STAFF REPORT

TO:	CHIEF ADMINISTRATIVE OFFICER
FROM:	BRIGID REYNOLDS, CONSULTING TOWN PLANNER
SUBJECT:	DVP2026-01/DP2026-01 – SLOPES PHASE 6
MEETING DATE:	FEBRUARY 24, 2026
SUBJECT PROPERTY:	REMAINDER LOT A, SECTION 6, RENFREW DISTRICT PLAN EPP103677 EXCEPT PART ON PLANS EPP104021 AND EPP109124 AND EPP138345 – P.I.D. 031-159-851

PURPOSE

The applicant is requesting a development permit pursuant to Watercourse and Streamside Protection Development Permit Area (DPA 1) and a variance to Section 6.11 of the Subdivision, Works and Services Bylaw No. 1082-2022 to increase the size of the Streamside Protection and Enhancement Area that may be permitted in a new lot.

BACKROUND

The applicant has applied to create 15 lots in phase 6 of Slopes subdivision of 1.57 ha (3.9 ac) in size. The property is zoned Suburban Residential (R-1) and the required minimum lot size is 600 m2. Lot coverage is 30%. Single family dwelling units with one attached or detached accessory dwelling unit are permitted in this zone. Proposed lots range in size from 684 m2 to 1353 m2.

A small creek (tributary to Beadnell Ck) flows through the proposed subdivision. The Cowichan Lake Salmonid Enhancement Society hatchery is located downstream on Beadnell Ck. The proposed subdivision layout has the creek flowing through five of the 15 proposed lots. Watercourse and Streamside Protection Development Permit Area (DPA 1)

The land has been cleared of mature vegetation many years ago, it is graded and the roadbed has been laid. A section 11 notification pursuant to the *Water Sustainability Act* was authorized by the

Province January 16, 2025 to install a road crossing culvert and storm drain culvert on this creek. This work was completed in the fall of 2025.

A Riparian Area Protection Regulation Assessment Report was prepared by Bob Crandall, dated 2025-04-03 and established a 10 m SPEA. Following acceptance of this report, the province identified deficiencies in the RAPR report. As a result, a Conditions and Impact Assessment (CIA) Report was prepared by Brittany Brooks, dated 2025-10-30 to address the deficiencies. The CIA report is necessary to establish restoration efforts of the disturbed area to meet regulatory requirements and support ecological recovery. The CIA contains a restoration plan for the SPEA, an area of 1921 m2.

The subdivision application has been accepted but the preliminary review letter has not been issued yet, pending the outcome of Council's decision.

DISCUSSION

The applicant submitted their subdivision application, and the need for variance came to light. Section 6.11 of Bylaw 1082 requires that the maximum permissible area of the SPEA is 25% of the lot area. The stream flows through the proposed subdivision affecting five lots, based on the layout as shown on Attachment 1. The applicant is requesting to increase the percentage of the lot that can be SPEA. The five affected lots and the percentage area of the SPEA ranges between 26 % to 34%. Table 1 also gives a detailed breakdown.

Table 1 – SPEA as a Percentage of the Lot

Lot #	Lot Size m2	SPEA Area m2	SPEA as % of lot	Lot Size < the SPEA m2	Building Envelope
1	1353	368	27	985	494
2	1093	314	29	779	383
13	1192	411	34	781	459
14	736	204	28	532	293
15	811	210	26	601	331

Riparian Areas Protection Regulation Section 10 (4) states *a proposed development that involves a subdivision of a parcel or strata lot does not meet the riparian protection standard if the subdivision would create (a) a parcel that has a developable area that is less than the allowable footprint for that parcel.*

The layout proposes to establish lots with developable areas that exceed the allowable footprint for that parcel. The sketch plan in Attachment 1 shows building envelopes for each of the five lots. This is also shown in table form, above. The building envelopes are large enough to accommodate the permitted use of a single family home but may be a challenge to include a detached ADU.

