	American White Pelican	<i>Pelecanus erythrorhynchos</i>	Red				No	2
birds	Ancient Murrelet	<i>Synthliboramphus antiquus</i>	Blue	1	Special Concern	Y	No	2
birds	Band-tailed Pigeon	<i>Patagioenas fasciata</i>	Blue	1	Special Concern	Y	Yes	
birds	Barn Owl	<i>Tyto alba</i>	Blue	1	Threatened		No	1, 2
birds	Barn Swallow	<i>Hirundo rustica</i>	Yellow	1	Threatened	Y	Yes	
birds	Bay-breasted Warbler	<i>Setophaga castanea</i>	Red			Y	No	1, 2
birds	Black Scoter	<i>Melanitta americana</i>	Blue			Y	No	2
birds	Black Swift	<i>Cypseloides niger</i>	Blue	1	Endangered	Y	Yes	
birds	Black-crowned Night-heron	<i>Nycticorax nycticorax</i>	Red			Y	No	1, 2
birds	Black-throated Green Warbler	<i>Setophaga virens</i>	Blue			Y	Yes	
birds	Bobolink	<i>Dolichonyx oryzivorus</i>	Red	1	Threatened	Y	No	1, 2
birds	Brandt's Cormorant	<i>Urile penicillatus</i>	Red				No	2
birds	Brant	<i>Branta bernicla</i>	Blue			Y	No	2
birds	California Gull	<i>Larus californicus</i>	Red			Y	No	2
birds	Canada Goose, <i>occidentalis</i> subspecies	<i>Branta canadensis occidentalis</i>	Red				No	2
birds	Canada Warbler	<i>Cardellina canadensis</i>	Blue	1	Threatened	Y	No	1

birds	Caspian Tern	<i>Hydroprogne caspia</i>	Blue			Y	No	2
birds	Cassin's Auklet	<i>Ptychoramphus aleuticus</i>	Red	1	Special Concern	Y	No	2
birds	Common Murre	<i>Uria aalge</i>	Red			Y	No	2
birds	Common Nighthawk	<i>Chordeiles minor</i>	Blue	1	Threatened	Y	No	2
birds	Connecticut Warbler	<i>Oporornis agilis</i>	Blue			Y	No	1, 2
birds	Double-crested Cormorant	<i>Nannopterum auritum</i>	Blue				No	2
birds	Evening Grosbeak	<i>Coccothraustes vespertinus</i>	Yellow	1	Special Concern	Y	Yes	
birds	Forster's Tern	<i>Sterna forsteri</i>	Red			Y	No	2
birds	Great Blue Heron, <i>fannini</i> subspecies	<i>Ardea herodias fannini</i>	Blue	1	Special Concern		Yes	
birds	Green Heron	<i>Butorides virescens</i>	Blue			Y	No	2
birds	Gyr Falcon	<i>Falco rusticolus</i>	Blue				No	1, 2
birds	Horned Lark, <i>strigata</i> subspecies	<i>Eremophila alpestris strigata</i>	Red	1	Endangered		No	2
birds	Horned Puffin	<i>Fratercula corniculata</i>	Red			Y	No	2
birds	Hudsonian Godwit	<i>Limosa haemastica</i>	Red			Y	No	2
birds	Lark Sparrow	<i>Chondestes grammacus</i>	Blue			Y	No	1
birds	Lewis's Woodpecker	<i>Melanerpes lewis</i>	Blue	1	Threatened	Y	No	1, 2
birds	Long-billed Curlew	<i>Numenius americanus</i>	Yellow	1	Special Concern	Y	No	2
birds	Marbled Murrelet	<i>Brachyramphus marmoratus</i>	Blue	1	Threatened	Y	No	2
birds	Northern Fulmar	<i>Fulmarus glacialis</i>	Red			Y	No	2
birds	Northern Goshawk, <i>laingi</i> subspecies	<i>Accipiter gentilis laingi</i>	Red	1	Threatened		No	2
birds	Northern Pygmy-owl, <i>swarthi</i> subspecies	<i>Glaucidium gnoma swarthi</i>	Blue				No	2
birds	Olive-sided Flycatcher	<i>Contopus cooperi</i>	Yellow	1	Threatened	Y	Yes	
birds	Peregrine Falcon	<i>Falco peregrinus</i>	No Status	1	Special Concern		No	2
birds	Peregrine Falcon, <i>anatum</i> subspecies	<i>Falco peregrinus anatum</i>	Red	1	Special Concern		No	2

birds	Peregrine Falcon, <i>pealei</i> subspecies	<i>Falco peregrinus pealei</i>	Blue	1	Special Concern		No	2
birds	Pine Grosbeak, <i>carlotta</i> subspecies	<i>Pinicola enucleator carlotta</i>	Blue				Yes	
birds	Prairie Falcon	<i>Falco mexicanus</i>	Red				No	2
birds	Purple Martin	<i>Progne subis</i>	Blue			Y	Yes	
birds	Red Knot	<i>Calidris canutus</i>	Blue	1	Threatened / Endangered	Y	No	2
birds	Red-necked Phalarope	<i>Phalaropus lobatus</i>	Blue	1	Special Concern	Y	No	2
birds	Rough-legged Hawk	<i>Buteo lagopus</i>	Blue				Yes	
birds	Rusty Blackbird	<i>Euphagus carolinus</i>	Blue	1	Special Concern		No	2
birds	Sage Thrasher	<i>Oreoscoptes montanus</i>	Red	1	Endangered	Y	No	2
birds	Short-billed Dowitcher	<i>Limnodromus griseus</i>	Blue			Y	No	2
birds	Short-eared Owl	<i>Asio flammeus</i>	Blue	1	Special Concern		No	1, 2
birds	Smith's Longspur	<i>Calcarius pictus</i>	Blue			Y	No	2
birds	Surf Scoter	<i>Melanitta perspicillata</i>	Blue			Y	No	2
birds	Thick-billed Murre	<i>Uria lomvia</i>	Red			Y	No	2
birds	Tufted Puffin	<i>Fratercula cirrhata</i>	Blue			Y	No	2
birds	Upland Sandpiper	<i>Bartramia longicauda</i>	Red			Y	No	2
birds	Wandering Tattler	<i>Tringa incana</i>	Blue			Y	No	2
birds	Western Grebe	<i>Aechmophorus occidentalis</i>	Red	1	Special Concern	Y	No	2
birds	Western Screech-Owl	<i>Megascops kennicottii</i>	No Status	1	Threatened		Yes	
birds	Western Screech-Owl, <i>kennicottii</i> subspecies	<i>Megascops kennicottii kennicottii</i>	Blue	1	Threatened		Yes	
birds	White-tailed Ptarmigan, <i>saxatilis</i> subspecies	<i>Lagopus leucura saxatilis</i>	Blue				No	2
birds	Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	Red			Y	No	2
birds	Yellow-breasted Chat	<i>Icteria virens</i>	Red	1	Endangered	Y	No	2
bivalves	Long Fingernailclam	<i>Musculium transversum</i>	Blue				N/A	
bivalves	Olympia Oyster	<i>Ostrea lurida</i>	Blue	1	Special Concern		N/A	
bivalves	Striated Fingernailclam	<i>Sphaerium striatinum</i>	Blue				N/A	

bivalves	Swamp Fingernailclam	<i>Musculium partumeium</i>	Blue				N/A	
gastropods	Blue-grey Taildropper	<i>Prophysaon coeruleum</i>	Blue	1	Threatened		N/A	
gastropods	Broadwhorl Tightcoil	<i>Pristiloma johnsoni</i>	Blue				N/A	
gastropods	Dromedary Jumping-slug	<i>Hemphillia dromedarius</i>	Red	1	Threatened		N/A	
gastropods	Evening Fieldslug	<i>Deroceras hesperium</i>	Red				N/A	
gastropods	Haida Gwaii Slug	<i>Staala gwaii</i>	Red	1	Special Concern		N/A	
gastropods	Meadow Rams-horn	<i>Planorbula campestris</i>	Blue				N/A	
gastropods	Northern Abalone	<i>Haliotis kamtschatkana</i>	Red	1	Endangered		N/A	
gastropods	Oregon Forestsnail	<i>Allogona townsendiana</i>	Red	1	Endangered		N/A	
gastropods	Prairie Fossaria	<i>Galba bulimoides</i>	Blue				N/A	
gastropods	Puget Oregonian	<i>Cryptomastix devia</i>	Red	1	Extinct		N/A	
gastropods	Rocky Mountain Physa	<i>Physella propinqua</i>	Blue				N/A	
gastropods	Sunset Physa	<i>Physella virginea</i>	Blue				N/A	
gastropods	Threaded Vertigo	<i>Nearctula sp. 1</i>	Blue	1	Special Concern		N/A	
gastropods	Warty Jumping-slug	<i>Hemphillia glandulosa</i>	Red	1	Special Concern		N/A	
gastropods	Western Thorn	<i>Carychium occidentale</i>	Blue				N/A	
gastropods	Wrinkled Marshsnail	<i>Stagnicola caperata</i>	Blue				N/A	
insects	Alkali Bluet	<i>Enallagma clausum</i>	Blue				N/A	
insects	Audouin's Night-stalking Tiger Beetle	<i>Omus audouini</i>	Red	1	Threatened		N/A	
insects	Autumn Meadowhawk	<i>Sympetrum vicinum</i>	Blue				N/A	
insects	Black Petaltail	<i>Tanypteryx hageni</i>	Blue				N/A	
insects	Blue Dasher	<i>Pachydiplax longipennis</i>	Blue				N/A	
insects	Boisduval's Blue, <i>blackmorei</i> subspecies	<i>Icaricia icarioides blackmorei</i>	Blue				N/A	
insects	Clodius Parnassian, <i>claudianus</i> subspecies	<i>Parnassius clodius claudianus</i>	Blue				N/A	
insects	Common Ringlet, <i>insulana</i> subspecies	<i>Coenonympha californica insulana</i>	Red				N/A	
insects	Common Wood-nymph, <i>incana</i> subspecies	<i>Cercyonis pegala incana</i>	Red				N/A	
insects	Dun Skipper	<i>Euphyes vestris</i>	Blue	1	Threatened		N/A	