The SPEA is 10 m wide and is wider than the required setbacks - 7.5 front lot line / 4.5 rear lot line / 2.0 interior side / 3.0 exterior side. As a result, this layout has the potential that construction will take place directly adjacent to the SPEA. This can also create the potential for longer-term encroachments into the SPEA. It's also possible that owners may request a variance to move further away from the SPEA. Any future variance request can be reviewed by Council on its own merit.

CONCLUSION

Council could choose to not grant the variance and require each proposed lot to meet Section 6.11 of Bylaw No. 1082-2022 such that only a maximum of 25% of the proposed lot is SPEA. This would require a revised lot layout with the possibility that the applicant would lose one lot.

As noted above, there is sufficient developable area to accommodate a single-family dwelling and possible detached accessory dwelling. Council could choose to grant the variance but require an additional 2 m setback from the edge of the SPEA to minimize the potential for short- and long-term encroachment. This can be secured by a section 219 covenant.

Regardless of the variance decision, adherence to the CIA's restoration plan including the planting plan with the planting guide, species list, planting density, and budget is a proposed condition of the development permit. Additional proposed conditions include the installation of a split rail fence along the SPEA and the registration of a section 219 covenant prohibiting encroachment into the SPEA.

IMPLICATIONS

a. Financial:
Application fees are collected to cover the cost of processing this application.

b. Policy/Legislation:
The subject property is in the Watercourse and Streamside Protection Development Permit Area (DPA 1) pursuant to the Official Community Plan.

c. Strategic Priority:
N/A

d. Sustainability:
N/A

e. Communication:
As required by the Development Approval Procedures Bylaw No. 1109, notice of the application was sent to neighbours within 50 m of the subject property a minimum of 10 days prior to Council's consideration of the request. The notice was mailed out on February 12, 2025, and at the time of preparing the staff report no comments have been received.

f. Staffing Implication:
Processing this application is part of the Planning Department's regular duties.

Options

1) Approve both the development permit and development variance permit for this application.
2) Approve both the development permit and the development variance permit with additional requirements.
3) Approve the development permit only and deny the development variance permit.
4) Deny the development variance permit for this application.

Recommendation

The Contract Planner recommends Option 1, that Council

1. Approve DP2026-01 to permit development within Watercourse and Streamside Protection Development Permit Area (DPA 1) AND
2. Approve DVP2026-01 to vary Section 6.11 of the Subdivision, Works and Services Bylaw No. 1082-2022 to increase the size of the Streamside Protection and Enhancement Area within proposed lots 1, 2, 3, 14 & 15 that may be permitted in the proposed subdivision SD2025-01, as shown in Attachment 1 and subject to
    a. all works being consistent with the Conditions and Impact Assessment (CIA) Report prepared by Brittany Brooks, dated 2025-10-30, as shown in Attachment 2 including
        i. the replanting plan
        ii. submission of the landscape bond in the amount of $5,903.41
        iii. installation of a split rail fence along the SPEA as a condition of subdivision approval, and
        iv. registration of a watercourse protection section 219 covenant as a condition of subdivision approval.

Signed:

Brigid Reynolds

Brigid Reynolds RPP MCIP
Contract Planner

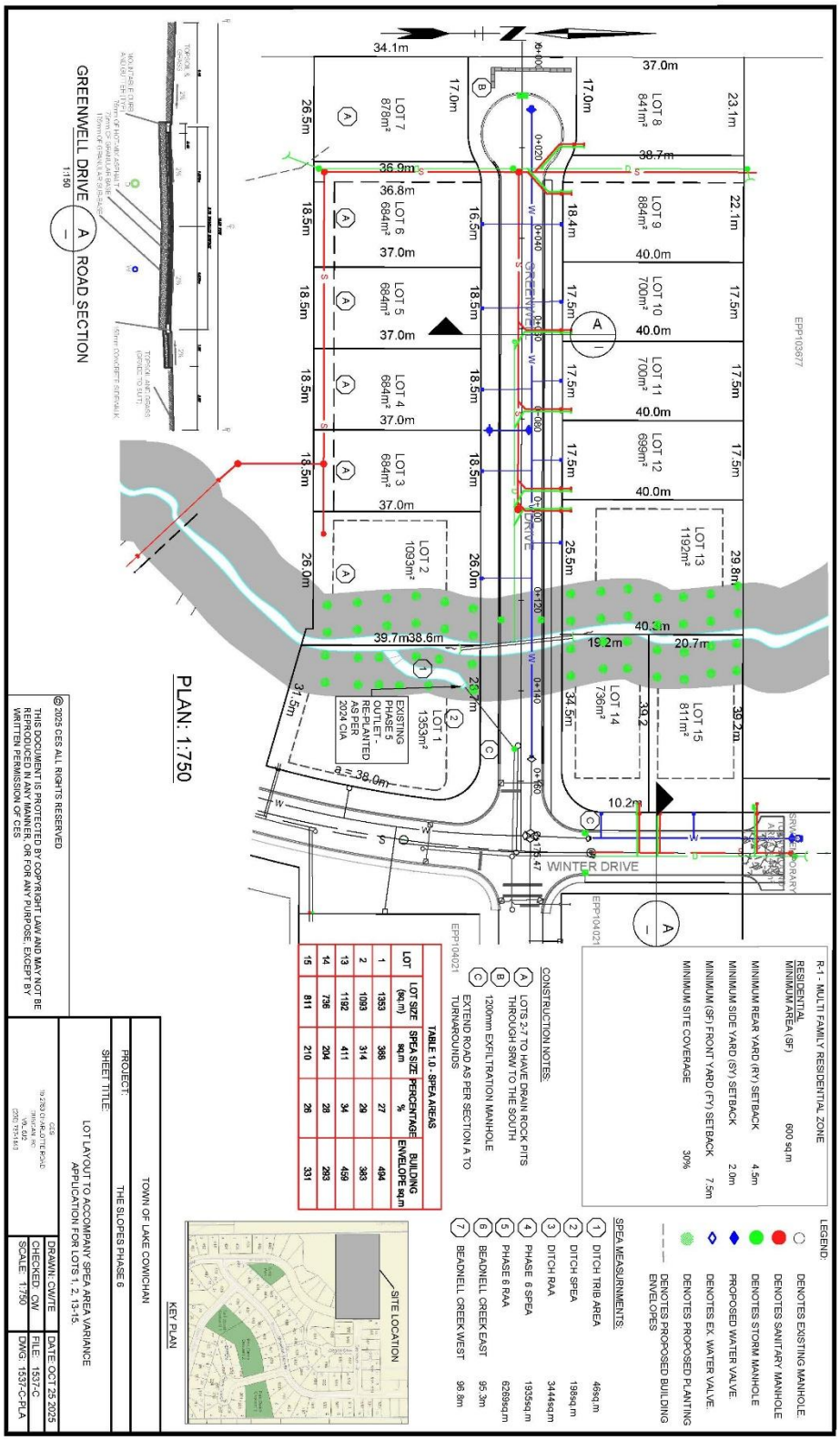
Concurrence:

John T

John Thomas
Chief Administrative Officer

ATTACHMENT 1

Proposed Subdivision Layout and Variance



ATTACHMENT 2
Conditions and Impact Assessment (CIA) Report
prepared by Brittany Brooks, dated 2025-10-30

CONDITIONS AND IMPACT ASSESSMENT

& RIPARIAN PLANTING PLAN

PART OF LOT A, SECTION 6, RENFREW DISTRICT, PLAN EPP103677, EXCEPT PARTS

IN PLANS EPP104021 AND EPP10.

By: Brittany Brooks - R.P. Bio, QEP, Bob Crandall AScT, QEP

October 30th, 2025

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1. Background & Site Context

The Slopes Development – Phase 6 is located on Greenwell Drive (PID 031-159-851). It was requested that a CIA and restoration plan be made for phase 6 to address previous moonscape activities and work within the SPEA and RAA. RAPR Submission #8805 for phase 5 was approved (December 14, 2024) and a CIA with Restoration Plan was provided August 17th, 2025. The Ministry of Water, Land, and Resource Stewardship reviewed the RAPR #9288 submission for phase 6. It was determined that this report is required to address contraventions that apply to the remaining lots per the Riparian Area Protection Regulation (RAPR). A bond is required for the replanting of riparian areas, like conditions in phase 5.