insects	Edith's Checkerspot, <i>taylori</i> subspecies	<i>Euphydryas editha taylori</i>	Red	1	Endangered		N/A	
insects	Edwards' Beach Moth	<i>Anarta edwardsii</i>	Red	1	Endangered		N/A	
insects	Greenish Blue, <i>insulanus</i> subspecies	<i>Icaricia saepiolus insulanus</i>	Red	1	Endangered		N/A	
insects	Johnson's Hairstreak	<i>Callophrys johnsoni</i>	Red				N/A	
insects	Large Marble, <i>insulanus</i> subspecies	<i>Euchloe ausonides insulanus</i>	Red	1	Extinct		N/A	
insects	Monarch	<i>Danaus plexippus</i>	Red	1	Special Concern		N/A	
insects	Moss' Elfin, <i>mossii</i> subspecies	<i>Callophrys mossii mossii</i>	Red				N/A	
insects	Propertius Duskywing	<i>Erynnis propertius</i>	Red				N/A	
insects	Rocky Mountain Parnassian, <i>olympiannus</i> subspecies	<i>Parnassius smintheus olympiannus</i>	Blue				N/A	
insects	Sand-verbena Moth	<i>Copablepharon fuscum</i>	Red	1	Endangered		N/A	
insects	Silver-spotted Skipper	<i>Epargyreus clarus</i>	Blue				N/A	
insects	Silver-spotted Skipper, <i>californicus</i> subspecies	<i>Epargyreus clarus californicus</i>	Red				N/A	
insects	Sinuuous Snaketail	<i>Ophiogomphus occidentis</i>	Blue				N/A	
insects	Western Branded Skipper, <i>oregonia</i> subspecies	<i>Hesperia colorado oregonia</i>	Red				N/A	
insects	Western Pine Elfin, <i>sheltonensis</i> subspecies	<i>Callophrys eryphon sheltonensis</i>	Blue				N/A	
insects	Western Pondhawk	<i>Erythemis collocata</i>	Blue				N/A	
insects	Zerene Fritillary, <i>bremnerii</i> subspecies	<i>Speyeria zerene bremnerii</i>	Red				N/A	
Lampreys	Cowichan Lake Lamprey	<i>Entosphenus macrostomus</i>	Red	1	Threatened		N/A	
Lampreys	Western Brook Lamprey (Morrison Creek Population)	<i>Lampetra richardsoni</i> pop. 1	Red	1	Endangered		N/A	

malacostracans	Quatsino Cave Amphipod	<i>Stygobromus quatsinensis</i>	Blue				N/A	
mammals	Caribou (Northern Mountain Population)	<i>Rangifer tarandus</i> pop. 15	Blue	1	Special Concern		No	1,2
mammals	Ermine, <i>anguinae</i> subspecies	<i>Mustela richardsonii anguinae</i>	Blue					
mammals	Fisher	<i>Pekania pennanti</i>	No Status					
mammals	Grey Whale	<i>Eschrichtius robustus</i>	Blue	1	Special Concern		No	2
mammals	Grizzly Bear	<i>Ursus arctos</i>	Blue	1	Special Concern		No	2
mammals	Hoary Bat	<i>Lasiurus cinereus</i>	Blue					
mammals	Little Brown Myotis	<i>Myotis lucifugus</i>	Blue	1	Endangered		Yes	
mammals	Mountain Goat	<i>Oreamnos americanus</i>	Blue				No	1, 2
mammals	Roosevelt Elk	<i>Cervus elaphus roosevelti</i>	Blue				No	2
mammals	Steller Sea Lion	<i>Eumetopias jubatus</i>	Blue	1	Special Concern		No	2
mammals	Townsend's Big-eared Bat	<i>Corynorhinus townsendii</i>	Blue				Yes	
mammals	Townsend's Vole, <i>cowani</i> subspecies	<i>Microtus townsendii cowani</i>	Red					
mammals	Vancouver Island Marmot	<i>Marmota vancouverensis</i>	Red	1	Endangered		No	1, 2
mammals	Western Water Shrew, <i>brooksi</i> subspecies	<i>Sorex navigator brooksi</i>	Blue					
mammals	Wolverine	<i>Gulo gulo</i>	No Status	1	Special Concern		No	1
mammals	Wolverine, <i>luscus</i> subspecies	<i>Gulo gulo luscus</i>	Blue	1	Special Concern		No	1
mammals	Wolverine, <i>vancouverensis</i> subspecies	<i>Gulo gulo vancouverensis</i>	Red	1	Special Concern			
mammals	Yuma Myotis	<i>Myotis yumanensis</i>	Blue				Yes	
oligochaetes	an earthworm	<i>Arctiostrotus perrieri</i>	Blue				N/A	
ray-finned fishes	Bull Trout	<i>Salvelinus confluentus</i>	Blue				No	2

ray-finned fishes	Cutthroat Trout, <i>clarkii</i> subspecies	<i>Oncorhynchus clarkii clarkii</i>	Blue				No	2
ray-finned fishes	Eulachon	<i>Thaleichthys pacificus</i>	Blue				No	2
ray-finned fishes	Inconnu	<i>Stenodus leucichthys</i>	Blue				No	2
ray-finned fishes	Misty Lake "Lake" Stickleback	<i>Gasterosteus sp. 18</i>	Red	1	Endangered		No	2
ray-finned fishes	Misty Lake "Stream" Stickleback	<i>Gasterosteus sp. 19</i>	Red	1	Endangered		No	2
reptiles	Common Sharp-tailed Snake	<i>Contia tenuis</i>	Red	1	Endangered		No	2
reptiles	Gophersnake	<i>Pituophis catenifer</i>	No Status	1	Extinct / Threatened		No	1, 2
reptiles	Gophersnake, <i>catenifer</i> subspecies	<i>Pituophis catenifer catenifer</i>	Red	1	Extinct		No	1, 2
turtles	Leatherback Sea Turtle	<i>Dermochelys coriacea</i>	Red	1	Endangered		No	2
turtles	Northern Painted Turtle	<i>Chrysemys picta</i>	No Status	1	Endangered / Special Concern		No	2
turtles	Northern Painted Turtle - Pacific Coast Population	<i>Chrysemys picta</i> pop. 1	Red	1	Endangered		No	2

* SARA = *Species at Risk Act*; MBCA = *Migratory Bird Convention Act*

Notes 1:

1. Outside of known range for the species or species is not known in the area
2. No suitable habitat in the study area

Table B2. BC Ecosystems Explorer Query Results for Vegetation.

Name Category	English Name	Scientific Name	BC List	SARA Schedule	SARA Status	Habitats (Type / Subtype / Dependence)
Bryophyte	rigid apple moss	<i>Bartramia aprica</i>	Red	1	Endangered	Rock/Sparsely Vegetated Rock / Garry Oak Coastal Bluffs / Facultative - frequent use
Bryophyte	Roell's brotherella	<i>Brotherella roellii</i>	Red	1	Endangered	
Bryophyte	banded cord-moss	<i>Entosthodon fascicularis</i>	Blue	1	Special Concern	Grassland/Shrub / Garry Oak Maritime Meadow / Facultative - frequent use
Bryophyte	acuteleaf small limestone moss	<i>Seligeria acutifolia</i>	Red	1	Endangered	
Vascular Plant	yellow sand-verbena	<i>Abronia latifolia</i>	Blue			Other Unique Habitats / Beach / Obligate ; Other Unique Habitats / Sand Dune / Facultative - frequent use
Vascular Plant	pink sand-verbena	<i>Abronia umbellata</i> var. <i>breviflora</i>	Red	1	Endangered	Other Unique Habitats / Beach / Facultative - frequent use ; Other Unique Habitats / Sand Dune / Facultative - frequent use
Vascular Plant	dwarf maiden-hair fern	<i>Adiantum aleuticum</i> var. <i>subpumilum</i>	Blue			Other Unique Habitats / Beach / Facultative - frequent use ; Rock/Sparsely Vegetated Rock / Cliff / Facultative - frequent use
Vascular Plant	mountain hemlock dwarf mistletoe	<i>Arceuthobium tsugense</i> ssp. <i>mertensianae</i>	Blue			Forest / Conifer Forest - Mesic (average) / Unknown
Vascular Plant	three-forked mugwort	<i>Artemisia furcata</i>	Blue			Alpine/Tundra / Alpine/Subalpine Meadow / Unknown ; Alpine/Tundra / Krummholtz / Unknown ; Alpine/Tundra / Tundra / Unknown ; Rock/Sparsely Vegetated Rock / Cliff / Unknown ; Rock/Sparsely Vegetated Rock / Talus / Unknown

Vascular Plant	corrupt spleenwort	<i>Asplenium adulterinum</i>	Blue			Rock/Sparsely Vegetated Rock / Cliff / Facultative - frequent use ; Rock/Sparsely Vegetated Rock / Rock/Sparsely Vegetated Rock / Facultative - frequent use
Vascular Plant	river bulrush	<i>Bolboschoenus fluviatilis</i>	Blue			Other Unique Habitats / Estuary / Facultative - frequent use ; Riparian / Riparian Shrub / Facultative - frequent use ; Wetland / Marsh / Obligate
Vascular Plant	two-edged water-starwort	<i>Callitriche heterophylla</i> var. <i>heterophylla</i>	Unknown			Lakes / Pond/Open Water / Facultative - occasional use
Vascular Plant	beach bindweed	<i>Calystegia soldanella</i>	Blue			Other Unique Habitats / Sand Dune / Obligate
Vascular Plant	angled bittercress	<i>Cardamine angulata</i>	Blue			Forest / Conifer Forest - Moist/wet / Facultative - frequent use ; Forest / Old Forest / Facultative - occasional use ; Riparian / Riparian Forest / Facultative - frequent use ; Stream/River / Stream/River / Facultative - frequent use
Vascular Plant	estuarine paintbrush	<i>Castilleja ambigua</i> var. <i>ambigua</i>	Blue			Grassland/Shrub / Garry Oak Maritime Meadow / Facultative - frequent use ; Other Unique Habitats / Estuary / Facultative - frequent use ; Other Unique Habitats / Vernal Pools/Seasonal Seeps / Facultative - frequent use
Vascular Plant	Fischer's chickweed	<i>Cerastium fischerianum</i>	Blue			Grassland/Shrub / Meadow / Facultative - occasional use ; Lakes / Lake / Facultative - frequent use ; Riparian / Riparian Herbaceous / Facultative - occasional use ; Stream/River / Stream/River / Facultative - frequent use
Vascular Plant	tooth-leaved monkey-flower	<i>Erythranthe dentata</i>	Blue			Riparian / Riparian Forest / Unknown ; Stream/River / Stream/River / Unknown

Vascular Plant	white glacier lily	<i>Erythronium montanum</i>	Blue			Alpine/Tundra / Alpine/Subalpine Meadow / Unknown ; Other Unique Habitats / Avalanche Track / Unknown
Vascular Plant	dwarf red fescue	<i>Festuca rubra ssp. mediana</i>	Yellow			
Vascular Plant	Haida Gwaii avens	<i>Geum schofieldii</i>	Blue			Rock/Sparsely Vegetated Rock / Cliff / Facultative - frequent use ; Rock/Sparsely Vegetated Rock / Rock/Sparsely Vegetated Rock / Facultative - frequent use ; Rock/Sparsely Vegetated Rock / Talus / Facultative - frequent use
Vascular Plant	American glehnia	<i>Glehnia littoralis ssp. leiocarpa</i>	Blue			Other Unique Habitats / Beach / Obligate ; Other Unique Habitats / Sand Dune / Obligate
Vascular Plant	hairy goldfields	<i>Lasthenia maritima</i>	Blue			Ocean / Marine Island / Unknown ; Rock/Sparsely Vegetated Rock / Cliff / Unknown ; Rock/Sparsely Vegetated Rock / Rock/Sparsely Vegetated Rock / Unknown
Vascular Plant	silky beach pea	<i>Lathyrus littoralis</i>	Red			Other Unique Habitats / Beach / Facultative - frequent use ; Other Unique Habitats / Sand Dune / Facultative - frequent use
Vascular Plant	California wax-myrtle	<i>Morella californica</i>	Blue			Grassland/Shrub / Shrub - Natural / Unknown
Vascular Plant	redwood sorrel	<i>Oxalis oregana</i>	Blue			Forest / Conifer Forest - Moist/wet / Facultative - frequent use ; Forest / Old Forest / Facultative - occasional use
Vascular Plant	whitebark pine	<i>Pinus albicaulis</i>	Blue	1	Endangered	Forest / Conifer Forest - Dry / Facultative - frequent use ; Forest / Conifer Forest - Mesic (average) / Facultative - frequent use ; Rock/Sparsely Vegetated Rock / Cliff / Facultative - frequent use ; Rock/Sparsely Vegetated Rock / Rock/Sparsely Vegetated Rock / Facultative - frequent use ;

						Rock/Sparsely Vegetated Rock / Talus / Facultative - frequent use
Vascular Plant	black knotweed	<i>Polygonum paronychia</i>	Blue			Other Unique Habitats / Beach / Facultative - frequent use ; Other Unique Habitats / Sand Dune / Facultative - frequent use
Vascular Plant	Alaska holly fern	<i>Polystichum setigerum</i>	Blue			Forest / Conifer Forest - Moist/wet / Facultative - frequent use ; Riparian / Riparian Forest / Facultative - occasional use ; Riparian / Riparian Shrub / Facultative - occasional use ; Rock/Sparsely Vegetated Rock / Rock/Sparsely Vegetated Rock / Facultative - occasional use ; Stream/River / Stream/River / Facultative - occasional use
Vascular Plant	wedge-leaf primrose	<i>Primula cuneifolia</i> ssp. <i>saxifragifolia</i>	Blue			Grassland/Shrub / Meadow / Facultative - frequent use ; Rock/Sparsely Vegetated Rock / Rock/Sparsely Vegetated Rock / Facultative - occasional use
Vascular Plant	Smith's fairybells	<i>Prosartes smithii</i>	Blue			Forest / Conifer Forest - Moist/wet / Unknown ; Forest / Deciduous/Broadleaf Forest / Unknown ; Forest / Mixed Forest (deciduous/coniferous mix) / Unknown ; Riparian / Riparian Forest / Unknown
Vascular Plant	leafless wintergreen	<i>Pyrola aphylla</i>	Blue			Forest / Conifer Forest - Mesic (average) / Facultative - frequent use
Vascular Plant	Hibberson's trillium	<i>Trillium hibbersonii</i>	Blue			Rock/Sparsely Vegetated Rock / Cliff / Facultative - occasional use

Table B3. BC Ecosystems Explorer Query Results for Ecosystems.

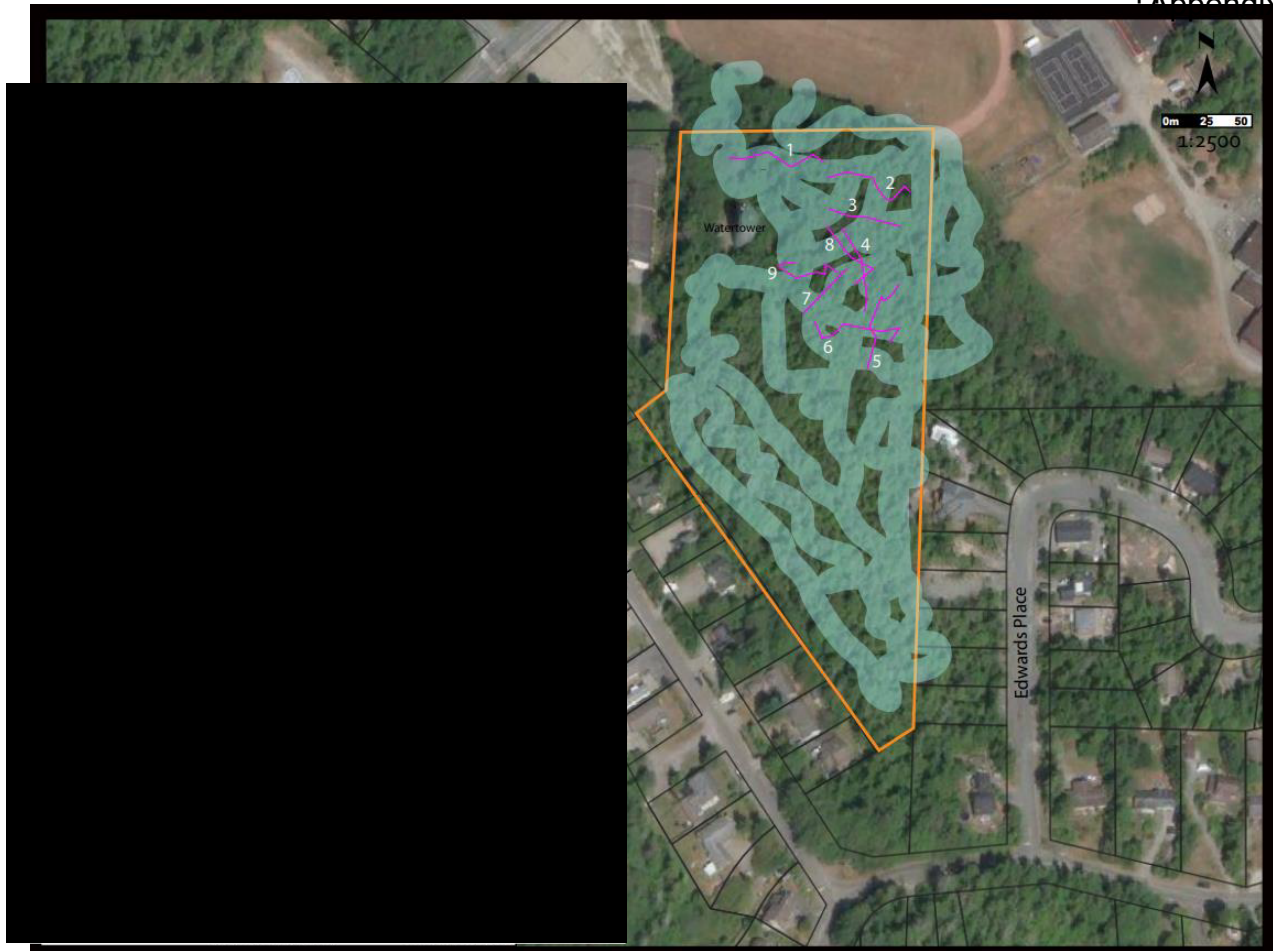
English Name	Scientific Name	Ecosystem Group	BC List
red alder / salmonberry / common horsetail	<i>Alnus rubra</i> / <i>Rubus spectabilis</i> / <i>Equisetum arvense</i>	Terrestrial Realm - Flood Group (F): Low Bench Flood Class (Fl)	Blue
Lyngbye's sedge herbaceous vegetation	<i>Carex lyngbyei</i> Herbaceous Vegetation	Estuarine Realm: Estuarine Marsh Class (Em)	Red
large-headed sedge Herbaceous Vegetation	<i>Carex macrocephala</i> Herbaceous Vegetation	Terrestrial Realm - Beach Group (B): Beachland Class (Bb)	Red
tufted hairgrass - meadow barley	<i>Deschampsia cespitosa</i> ssp. <i>beringensis</i> - <i>Hordeum brachyantherum</i>	Estuarine Realm: Estuarine Meadow Class (Ed)	Red
common spike-rush Herbaceous Vegetation	<i>Eleocharis palustris</i> Herbaceous Vegetation	Wetland Realm - Mineral Wetland Group: Marsh Wetland Class (Wm); Estuarine Realm: Estuarine Marsh Class (Em)	Blue
dune wildrye - beach pea	<i>Leymus mollis</i> ssp. <i>mollis</i> - <i>Lathyrus japonicus</i>	Terrestrial Realm - Beach Group (B): Beachland Class (Bb)	Red
Sitka spruce / Pacific reedgrass	<i>Picea sitchensis</i> / <i>Calamagrostis nutkaensis</i>	Terrestrial Realm - Forest: Coniferous - dry	Blue
Sitka spruce / slough sedge	<i>Picea sitchensis</i> / <i>Carex obnupta</i>	Terrestrial Realm - Forest: Coniferous - moist/wet	Blue
Sitka spruce / salal	<i>Picea sitchensis</i> / <i>Gaultheria shallon</i>	Terrestrial Realm - Forest: Coniferous - dry	Blue
Sitka spruce / Oregon beaked-moss	<i>Picea sitchensis</i> / <i>Kindbergia oregana</i>	Terrestrial Realm - Forest: Coniferous - dry	Blue
Sitka spruce / false lily-of-the-valley Very Wet Hypermaritime 1	<i>Picea sitchensis</i> / <i>Maianthemum dilatatum</i> Very Wet Hypermaritime 1	Terrestrial Realm - Flood Group (F): Highbench Flood	Red
Sitka spruce / Pacific crab apple	<i>Picea sitchensis</i> / <i>Malus fusca</i>	Terrestrial Realm - Forest: Coniferous - moist/wet	Blue

Sitka spruce / sword fern	<i>Picea sitchensis</i> / <i>Polystichum munitum</i>	Terrestrial Realm - Forest: Coniferous - moist/wet	Blue
Sitka spruce / tall trisetum	<i>Picea sitchensis</i> / <i>Trisetum canescens</i>	Terrestrial Realm - Flood Group (F): Middle Bench Flood Class (Fm); Terrestrial Realm - Forest: Coniferous - moist/wet	Red
dune bluegrass Herbaceous Vegetation	<i>Poa macrantha</i> Herbaceous Vegetation	Terrestrial Realm - Beach Group (B): Beachland Class (Bb)	Red
beaked ditch-grass Herbaceous Vegetation	<i>Ruppia maritima</i> Herbaceous Vegetation	Estuarine Realm: Estuarine Marsh Class (Em)	Red
Sitka willow - Pacific willow / skunk cabbage	<i>Salix sitchensis</i> - <i>Salix lasiandra</i> var. <i>lasiandra</i> / <i>Lysichiton americanus</i>	Wetland Realm - Mineral Wetland Group: Swamp Wetland Class (Ws)	Blue
American glasswort - sea-milkwort	<i>Sarcocornia pacifica</i> - <i>Lysimachia maritima</i>	Estuarine Realm: Estuarine Marsh Class (Em)	Red
western redcedar - Sitka spruce / skunk cabbage	<i>Thuja plicata</i> - <i>Picea sitchensis</i> / <i>Lysichiton americanus</i>	Terrestrial Realm - Forest: Coniferous - moist/wet; Wetland Realm - Mineral Wetland Group: Swamp Wetland Class (Ws)	Blue
western redcedar - Sitka spruce / devil's club Very Wet Hypermaritime 1	<i>Thuja plicata</i> - <i>Picea sitchensis</i> / <i>Oplopanax horridus</i> Very Wet Hypermaritime 1	Terrestrial Realm - Forest: Coniferous - moist/wet	Blue
western redcedar - Sitka spruce / sword fern	<i>Thuja plicata</i> - <i>Picea sitchensis</i> / <i>Polystichum munitum</i>	Terrestrial Realm - Forest: Coniferous - dry; Terrestrial Realm - Forest: Coniferous - mesic	Blue
western hemlock - Sitka spruce / lanky moss	<i>Tsuga heterophylla</i> - <i>Picea sitchensis</i> / <i>Rhytidiadelphus loreus</i>	Terrestrial Realm - Forest: Coniferous - mesic	Blue

Preliminary Field Reconnaissance of proposed frisbee golf course for the District of Ucluelet, Ucluelet, BC.