Historically, Habitat Officer Kevin Telfer and Peter D. Law, Senior Fisheries Biologist, visited the property in 2007 regarding the alteration of a series of braided channels passing through the property. Landowner Wayne Winter had altered the flow of the watercourses, which are connected to Beadnell Creek. Peter and Kevin informed Mr. Winter that he could no longer make any further stream changes, due to the new law, and he ceased activity. In 2011, invasive species such as Himalayan Blackberry and Scotch Broom dominated the grubbed land. In 2024, Mr. Winter enlisted Bob Crandall, QEP, to flag the SPEA lines and stake the stream boundaries as part of assessment #8805 and #9288. Following this, Mr. Winter cleared the land outside of the SPEA, but within the RAA, to prepare lots for future development.

Bob Crandall (QEP)submitted RAPR #9288. Key points from that submission include:

- Lot 1 contains the unnamed ditch tributary that was already restored and removed from the restoration calculation.

- Total restoration area in Lot 1, QEP measured to be 85 m² and is within the SPEA of Beadnell Creek.
- Disturbance was attributed to previous moon scaping and grading activities. Invasive species were reportedly removed during this process.
- Restoration was not proposed for the RAA due to the future development of Lots 1, 2, 13, 14, and 15; however, seeding of disturbed areas is recommended.
- Recommended actions: protect the SPEA from future urban encroachment and apply BC reclamation grass seed to stabilize the disturbed RAA.

Ministry and Local Government Review

Subsequent review revealed that the original CIA did not fully identify or assess the extent of riparian disturbances on site. Observations include:

- Significant tree clearing and vegetation removal (invasive species) occurred between 2006 and 2021 within the RAA of Beadnell Creek. Note: Mature tree clearing did take place prior to Ministry involvement in 2007.
- The CIA for the little storm water installation intrusion lacks a site-specific discussion of these prior to 2007 activities and does not address the ecological impacts of SPEA loss.

A letter dated July 30, 2024, from the Town to the QEP and developer accepted the report conditionally, stating: “The Town approved the CIA for the little storm water pipe intrusion area. In addition, will accept the report as presented, subject to the conditions outlined below: The identification and rectification of all RAPR contraventions."

Swordfern Environmental prepared this report to:

- Document negative impacts on the features, functions, and conditions of Beadnell Creek's 10m SPEA, and the unnamed ditch's 5 m SPEA.
- Address prior deficiencies & provide a comprehensive restoration plan.
- Support integration into a revised DP encompassing Phase 5 and Phase 6 works.