Prepared for:	District of Ucluelet
Author:	Carey Cunneyworth (UFN)
First Nation Traditional Territory:	Ucluelet First Nation
Survey Date:	November 10, 2022
Field Director:	Carey Cunneyworth
Survey Crew:	Tyson Touchie Jr (UFN) Jay Millar (UFN)
Attachments:	Figures 1, Photos 1-2
Archaeological:	No
Borden #:	N/A
Site Registration:	N/A
Cover Photo:	Tyson Touchie Jr and Jay Millar next to modern attempts at tapered bark strips. Looking W, C.Cunneyworth, img_6686.jpg



1.0 INTRODUCTION

1.1 Objectives

The objectives of this Preliminary Field Reconnaissance (PFR) survey and report are to:

- (a) Identify the above-ground or naturally exposed archaeological, cultural and heritage resources;
- (b) Record and determine the extent of possible impacts to existing culturally modified trees (CMTs) and other visible archaeological remains by the proposed development;
- (c) Identify and evaluate areas of archaeological potential within the development that may require subsurface testing or monitoring;
- (d) Make recommendations regarding any further archaeological work that may be required, and ways in which possible developmental impacts to the existing archaeological, cultural or heritage resources can be reduced or alleviated.

1.2 Survey and Report Summary

No previously unregistered archaeological sites were encountered during this survey. Seven (7) contemporary tapered bark stripped western red cedars were encountered during this survey. None of the seven (7) features pre-date 1846 and are not believed to be of Yuułu?il?ath (Ucluelet First Nation) origin, therefore are neither archaeological nor of traditional use. As the proposed frisbee golf construction has been explained to UFN as having a very low impact to the natural

environment and that no standing trees or stumps will be cut, UFN does not have concerns with the proposed frisbee golf course at this time and construction can proceed as planned. No further archaeological work is recommended in relation to this proposed development.

2.0 Background

2.1 General

On September 22nd, 2022, the District of Ucluelet consulted the Ucluelet First Nation (UFN) concerning a proposed frisbee golf course measuring approximately 110 meters in length and 120 meters in width, and located on a larger District of Ucluelet property south of the high school running track. Construction of this proposed frisbee golf course would not include any anticipated timber falling or direct subsurface impacts. Due to the close proximity of this development to registered archaeological sites and considering its likelihood to contain stands of old growth forest, UFN considers the area to be of high archaeological potential and requested that a PFR be conducted.

2.3 Archaeological and Ethnographic Research

The location of this proposed trail section falls entirely within the known traditional territory of the Yuułuʔiłʔatḥ (Ucluelet First Nation) who are a post-contact consolidation of at least seven (7) previously independent primary groups that each consisted of multiple sub-groups and families (Inglis and Haggarty, 1986)

The modern Yuułuʔiłʔatḥ are made up of the following primary groups:

- Yuułuʔiłʔatḥ
- Huʔuʔatḥ
- K̓inaxuumasʔatḥ
- Hitacuʔatḥ
- K̓ʷaayimtaʔatḥ
- Hinap̓iiʔisʔatḥ
- W̓aayiʔatḥ

Prior to conducting fieldwork, archaeological site potential was addressed by reviewing the literature and speaking with the UFN community for known archaeological and ethnographic sites in close proximity to and within the study area.

One (1) ethnographic site and/or named place is located nearby this proposed frisbee golf course.

λawačaqtu is the Yuułuʔiłʔatḥ place now known as Little Beach. λawačaqtu was a seasonal village site and translates to “short walk over” that references the narrow passageway between the inner waters of Spring Cove and the outer coast. (Kammler 2016)

Two (2) registered archaeological sites are located within the close proximity (<150m) of the proposed survey area.

Dfsj-84 is located within 100m of this survey area and is a registered archaeological CMT site consisting of nine (9) aboriginally logged and bark stripped western red cedar CMTs.

Dfsj-85 is located within 150 m of this survey area and is a registered archaeological CMT site consisting of two (2) aboriginally logged western red cedar CMTs.

Four (4) additional registered archaeological are located nearby (< 500m) the proposed survey area.

Dfsj-68 is located within 300m of this survey area and consists of a waterfront shell midden site.

Dfsj-74 is located within 400m of this survey area and consists of three (3) CMT features.

Dfsj-75 is located within 300m of this survey area and consists of a single CMT.

Dfsj-100 is located within 500m of this survey area and consists of a shell midden, burial site, and village site. This site is known as *ławačaqtu* at little beach.

3.0 ASSESSMENT METHODS

The field team examined pertinent archaeological site maps and ethnographic maps, as well as aerial photographs and legal boundary maps prior to conducting the actual survey. This assisted in modelling the field reconnaissance and targeting the areas of highest potential within the survey areas.

This field survey consisted of an archaeologist and two field technicians traversing the defined survey area. This survey concentrated primarily along the proposed frisbee golf course, and secondarily on areas outside the proposed frisbee golf course but within the property parcel and pre-defined survey area. All standing and fallen timber, both directly within the proposed frisbee golf course and immediately outside, were inspected for cultural modification. All natural exposures were visually inspected for subsurface archaeological deposits. Subsurface testing was not permitted during this PFR survey.

4.0 SURVEY RESULTS

4.1 Field Survey

This survey area consisted of an irregular polygon shape measuring approximately 260 m by 150 m at its widest points and is situated on the north, east, and south flanks of a coastal hilltop. The survey area is located approximately 350 m inland from the closest coastline and is bordered by the high school track to the North, the private properties on Edwards Place to the East, private properties on Victoria Rd to the South, and by private properties on Short rd to the West.

The survey area generally consisted of a forested coastal hilltop with a 0-20 % hill slope between the lower elevation (15-20 m asl) and the upper elevation (35-40 m asl) of a coastal hill top. The lower area and south flank generally consists of dense salal and cynamoka in a mix of western red cedar, hemlock, and pine trees and some areas of poorly drained soils. This area contained some remaining stands of old growth and lacked good visibility due to the dense understory. The upper elevation and hilltop generally consists of duff ground with a low amount of dead fall and an extensive network of trail systems created naturally by human foot traffic. Large quantities of modern refuse was found throughout this area, as well as an imported public sitting bench further indicating the high traffic nature of this area. The forest type in this survey areas consists of mixed mature second growth hemlock and cedar stands with few individual remnant old-growth standing western red cedars over 150 cm in diameter. Evidence of historical logging including sawn stumps and logs and was visible through much of the survey area.

Seven (7) contemporary tapered bark stripped western red cedars were encountered during this survey and we located immediately adjacent the imported sitting bench. None of the seven (7) TUS features pre-date 1846 and are not believed to be of Yuułu?ił?ath (Ucluelet First Nation) origin, therefore are neither archaeological nor of traditional use.

Visibility was considered moderate - very good and survey coverage was achieved across 95% of the total area. Visually inspected natural exposures showed no evidence of buried archaeological deposits. A recommendation for sub surface testing was not considered necessary due to the non-invasive nature of the development

No other surface or subsurface archaeological findings were identified within the survey area during this PFR.

7.0 RECOMMENDATIONS

Based on the results of this assessment, no further archaeological work is required. However, the following recommendations are made should any unidentified archaeological feature or site be encountered after this survey.

1. That the *District of Ucluelet* inform all contractors who will be involved with building activities in the proposed development area that archaeological remains in the Province of British Columbia are protected from disturbance, intentional or inadvertent, by the Heritage Conservation Act (RSBC 1996, Chapter 87) and Section 51 of the Forest Practices Code Act (1995);
2. That the *District of Ucluelet* inform contractors that, in the event that previously unidentified archaeological remains (including culturally modified trees) are encountered during building activities, that all activities with potential impacts to the remains must be halted, and the Ucluelet First Nation must be contacted upon discovery, and be informed of the location, the type/s of archaeological remains encountered, and the nature of the disturbance.

8.0 REFERENCES

Applaud, Brian, and Ray Kenny

1996 *British Columbia Archaeological Impact Assessment Guidelines*. Ministry of Small Business, Tourism and Culture, Archaeology Branch, Victoria.

Brolly, Richard, and Brian Pegg

1998 *Archaeological Investigations in Ucluelet Traditional Territory*. HCA 1995-048. Prepared by Arcas Consulting Archaeologists LTD

Inglis, R.I, and J.C Haggarty

1986 *Pacific Rim National Park Ethnographic History*. Report on File, Western Canada Services Centre, Parks Canada, Archaeological Services, Victoria, BC.

Kammler, Henry

2016 *NCN Barkley Sound Dictionary*. Work in Progress.

Kristensen, Kira

2007 *Archaeological Impact Assessment, Peninsula Road Upgrade, Little Beach Site (DfSj-100), Ucluelet BC*. Prepared for Koers & Associated Engineering Ltd. I.R Wilson Consultants, Victoria BC.

Pojar, Jim, and Andy Mackinnon

2004 *Plants of Coastal British Columbia*. Ministry of Forests and Lone Pine Publishing. Vancouver, BC.

Stryd, Arnoud H.

1997 *Culturally Modified Trees of British Columbia: A Handbook for Identification and Recording of Culturally Modified Trees*. Ministry of Forests, Vancouver Forest Region, Nanaimo.

Permit #: Non Permit
 Temporary #: N/A
 Borden #: N/A
 Date of visit: November 10, 2022



Photo 1: Jay Millar next to a modern tapered bark strip and public bench. Looking S, C.Cunneyworth, img_6687.jpg



Photo 2: General view of the south end of the survey area. Looking N, C.Cunneyworth, img_6689.jpg



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& ASSOCIATES
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February 7, 2025
File No.: 2460-02

District of Ucluelet
200 Main Street
Ucluelet, BC V0R 3A0

Attention: Mr. John Towgood, Municipal Planner

**Re: Civil Servicing Cost Estimate
Proposed Matterson Water Tower Development**

Further to your request to provide a conceptual civil servicing design and accompanying high-level cost estimate for the potential 100+ unit multi-family residential development at the Matterson Drive water tower site, we submit the following for your review and comment:

- A high-level Class D servicing estimate of the proposed on-site and off-site works.
- A conceptual servicing design concept that forms the basis of this estimate consisting of:
 - The proposed road from Matterson Drive to Proposed Lots A and B.
 - Clearing, excavation and rough grading for Proposed Lots A and B.
 - Clearing, excavation for a possible fire lane access between Lots A and B.
 - The water connection at the reservoir with for fire protection.
 - The water connection to Pressure Zone 65 on Matterson Drive for domestic water supply.
 - Off-site sanitary and storm sewers.
 - Detention pond for stormwater management.
 - Service stubs for Proposed Lots E and F (to be developed by School District 70)

The following describes the conceptual servicing items in further detail and outlines the assumptions used for the estimate.

EXISTING CONDITIONS

Proposed Lots A and B are located southeast of the Matterson water tower, at the top of the hill. The proposed road will be constructed from Matterson Drive to the proposed lots. Proposed Lots E and F are located on either side of the access road, fronting onto Matterson Road.

The existing topography is quite steep with existing slopes on the north, south and west sides ranging from 13 to 40 %. The site is predominantly forested. With the prevalence of exposed rock along the existing water tower access road, it is assumed that bedrock exists close to the surface throughout the entire site, except for Lot A and part of Lot B.

../2



February 7, 2025
File: 2460-02

District of Ucluelet
Mr. John Towgood

The District's Lidar generated contours were used for topographic information for this project. The data was supplemented with ground survey data that existed for the water reservoir site. We noted differences in elevations between the two data sources, ranging from 0.1m to 0.5m.

No geotechnical investigation has been completed on the site to confirm rock depths or any other geotechnical conditions. Geotechnical assumptions along with the approximate topographic data will influence the accuracy of the excavation quantities.

CONCEPTUAL SERVICING DESIGN

Drawing 2460-P1 shows the conceptual design of the Proposed Road and the rough grading design for Proposed Lots A and B and forms the basis for the cost estimates. The proposed road alignment, future building locations and parking areas were provided by the District. No adjustments were made to the alignments, locations of parking areas, or the locations of the buildings.

Proposed Road:

The proposed road is assumed to be 7m wide with curb and gutter and a concrete sidewalk on the north and east side of the road. The south and west side of the road is assumed to have a roadside ditch. The 160m long road will terminate at the top of the hill, and will provide access to Lots A and B. The road will be dedicated with a general right-of-width of 20m.

The conceptual profile for the road shows a maximum grade of 12%. It has been assumed that the geology of road area includes a 300mm thickness of overburden over bedrock. The design cut and fill slopes for the road have been assumed as 1:1 and 2:1 respectively. A geotechnical analysis would confirm the appropriate cut and fill slopes.

The road will contain the proposed sanitary and storm sewers, domestic water supply and the electrical/communication utilities for the development. The existing watermain to the reservoir will remain, and new watermains will be constructed to service the proposed lots. The road dedication should widen appropriately to include the existing watermain.

The road terminates near the water tower, and due to topographical restraints, a retaining wall will be required along the south fence line of the water tower.

Proposed Lot A and B Development:

The conceptual grading plan for the site assumes and two future buildings will be partially buried in the slope and minimum and maximum parking lot grades will be 1% and 5% respectively. Steeper allowable parking lot grades could result in cost savings but also decrease safety and accessibility.

It has been assumed that the first floor of the buildings will be fully buried, daylighted on the southwest side for Lot A and on the northeast side for Lot B. The parking level floors (2nd floor) have been set 6m above the lowest existing elevation at the corners of the buildings. With a daylighted first floor, the buildings will be "notched" into the existing slope, minimizing the need for fill slopes. However, the foundation wall height for the buildings will need to extend from the first floor to the existing ground elevation. The elevation of the adjacent parking lot will be about 200mm below the floor elevation.

../3

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February 7, 2025
File: 2460-02

District of Ucluelet
Mr. John Towgood

We understand it is anticipated that the parking areas will be surfaced with gravel without curbing. Therefore, it has been assumed that the grade of the parking areas will be sloped away from the buildings to the center of the parking areas.

The cut and fill slopes shown, assume 1:1 for cut and 2:1 for fill, which is consistent with the proposed road.

Proposed Lots E and F:

These two townhouse development lots will be accessed and serviced from the proposed road. It is assumed that these lots will be developed by School District 70. This estimate does not include servicing or grading work for these lots.

Proposed Lot C:

We understand this future development lot will remain undeveloped at this time. When Lot A develops, it is anticipated that sanitary and storm sewers will be extended into Lot C. Lot C will likely require a lift station for sanitary servicing and storm drainage may require a connection to Victoria Drive. This cost estimate does not include any works on Lot C. Consideration should be given to filling part of this lot with the excess rock excavation from the access road and Lot B.

Storm Drainage:

Being situated at the top of hill, existing surface drainage flows, according to the contours, to the east, south and north. For the conceptual design, the drainage will be collected within a storm sewer system and conveyed to the access road and to a proposed detention pond behind Lot E. The available area for the detention pond will ultimately determine the amount of storage available. Shown on the drawing 2460-P1, about 200-250 m³ may be available. Although pond modelling and calculations have not been completed, this amount of detention volume will reduce the peak flows leaving the site.

Off-site storm drainage improvements will be required to convey the storm drainage to the ocean. For the cost estimate, it is assumed that the existing 650mm storm sewer will be extended and connected to the existing 525mm storm sewer across from the community hall. A conditions assessment of the existing sewers should be done to see if replacement of any of the downstream sewers will be required.

It is assumed that the roof drainage for the future buildings on Lots A and B will connect to the storm drainage system. However, some building foundation drains may be too low to connect to the gravity storm sewer. Sump pumps or allowing the foundation drainage to weep onto the slope may be required.

Sanitary Sewers:

Sewage will be conveyed from the buildings to the access road and to Matterson Drive with a 200mm gravity sanitary sewer. An off-site 200mm sanitary sewer is proposed from Matterson Drive, along Bay Street to an existing manhole at Yew Street. With the future buildings being partially buried, servicing the first floor with sanitary sewer requires a deep sewer connection at the building. The sewer will remain quite deep (4.0 to 5.5m) to the second set of manholes where it can shallow to more common depths. If the sanitary and storm sewers were not constructed at these deeper depths, the future buildings would

../4

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February 7, 2025
File: 2460-02

District of Ucluelet
Mr. John Towgood

each require a sanitary lift station, and an alternate route for the building roof drainage would be required.

Waterworks:

Proposed Lots E and F will be serviced with water from the new domestic water supply main (Pressure Zone 65). A new fire hydrant will be installed, connected to the existing, lower pressure (Pressure Zone 57) watermain. Proposed Lots A and B will be serviced with domestic water from the new supply main and the fire hydrants for the five-building development site will be supplied by a new watermain connected to the lower pressure watermain at the reservoir site. Even with the domestic water supply from Pressure Zone 65, the water pressures at the top of the hill, and on the top floor of the multi-story buildings, will be less than desired. Therefore, each multi-story building will require a jet pump to be installed in the mechanical room to boost the domestic water supply pressure. During a power outage, the static pressure available in this pressure zone indicates that there should be enough water pressure to maintain domestic service, temporarily, without the need for backup power supply generators.

On-site fire hydrants will be connected to the lower pressure system, with the assumption that during a fire, the District's fire department will connect to and pump from these fire hydrants.

A new booster pump station for the entire development was originally considered, but the estimated cost of \$500,000 seemed to be much higher than the estimated cost of building a new domestic supply main from Pressure Zone 65, along with individual jet pumps in each building. The District, when estimating the building costs, will need to include a jet pump in the mechanical room of each multi-story building.

For the future development of Lot C, it is assumed that both watermains will be extended through the middle of the site to Lot C for fire and domestic supply. Any building on Lot C will also require a jet pump.

Underground Hydro, Telephone and Cable

Underground shallow utilities (hydro, telephone and cable) will be constructed within the access road to the proposed buildings. Assumed conduit alignments are shown on the site plan. It is assumed that each building will have an elevator, requiring three-phase power. A cost per meter shown on the estimates for hydro/tel and cable has been assumed. Unit prices for shallow utilities are very difficult to determine prior to detailed design. The estimated costs shown for these utilities may vary significantly from actual costs.

COST ESTIMATE

The development cost estimate has been broken into four parts:

- Proposed road and servicing works from Matterson Drive to Lots A and B, including the storm detention pond,
- Clearing, Excavation and Rough Grading for Lot A,
- Clearing, Excavation and Rough Grading for Lot B,
- Off-site Sanitary and Storm Sewers and Domestic Water Supply,
- Clearing, Excavation and Rough Grading for a fire lane (if required) between Lots A and B.

../5

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February 7, 2025
File: 2460-02

District of Ucluelet
Mr. John Towgood

The attached estimates are based on the conceptual design presented on drawing 2460-P1, and the summaries are presented in the table below. The estimated unit rates shown reflect current market conditions and the contingency amount indicates a Class D Estimate.

Class D Cost Estimate Summary:

Proposed Development Area	Subtotal Costs	Contingency	Total
Proposed Road including the Storm Detention Pond.	\$2,654,028	\$1,327,014	\$3,981,041
Clearing, Excavation and Rough Grading of Lot A (does not include building excavation).	\$836,913	\$418,456	\$1,255,369
Clearing, Excavation and Rough Grading of Lot B (does not include building excavation).	\$1,208,794	\$604,397	\$1,813,191
Off-Site Storm and Sanitary Sewers and Domestic Water Supply	\$216,200	\$108,100	\$324,300
			\$7,373,901

Additional Works (If required):

Proposed Development Area	Subtotal Costs	Contingency	Total
Clearing, Excavation and Rough Grading for Fire Lane	\$285,085	\$142,543	\$427,628
			\$427,628

This is a Class D Estimate. *“A Class D estimate (±50%) is an estimate which, due to little or no site information, indicates the approximate magnitude of cost of the proposed project, based on the client’s broad requirements. This overall cost estimate may be derived from lump sum or unit costs for a similar project. It may be used in developing long term capital plans and for preliminary discussion of proposed capital projects”*

We note that the proposed costs for the earthworks for this project represent a significant portion of the overall estimate. The reader is advised that the estimated earthworks quantities have been developed using assumed stripping depths, assumed subsurface materials and were based on approximate topographic information. Costs could vary, depending on the actual site conditions.

The excavation of the buildings to subgrade have not been included in this cost estimate. It would be more appropriate to include these costs in the building costs.