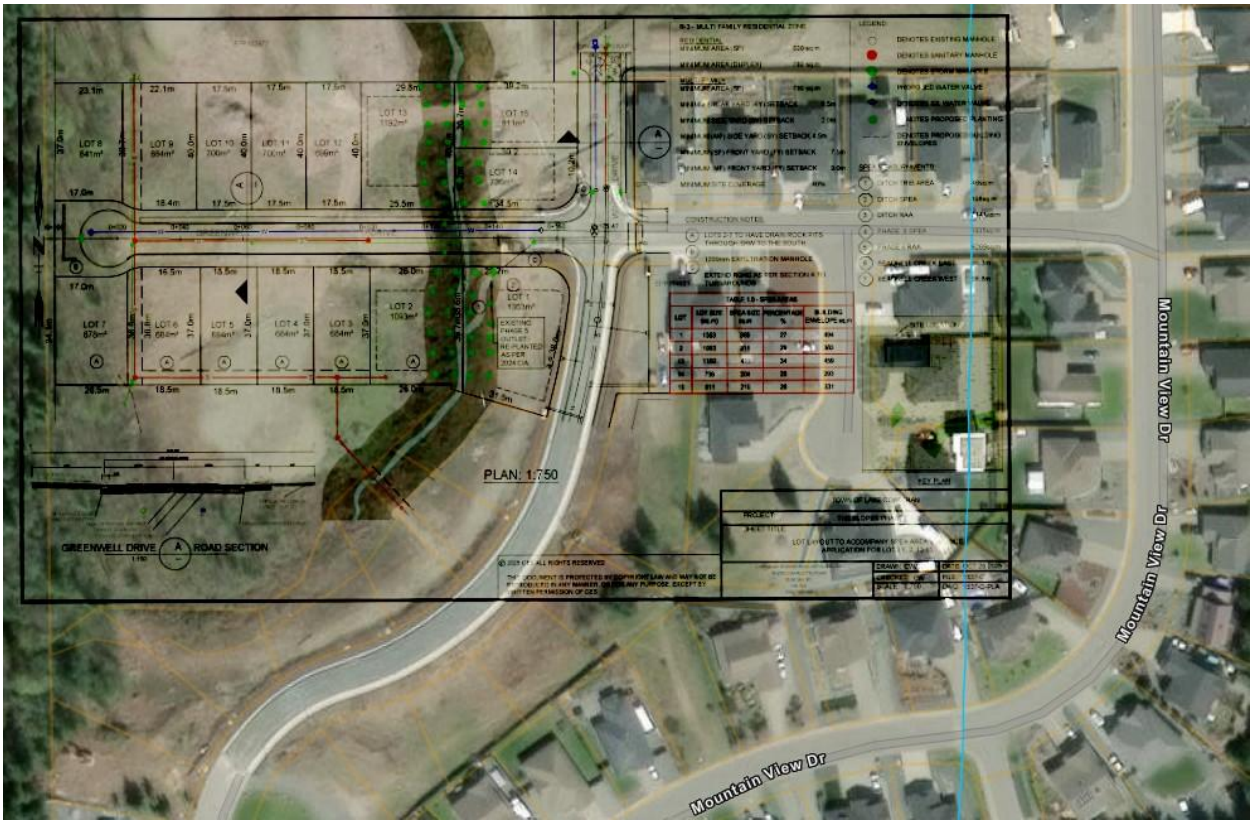

Figure 1. Aerial image of Phase VI

The subject parcel is legally described as follows: PROPOSED SUBDIVISION PLAN OF: PART OF LOT A, SECTION 6, RENFREW DISTRICT, PLAN EPP103677, EXCEPT PARTS IN PLANS EPP104021 AND EPP10.