../6

KOERS & ASSOCIATES ENGINEERING LTD.



February 7, 2025
File: 2460-02

District of Ucluelet
Mr. John Towgood

Other non-civil servicing development costs like environmental mitigation and unforeseen agency requirements have not been included. Other assumptions are also noted on the estimates for your reference.

RECOMMENDATIONS

Following the review and assessment of the attached cost estimates, we recommend that further design and investigation work be undertaken to further refine project costs. Future assignments that the owner should consider include the following items:

- A detailed topographic survey of the site and along Matterson Drive and Bay Street where offsite works are proposed.
- A comprehensive geotechnical assessment of the proposed development area.
- Advancing the conceptual design to a pre-design or feasibility level to enable discussion and consultation with the required utility companies.
- Retain an Architect to advance the building designs.

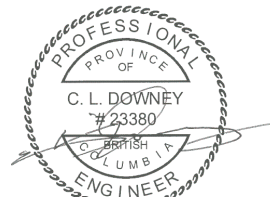
We trust this is the information you require. Please call if you have any questions.

Yours truly,

KOERS & ASSOCIATES ENGINEERING LTD.



Richard Cave, ASCT
Project Technologist



Chris Downey, P.Eng.
Project Manager

Enclosures
Permit to Practice Number 1001658

KOERS & ASSOCIATES ENGINEERING LTD.



CONCEPTUAL SERVICING DESIGN COST ESTIMATE - CLASS D (+/- 50%)
District of Ucluelet
WATER TOWER DEVELOPMENT
Proposed Road and Detention Pond



Date: 3-Feb-25
Revised:

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT RATE	EXTENSION
1.0	GENERAL				
1.1	General Requirements	LS	1	\$60,000	\$60,000
Subtotal General					\$60,000
2.0	CLEARING, EXCAVATION AND FILLING				
2.1	Clearing and grubbing	ha	0.31	\$50,000	\$15,500
2.2	Stripping of overburden, haul off-site (assume 300mm)	m3	930	\$30	\$27,900
2.3	Bulk rock excavation	m3	2600	\$300	\$780,000
2.4	Sanitary and Storm trench rock excavation	m3	1100	\$300	\$330,000
2.5	Watermain and Utilities trench excavation	m3	400	\$300	\$120,000
2.6	Embankment fill placement - (assume reuse of rock excavation)	m3	1100	\$20	\$22,000
2.7	Haul off-site excess rock (assumes 30% swell)	m3	2300	\$30	\$69,000
2.8	Segmental Retaining Wall (Lock Block or Similar)	m2 of face	80	\$600	\$48,000
Subtotal Clearing Excavation and Filling					\$1,412,400
3.0	WATERMAINS				
3.1	Tie-in to existing main at Water Tower Site	LS	1	\$6,000	\$6,000
3.2	150mm dia. PVC Domestic Supply Main to Development Site	lm	215	\$240	\$51,600
3.3	200mm dia. PVC Fire Supply to Development Site c/w fittings and import backfill	lm	90	\$260	\$23,400
3.4	Fire Hydrants c/w lead and connect to existing WM	each	1	\$8,000	\$8,000
3.4	Fire Hydrants c/w lead	each	1	\$6,500	\$6,500
	Service Connections (38-50mm) c/w Meter Box and Setter	each	2	\$2,000	\$4,000
3.5	38-50mm Servicing Pipe	lm	20	\$205	\$4,100
Subtotal Watermains					\$103,600
4.0	SANITARY SEWERS				
4.1	200mm dia. PVC (less than 3m deep)	lm	120	\$275	\$33,000
4.2	200mm dia. PVC (less than 3m -5.5m deep)	lm	90	\$335	\$30,150
4.3	Manholes, 1050mm dia. (less than 3m deep)	each	2	\$5,000	\$10,000
	Manholes, 1050mm dia. (less than 3-5.5m deep)	each	2	\$7,000	\$14,000
4.3	Service Connections (150 c/w wye and inspection chamber)	each	2	\$900	\$1,800
4.4	150mm dia. Service pipe	lm	25	\$235	\$5,875
Subtotal Sanitary Sewers					\$94,825
5.0	STORM SEWERS AND DRAINAGE				
5.1	250 - 300mm dia. PVC (3m - 5.5 m deep)	lm	45	\$390	\$17,550
5.2	375- 450mm dia. PVC (less than 3m deep)	lm	155	\$400	\$62,000
	375- 450mm dia. PVC (3-5.5m depth)	lm	45	\$450	\$20,250
5.3	Manholes, 1050mm dia. (less than 3m deep)	each	4	\$5,000	\$20,000
	Manholes, 1050mm dia. (less than 3-5.5m deep)	each	1	\$7,000	\$7,000
5.3	Headwalls	each	3	\$2,000	\$8,000
5.4	Oil/Grit Separator	each	1	\$20,000	\$20,000
5.4	Catch Basins	each	5	\$5,200	\$26,000
5.5	Service Connections c/w wye and inspection chamber	each	2	\$900	\$1,800
5.6	150-200mm dia. service pipe c/w import backfill	lm	70	\$275	\$19,250
5.7	100mm dia. H/T/C drains	each	4	\$1,100	\$4,400
Subtotal Storm Sewers and Drainage					\$206,250

6.0	DETENTION POND +/- 200-250 m3 of storage				
6.1	Sripping (haul away)	m3	130	\$30	\$3,900
6.2	Excavation (haul away)	m3	475	\$30	\$14,250
6.3	Pond Lining (assume clay/hardpan etc. 300mm thick)	m2	350	\$20	\$7,000
6.4	Outlet headwall, pipe and Control Structure	LS	1	\$15,000	\$15,000
6.5	375mm dia. PVC c/w import backfill	lm	25	\$400	\$10,000
6.6	Topsoil / Seed	m2	450	\$50	\$22,500
6.7	Miscellaneous	LS	1	\$5,000	\$5,000
Subtotal Detention Pond					\$77,650
7.0	ROAD WORKS				
7.1	Subbase Gravel, 200mm thick	m2	1800	\$16	\$28,800
7.2	Base Gravel, 100mm thick	m2	1600	\$15	\$24,000
7.3	Asphalt, 50mm	m2	1460	\$75	\$109,500
7.4	Concrete Curb and Gutter /w base prep.	lm	175	\$175	\$30,625
7.5	Sidewalk (1.5m wide /w base prep.)	lm	175	\$300	\$52,500
Subtotal Road Works					\$245,425
8.0	ELECTRICAL AND COMMUNICATIONS				
8.1	Hydro/Tel/Cable install (3 phase power)	lm	180	\$320	\$57,600
8.2	Utility Costs and Design Fees				TBD
8.3	Street lighting (ornamental light, base and install)	each	4	\$8,700	\$34,800
Subtotal Electrical and Communications					\$92,400
9.0	MISCELLANEOUS				
9.1	Signs	each	3	\$1,100	\$3,300
9.2	Road Markings	LS	1	\$2,000	\$2,000
9.3	Top Soil and seed	m2	200	\$50	\$10,000
Subtotal Miscellaneous					\$15,300
Subtotal					\$2,307,850
ENGINEERING (15%)					\$346,178
Subtotal					\$2,654,028
CLASS D PROJECT CONTINGENCY (+ 50%)					\$1,327,014
TOTAL (Excluding GST)					\$3,981,041

Notes: 1.) This cost estimate was prepared by Koers & Associates Engineering Ltd. in accordance with the general terms of our contract with the client. The material in it reflects the best judgment of Koers & Associates in light of the information available to it at the time of preparation and the conditions noted in the service agreement apply herein. Any use which a Third Party makes of this estimate, or any reliance on decisions to be made upon it, are the responsibility of such parties. Koers & Associates accepts no responsibility for any damages, if suffered as a result of the decision made or actions based on this estimate.

2.) **This is a Class D Estimate** - A Class D estimate ($\pm 50\%$) is an estimate which, due to little or no site information, indicates the approximate magnitude of cost of the proposed project, based on the client's broad requirements. This overall cost estimate may be derived from lump sum or unit costs for a similar project. It may be used in developing long term capital plans and for preliminary discussion of proposed capital projects

3) This estimate is based on the scope of work available at the time of the estimate. Items not included in this estimate are:

- environmental control measures
- additional or unforeseen agency requirements
- material quantities could vary significantly depending on site conditions encountered.
- geotechnical, traffic, or electrical engineering input
- material testing, or legal survey services
- permitting fees

4) Telus, BC Hydro, Shaw Cable, and Fortis BC review, approval and installation fees are not included. Further design work, review and discussion with these agencies is required to determine costs.

CONCEPTUAL SERVICING DESIGN COST ESTIMATE - CLASS D (+/- 50%)
District of Ucluelet
WATER TOWER DEVELOPMENT
Lot A Development Site - Clearing, Excavation and Rough Grading



Date: 3-Feb-25

Revised:

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT RATE	EXTENSION
1.0	GENERAL				
1.1	General Requirements	LS	1	\$40,000	\$40,000
Subtotal General					\$40,000
2.0	CLEARING, EXCAVATION AND FILLING				
2.1	Clearing and grubbing	ha	0.53	\$50,000	\$26,500
2.2	Stripping of overburden, haul off-site (assume 300mm)	m3	1600	\$30	\$48,000
2.3	Bulk rock excavation	m3	1500	\$300	\$450,000
2.4	Sanitary & Storm trench rock pre-blast	m3	200	\$275	\$55,000
2.5	Water & Utilities trench Rock pre-blast	m3	110	\$275	\$30,250
2.6	Embankment Fill placement - (assume reuse of rock excavation)	m3	2050	\$20	\$41,000
2.7	Haul off-site excess rock (assumes 30% swell)	m3	0	\$30	\$0
2.8	Rough Grade Site	m2	3700	\$10	\$37,000
Subtotal Clearing Excavation and Filling					\$687,750
Subtotal					\$727,750
ENGINEERING (15%)					\$109,163
Subtotal					\$836,913
CLASS D PROJECT CONTINGENCY (+ 50%)					\$418,456
TOTAL (Excluding GST)					\$1,255,369

- Notes:
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 - material quantities could vary significantly depending on site conditions encountered.
 - geotechnical, traffic, or electrical engineering input
 - material testing, or legal survey services
 - permitting fees
 - 4) Telus, BC Hydro, Shaw Cable, and Fortis BC review, approval and installation fees are not included. Further design work, review and discussion with these agencies is required to determine costs.

CONCEPTUAL SERVICING DESIGN COST ESTIMATE - CLASS D (+/- 50%)
District of Ucluelet
WATER TOWER DEVELOPMENT
Lot B Development Site - Clearing, Excavation and Rough Grading



Date: 3-Feb-25

Revised:

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT RATE	EXTENSION
1.0	GENERAL				
1.1	General Requirements	LS	1	\$40,000	\$40,000
Subtotal General					\$40,000
2.0	CLEARING, EXCAVATION AND FILLING				
2.1	Clearing and grubbing	ha	0.46	\$50,000	\$23,000
2.2	Stripping of overburden, haul off-site (assume 300mm)	m3	1400	\$30	\$42,000
2.3	Bulk rock excavation	m3	2300	\$300	\$690,000
2.4	Sanitary & Storm trench rock pre-blast	m3	410	\$275	\$112,750
2.5	Water & Utilities trench Rock pre-blast	m3	125	\$275	\$34,375
2.6	Embankment Fill placement - (assume reuse of rock excavation)	m3	500	\$20	\$10,000
2.7	Haul off-site excess rock (assumes 30% swell)	m3	2400	\$30	\$72,000
2.8	Rough Grade Site	m2	2700	\$10	\$27,000
Subtotal Clearing Excavation and Filling					\$1,011,125
Subtotal					\$1,051,125
ENGINEERING (15%)					\$157,669
Subtotal					\$1,208,794
CLASS D PROJECT CONTINGENCY (+ 50%)					\$604,397
TOTAL (Excluding GST)					\$1,813,191

- Notes:
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 - material quantities could vary significantly depending on site conditions encountered.
 - geotechnical, traffic, or electrical engineering input
 - material testing, or legal survey services
 - permitting fees
 - 4) Telus, BC Hydro, Shaw Cable, and Fortis BC review, approval and installation fees are not included. Further design work, review and discussion with these agencies is required to determine costs.

CONCEPTUAL SERVICING DESIGN COST ESTIMATE - CLASS D (+/- 50%)
District of Ucluelet
WATER TOWER DEVELOPMENT
Offsite Storm and Sanitary Sewers and Domestic Water Supply Main



Date: 3-Feb-25

Revised:

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT RATE	EXTENSION
1.0	GENERAL				
1.1	General Requirements	LS	1	\$15,000	\$15,000
1.2	Traffic Control	LS	1	\$7,000	\$7,000
1.3	Locates	each	10	\$1,000	\$10,000
Subtotal General					\$32,000
2.0	WATERMAINS				
2.1	Tie-in to existing watermain south of the existing check valve on Matterson Drive (Pressure Zone 65)	LS	1	\$8,000	\$8,000
2.2	150mm dia. PVC Domestic Supply Main to Access Road	lm	50	\$260	\$13,000
2.3	Pavement Restoration (assume 1.5m wide)	lm	1	\$8,000	\$8,000
Subtotal Watermains					\$29,000
3.0	SANITARY SEWERS				
3.1	200mm dia. PVC c/w import backfill	lm	65	\$300	\$19,500
3.2	Manholes, 1050mm dia.	each	1	\$6,000	\$6,000
3.3	Tie-in to Existing Manhole on Bay Street	LS	1	\$5,000	\$5,000
3.4	Pavement Restoration (assume 1.5m wide)	lm	65	\$200	\$13,000
Subtotal Sanitary Sewers					\$43,500
4.0	STORM SEWERS AND DRAINAGE				
4.1	600mm dia. HDPE c/w import backfill	lm	80	\$700.00	\$56,000
4.2	Tie-in to Existing 650 and 525 storm sewers	each	2	\$5,000.00	\$10,000
4.3	Manholes, 1200mm dia.	each	1	\$7,500.00	\$7,500
4.4	Pavement Restoration (assume 2m wide)	lm	40	\$250.00	\$10,000
Subtotal Storm Sewers and Drainage					\$83,500
Subtotal					\$188,000
ENGINEERING (15%)					\$28,200
Subtotal					\$216,200
CLASS D PROJECT CONTINGENCY (+ 50%)					\$108,100
TOTAL (Excluding GST)					\$324,300

- Notes:
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 - additional or unforeseen agency requirements
 - material quantities could vary significantly depending on site conditions encountered.
 - geotechnical, traffic, or electrical engineering input
 - material testing, or legal survey services
 - permitting fees

CONCEPTUAL SERVICING DESIGN COST ESTIMATE - CLASS D (+/- 50%)
District of Ucluelet
WATER TOWER DEVELOPMENT
Fire Lane (If Required)- Clearing, Excavation and Rough Grading



Date: 3-Feb-25

Revised:

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT RATE	EXTENSION
1.0	GENERAL				
1.1	General Requirements	LS	1	\$40,000	\$40,000
Subtotal General					\$40,000
2.0	CLEARING, EXCAVATION AND FILLING				
2.1	Clearing and grubbing	ha	0.03	\$50,000	\$1,600
2.2	Stripping of overburden, haul off-site (assume 300mm)	m3	100	\$30	\$3,000
2.3	Bulk rock excavation	m3	560	\$300	\$168,000
2.4	Segmental Retaining Wall (Allan Block or Similar)	m2 of Face	30	\$350	\$10,500
2.5	Haul off-site excess rock (assumes 30% swell)	m3	720	\$30	\$21,600
2.6	Rough Grade Site	m2	320	\$10	\$3,200
Subtotal Clearing Excavation and Filling					\$207,900
Subtotal					\$247,900
ENGINEERING (15%)					\$37,185
Subtotal					\$285,085
CLASS D PROJECT CONTINGENCY (+ 50%)					\$142,543
TOTAL (Excluding GST)					\$427,628

- Notes:
- 1.) This cost estimate was prepared by Koers & Associates Engineering Ltd. in accordance with the general terms of our contract with the client. The material in it reflects the best judgment of Koers & Associates in light of the information available to it at the time of preparation and the conditions noted in the service agreement apply herein. Any use which a Third Party makes of this estimate, or any reliance on decisions to be made upon it, are the responsibility of such parties. Koers & Associates accepts no responsibility for any damages, if suffered as a result of the decision made or actions based on this estimate.
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 - 3) This estimate is based on the scope of work available at the time of the estimate. Items not included in this estimate are:
 - environmental control measures
 - additional or unforeseen agency requirements
 - material quantities could vary significantly depending on site conditions encountered.
 - geotechnical, traffic, or electrical engineering input
 - material testing, or legal survey services
 - permitting fees
 - 4) Telus, BC Hydro, Shaw Cable, and Fortis BC review, approval and installation fees are not included. Further design work, review and discussion with these agencies is required to determine costs.

NOT FOR CONSTRUCTION

RECORD OF REVISIONS		RECORD OF ISSUE	
REV	DATE	BY	DESCRIPTION

RECORD OF ISSUE	
ISS	DATE

SEAL	
DATE	DESCRIPTION

PERMIT TO PRACTICE No. 1001658
PROJECT No. 2460
DRAWN RC
DESIGNED RC
CHECKED CD
APPROVED CD
DATE NOV 2024
SCALE 1:500
CLIENT



UTILITIES LEGEND

EXISTING	DESCRIPTION	PROPOSED	DESCRIPTION
	WATERMAIN (SIZE NOTED)		W 200P
	AIR VALVE		A 200P
	FIRE HYDRANT (SIZE NOTED)		S 200P
	SANITARY SEWER (SIZE NOTED)		S 200P
	STORM DRAIN (SIZE NOTED)		D 200P
	STORM DRAIN MANHOLE (SIZE NOTED)		M 200P
	CATCH BASIN - TYPE 2		C 200P
	DITCH/SWALE		D/S 200P
	1/2 HYDRO/TEL./CABLE		H/T/C 200P
	STREET LIGHT		SL 200P

SURFACE FEATURES LEGEND

EXISTING	DESCRIPTION	PROPOSED	DESCRIPTION
	EDGE OF PAVEMENT		EP
	NON-MOUNTABLE CURB		NC
	TOP OF SLOPE		TS
	RETAINING WALL		RW
	FINISHED GROUND		FG
	GRADE BREAK		GB
	FILL SLOPE		FS
	CUT SLOPE		CS

- NOTES**
- THIS CONCEPTUAL DESIGN IS FOR COST ESTIMATING PURPOSES ONLY. THE EXISTING AND PROPOSED UTILITIES SHOWN ARE APPROXIMATE. THE LOCATION OF UTILITIES SHOWN ARE APPROXIMATE AND SHOULD BE CONFIRMED BY FIELD SURVEY. THE ACCURACY OF THE CONTOURS IS UNKNOWN.
 - ANY PROPOSED PARK SIZES IS APPROXIMATE AND IS TO BE CONFIRMED DURING DETAILED DESIGN.
 - THE EXTENTS OF CUT AND FILL SLOPES IS APPROXIMATE. IT IS ASSUMED THAT THE BUILDINGS ON LOTS A, B AND C WILL BE BUILT TO THE FIRST FLOOR AND THE FILL SLOPES ARE ASSUMED TO BE 1:1. CUT SLOPES ARE ASSUMED TO BE AT A 1:1. SLOPE IN ROCK FILL SLOPES ARE ASSUMED TO BE 1:1.
 - THE ACCESS ROAD IS SHOWN WITH A PAVED WIDTH OF 7.0m, WITH CONCRETE CURB AND 1.5m ROAD SIDE SHOULDER WITH CURB AND 0.75m ROAD SIDE SHOULDER.
 - CONSTRUCT NEW 150P DOMESTIC WATER SUPPLY MAIN.
 - CONSTRUCT NEW 200P STORM WATER MAIN WITH 150P MANHOLE.
 - CONSTRUCT NEW 200P SANITARY MAIN WITH 150P MANHOLE.

WATER TOWER SITE – UCLUELET

TO: District of Ucluelet

FROM: M’akola Development Services

DATE: February 6, 2025

SUBJECT: High Level Proforma Analysis

PURPOSE

The District of Ucluelet has engaged M’akola Development Services to conduct a high level feasibility brief to assess the viability of an affordable housing development project at the Water Tower site, a District owned parcel of land located off Matterson Drive. A high-level proforma for the proposed development has been prepared under two funding scenarios: BC Housing’s [Community Housing Fund](#) and [BC Builds](#). It should be noted that affordability levels range across these two programs.

ASSUMPTIONS

Both rental scenarios assume the following project data based on preliminary site analysis and a Class D Cost Estimate for the road and civil works. Each scenario presents a single building and assumes the full cost of the road are carried by that building’s budget. It is worth noting that with District contribution or concurrent projects, the cost of the road could be reduced in each project budget. These are high-level numbers and will be further refined as the design of this project progresses. Unit count, mix and building form and size are not based on architectural and are subject to change.

The following page demonstrate for the purposes of consideration only the potential financial viability of up to two 50 unit buildings under various potential funding programs.