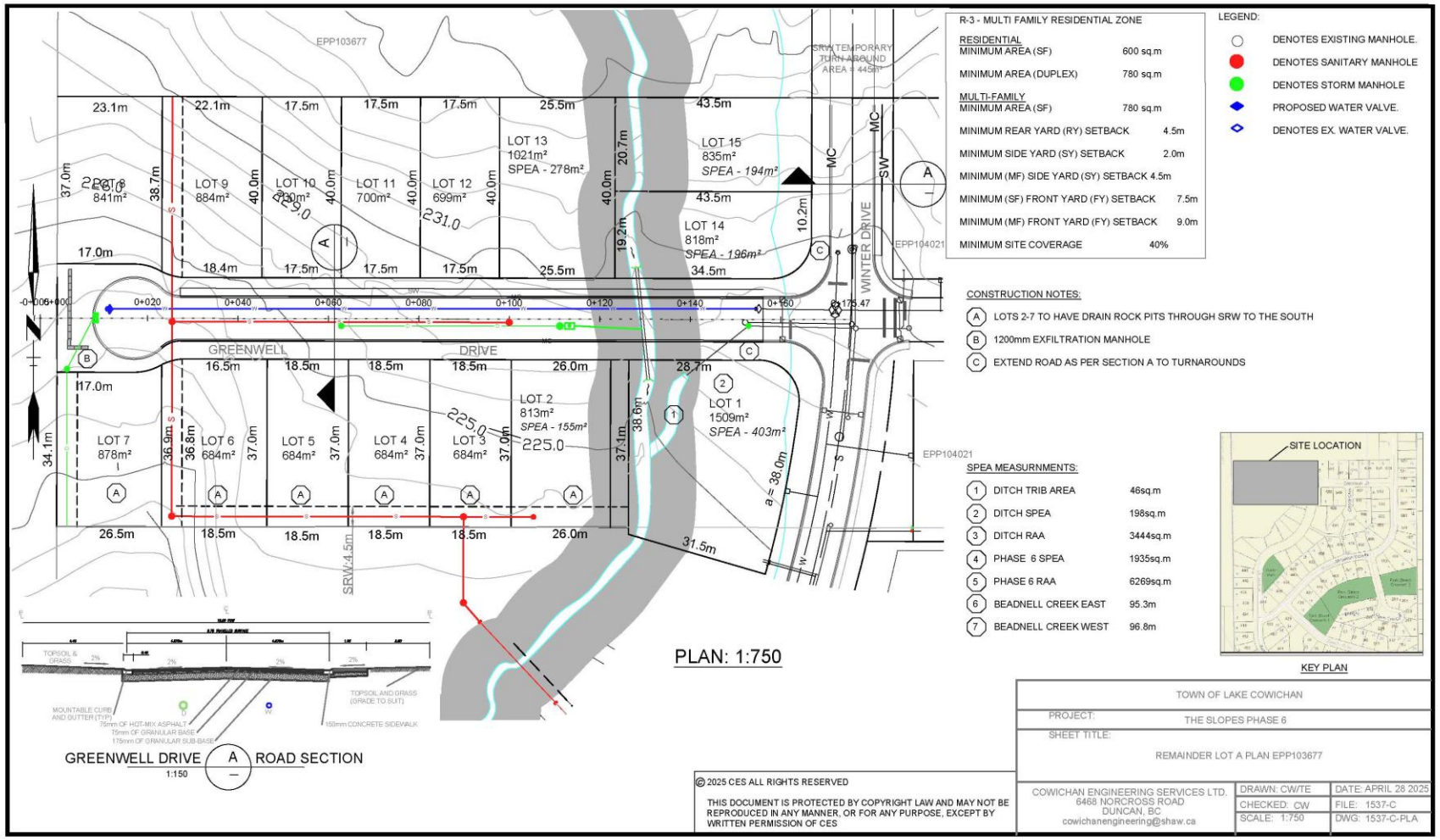

Figure 2. Proposed Subdivision Plan.

2. Regulatory Framework

2.1 Federal Legislation

Fisheries Act – Section 35 As of August 28, 2019:

- No person shall carry on any work or activity that results in the death of fish.
- No person shall carry on any work or activity that results in the harmful alteration, disruption or destruction (HADD) of fish habitat.

Fisheries Act – Section 36 Administered by Environment and Climate Change Canada:

- Prohibits the deposit of deleterious substances into waters frequented by fish unless authorized.

2.2 Provincial Legislation

Riparian Areas Protection Regulation (RAPR) Applies to residential, commercial, and industrial development within 30 m of a stream.

- Requires assessment by a QEP.
- Aims to protect stream functions, including large organic debris, bank stability, vegetative cover, food inputs, and pollution buffers.

2.3 Municipal Requirements

Official Community Plan (OCP) – Section 6.2 Designates riparian areas as Development Permit Areas.

- Requires a DP and supporting QEP report for work within 30 m of a watercourse.

3. Ecological Importance of Riparian Vegetation

Riparian vegetation for Beadnell Creek should support essential ecological functions such as:

- Temperature regulation through shade.
- Nutrient input via leaf litter and insect droppings.
- Habitat complexity through large woody debris.
- Bank stabilization and stormwater filtration.
- Wildlife habitat for birds, amphibians, reptiles, and small mammals.

Beadnell Creek is also the water source for the Cowichan Lake Salmonid Enhancement Society hatchery and a water source under a DFO water license, which raises Coho and chum salmon and supplies SD79 classrooms with salmon eggs.

Loss of riparian habitat leads to:

- Degraded fish habitat.
- Poor water quality and siltation (historical issues during the rainy season in the hatchery incubation trays.)
- Reduced species abundance – the creek runs dry or near dry in the summer.