ESTIMATED UNIT COUNT

	Building
Studio	16
1 Bedroom	16
2 Bedroom	15
3 Bedroom	3
Total	50

ESTIMATED OPERATING EXPENSES

	Monthly	Annual
Total	\$34,375	\$412,500

ESTIMATED PROJECT COSTS PER BUILDING

	Cost Per SQFT	Cost
Hard Costs	\$ 500.00	\$ 22,000,000
Road Costs	\$ 42.16	\$ 1,854,884
Soft Costs	\$ 180.00	\$ 7,920,000
Total	\$ 722.16	\$ 29,734,884

HIGH LEVEL FINANCIAL MODELLING

BC BUILDS – One Building

BC Builds is a housing program targeting increased housing supply for middle-income households. Homes built under the program will have at least 20% of units with rents that are 20% below market rate. This affordability is achieved through a per unit grant of up to \$225,000 and low-interest financing currently set at 4.30% with a 50-year amortization and 1.1 DSCR. BC Builds seeks to work with proponents to deliver Building Permits within 18 months of project initiation with BC Builds.

The financial modelling for this building has assumed market rental rates are based on the Tofino Headwaters Development posted rents. It is worth noting that these rents are in alignment with the operating agreements for this building and may not be what is required to be charged or what a market rent appraisal would determine market to be. BC Builds would require a market rent appraisal to be completed and rents to be set in line with that appraisal.

Rental Rates			Unit Types			
	Market	20% Below Market		Market	Affordable	Total
Studio	\$1,150	\$920	Studio	13	3	16
1 Bedroom	\$1,550	\$1,240	1 Bedroom	12	4	16
2 Bedroom	\$1,950	\$1,560	2 Bedroom	13	2	15
3 Bedroom	\$2,300	\$1,840	3 Bedroom	2	1	3

Per the above assumptions, Building 1, using THC Market Rents is likely not feasible under the BC Builds program.

The model above assumes that the project carries the cost of the road, should that cost be reduced or eliminated it is likely that the project is viable under a BC Builds scenario.

COMMUNITY HOUSING FUND – One Building

The Community Housing Fund is anticipated to open in Spring 2025. This fund is expected to be similar to other funds and include forgivable and repayable mortgages along with a subsidy to achieve a rental mix of 20% of units at deep subsidy rates, 50% rent-geared to income (these rents would be based on an individual tenants income – the modelled amount is an estimate) and 30% near market (using THC posted market rates).

The interest rate assumed is 5.0% with a 35 year amortization and 1.1 DSCR. CHF 2024 assumptions were used in this financial model. It is possible there will be a change to the program. The financial modelling for this building has assumed market rental rates based off the assumed Ucluelet market rental rates, BC Housing published shelter rates, and the BC Housing 2023 Housing Income Limits (HILs) Port Alberni region given there is no data available for Ucluelet.

Rental Rates				Unit Types				
	Market	Shelter	RGI		Market	Shelter	RGI	TOTAL
Studio	\$1,150	\$500	\$586	Studio	5	3	8	16
1 Bedroom	\$1,550	\$500	\$743	1 Bedroom	4	4	8	16
2 Bedroom	\$1,950	\$695	\$1,041	2 Bedroom	5	2	8	15
3 Bedroom	\$2,300	\$717	\$1,216	3 Bedroom	1	1	1	3

Given CHF has a capital contribution and a subsidy from the province as part of the program, per the above assumptions, a 50 unit CHF Project, could be feasible (as the program provides an operating subsidy from the Province of BC as part of the Contribution). In Makola Development Services’ experience, the likely subsidy required based on this early modelling is in line when compared to other successful CHF projects.

Two Buildings

Using the same assumptions, a model was completed for two buildings to be funded under BC Builds, CHF or as a Joint Project (this includes 100 units and the access road).

The increase density could lead to efficiencies in the project costs and make the larger project more feasible, however there would need to be further information and modelling done to evaluate this in detail under a BC Builds only scenario.

RECOMMENDATION & CONSIDERATIONS

Overall Considerations:

1. BC Housing Approval for Road Construction Costs

- The cost of the road is a barrier regardless of the Option selected as BC Housing typically likes to see sites that are fully serviced and accessible. The cost of the construction of the road being fully paid for by subsidized housing could be seen as a barrier to project-readiness.
- Council should consider options related to ways to remove this barrier.

2. Absorption Risk & Market Rate Influences

- Given Ucluelet is a small town with a population of approximately 2,000 to 2,500 full time residents, the rental absorption of approximately 100 units in one location is a risk to consider. The addition of these two buildings could see an approximate 5% increase in housing units in the District and an even larger increase to the rental stock. The operator may see difficulties in renting out all these units within a reasonable lease up period. Additionally, this large influx of rental units may influence the overall Ucluelet rental rates, driving rates down across the market. This is likely to be more of an impact under the BC Build program, where rents are at the low end of market.
- Council should consider, if a BC Builds style option is pursued to look at an absorption study

as part of the project due diligence.

3. Securing a Housing Operator

- While it is likely that the BC Builds units could be absorbed without an operating subsidy, it may be seen as a risk to a non-profit, posing challenges in securing a housing operator for the building.
- Council should consider directing staff to issue an Expression of Interest for Operators to advance the project and be the applicant to BC Housing.

4. Design is limited

- As noted, the above assumptions are based on concepts and very high level estimates. Further development of the design and site is required to provide more clarity on the project feasibility.
- Council should consider directing staff to engage a team to develop the project further with the goal of targeting a funding program as available.

Recommendations:

Given the absorption risk, another financial analysis is recommended to be completed to understand the viability of the market and near-market rents and Ucluelet's ability to absorb this number of units in the community. In addition, the construction of the road and civil costs associated burdens the project. Multiple phases or District contribution could be considered to alleviate this. Fully or partially funding the construction of the road will make the project more competitive in receiving a successful approval of funding.

Although this analysis is based off preliminary data, and unit numbers and costing may change, this project might be a strong fit for the Community Housing Fund. To be competitive, it is recommended to engage a consultant team and progress design as much as possible before the funding call closes this year.

From: [Randy Oliwa](#)
To: [Info Ucluelet](#); [Community Input Mailbox](#)
Cc: [Marilyn McEwen \(Ucluelet Mayor\)](#); [Shawn Anderson \(Ucluelet Council\)](#); [Jennifer Hoar \(Ucluelet Council\)](#); [Ian Kennington \(Ucluelet Council\)](#); [Mark Maftai \(Ucluelet Council\)](#)
Subject: R Oliwa Community Input RE: budget 2025
Date: February 21, 2025 1:23:49 PM
Attachments: [Budget Input letter Mayor and Council District of Ucluelet.docx](#)

[External]

Hello,

I have attached my community input regarding the 2025 budget process. I have spoken with many residents and local business owners regarding last year's substantial tax increase. I appreciate your efforts and understand the position you are in, but our economy has rapidly deteriorated, and it is not too late to pivot. Your goal of keeping the tax rate "below 10%" must be met with resistance from the public. The 10% goal is misleading, as it represents just the municipal tax rate, as you are aware that many other taxing authorities "ADD" to your projection. It should be further recognized that the business class community is subject to a three-time multiplier to your goal, lowering the business class tax rate might be an option, to give your employers a reprieve.

I'm looking forward to hearing your feedback.

Sincerely,

Randy Oliwa


Ucluelet BC


Randy Oliwa
[REDACTED]

Ucluelet BC
[REDACTED]

February 10, 2025

Mayor's and Council
District of Ucluelet

Dear Mayor and Council,

I am writing to express my concerns regarding the current budgeting process and projected 9% municipal residential tax increase. As a three-term municipal councillor, I find it unfathomable that the council is not thoroughly examining the budget line by line. The process appears rushed and lacks the necessary detail critical for responsible governance. The budget is the primary tool at your disposal, where the council has ultimate authority to control spending. Tax increases on residents and businesses (3 x residential) are a direct result of local government decisions regarding expenditure. By controlling spending, you will create the community you all strive to achieve.

Concerns About Current Budgeting Practices

I have observed a concerning trend where specific critiques regarding the budget have been minimal. Discussions seem to revolve primarily around the 3 options for a proposed additional tax increase, which would further burden our residents/businesses under the guise of “building up reserves.” While the intention to create a reserve fund is commendable, it is important to note that this council is not the first to consider such measures. It appears that the administration is leading these discussions without adequate scrutiny from the council.

Let me outline two essential philosophies regarding municipal taxation:

1. **Current Fiscal Year Budgeting:** Taxes should be collected for the current fiscal year to meet the immediate needs of our community. These needs include providing clean drinking water, upgrading sewer systems, maintaining roads and sidewalks, and ensuring fire safety and emergency preparedness.
2. **Future Reserve Budgeting:** While it is prudent to collect additional taxes for future needs, these should be established as statutory reserves, controlled, and monitored by the mayor and council. This ensures that funds are allocated responsibly and effectively.

Retaining Control Over Reserves

The current budgeting process cedes too much control of reserves to the bureaucracy, undermining the council's authority. It is imperative that you retain oversight of these funds to ensure they are utilized according to their intended purpose. The council has the discretion to request detailed financial records. Although reserves are established under a bylaw, in many cases, the additional reserve tax dollars are physically held in the same accounts as general collections, often in a consolidated bank account.

To enhance accountability, consider implementing protective measures such as setting up independent specific bank accounts tied directly to the reserve taxes collected in that year and earmarked for their intended purpose, as established by bylaw.

The Purpose of Local Government

I would like to gently remind you that the primary role of local government is to address the immediate needs of our residents while planning. You are entrusted with ensuring that residents receive value for every tax dollar collected. Your primary responsibility is fiscal in nature, and the budget lies squarely at the feet of the mayor and council.

Recommendations for Improved Fiscal Management

As a long-time resident of 40 years, I urge the mayor and council to consider the following actions to pivot our approach to fiscal management and project prioritization:

1. **Prioritize Critical and Time-Sensitive Projects:** Direct staff to identify the most urgent projects that require funding, allowing the council to discuss interim funding to ensure that essential community needs are met without unnecessary delays.
2. **Pause Additional Taxation Initiatives:** Consider putting a hold on the proposed additional taxation for "reserve funds for future capital projects" for one year. This pause would provide relief for residents/businesses during these challenging economic times and allow us to reassess our financial strategies.
3. **Implement a Line-by-Line Budget Process:** I recommend that you establish additional budget meetings to facilitate a thorough line-by-line review of the budget. This process should focus on reducing all non-critical spending and pausing additional tax collection, justification of current administrative staffing levels compared to communities similar to Ucluelet, and cost savings within last years budget on projects carried forward from the prior years. For instance, if the pay-parking initiative can be paused, it would significantly contribute to our cost-cutting efforts.

A comprehensive review aimed at cutting and eliminating non-essential expenses will help identify the root causes of our increasing administrative and operating costs. By concentrating on core services, we can ensure that our community's essential needs are prioritized.

Conclusion

In conclusion, the economic outlook has changed rapidly since your budget process began. I trust you will consider these points carefully as you navigate the budget process. By taking these steps, we can ensure a thorough, responsible, and transparent budgeting process that effectively serves the residents/businesses of Ucluelet.

Thank you for your attention to this matter.

Sincerely,

Randy Oliwa
40- year Resident and 20-year Local Business Owner