Revegetation is the most effective strategy for improving degraded riparian zones and maintaining long-term ecological integrity.

4. Impact Assessment

- Tree clearing between 2018 and 2021 impacted 3444m² to the Beadnell Creek RAA.

- The disturbed 1921m² of the SPEA will be restored, not including the restored area of the unnamed ditch. The restoration is for the 10m SPEA only because future development is within the 30m RAA, but not within the 10m SPEA.
- Lot 1 has 85m² of restored area for the unnamed ditch that was addressed in RAPR #8805 CIA.
- Lot 3-12 does not have a SPEA and does not need restoration.
- The riparian length for segment 1(east side) 95.3m, the riparian length for segment 2(west side) is 96.8m.
- Total Riparian length for Phase VI restoration: 192.1m.
- The omission of historical impacts from the report may lead to non-compliance with RAPR; however, this CIA has been developed to document such impacts.
- Restoration efforts must address the full disturbed area to meet regulatory requirements and support ecological recovery.
- Meets Section 10(4) of the RAPR – there are no undue hardship lots in the Phase VI development.

5. Riparian Restoration Plan

5.1 Objectives

- Improve wildlife habitat and stream function.
- Stabilize soils and reduce erosion & Filter runoff and prevent sedimentation.

Rationale for Tree-Dominant Planting and 6×6 ft Spacing (RAPR Context)

- A tree-dominant planting approach with an approximate 6×6m spacing has been selected to optimize long-term ecological function, canopy development, and compliance with the objectives of the Riparian Areas Protection Regulation (RAPR) Technical Manual (2019).

Biophysical Rationale

- Field observations indicate that the restoration area already supports a diverse and well-established assemblage of native shrub and herbaceous species, including both riparian and early-successional taxa. These existing species provide effective groundcover, erosion control, and soil moisture retention, meeting the lower strata requirements for riparian resilience.

  Accordingly, restoration efforts are concentrated on establishing upper canopy tree species to accelerate vertical habitat structure, shade development, and long-term riparian function.

Ecological Objectives and Rationale

Canopy Closure and Shading Function

- Tree planting at 6×6m spacing promotes progressive canopy closure within 5–10 years, contributing to the provision of shade and regulation of microclimate—key parameters under RAPR Section 2(2)(b) for maintaining stream temperature and aquatic habitat quality.
- The density supports sufficient canopy overlap while allowing for healthy competition and natural self-thinning.

Bank and Slope Stabilization

- Deep-rooted tree species (e.g., *Thuja plicata*, *Alnus rubra*, *Pseudotsuga menziesii*) provide mechanical soil reinforcement and subsurface cohesion.
- Tree root matrices complement the fibrous root networks of existing shrubs (*Rubus parviflorus*, *Cornus sericea*, *Spiraea douglasii*), creating a multi-layered stabilization system consistent with RAPR's emphasis on "vegetative and structural integrity of the streambank."

Successional Balance and Biodiversity

- The addition of upper-story species ensures a balanced vertical stratification—herbaceous, shrub, and canopy layers—that reflects natural riparian succession.
- As the site already demonstrates strong lower-stratum cover, prioritizing trees prevents over-competition in the shrub layer while supporting habitat heterogeneity and long-term carbon sequestration.

Summary

This design approach recognizes the existing natural recruitment of shrub and herbaceous vegetation and strategically supplements the upper canopy to restore a self-sustaining, functionally diverse riparian community.

The spacing and species selection together fulfill RAPR restoration objectives for shade, bank stability, biodiversity, and long-term ecosystem integrity, aligning with the *Riparian Areas Protection Regulation Technical Manual* (Province of BC, 2019, Sections 4.2–4.4).

5.2 Restoration Area Calculation:

DESCRIPTION	CALCULATION	AREA
Invasive Species Removal	riparian length (192.1M - both segments) x 5m (avg)	960.5m^2
RAA	192.1m (both segments) x 30 m RAA	6269m^2
SPEA in Phase VI	Computer calculated with road	1935m^2
Soil Zone (SZ)	Wet (w) (0-1 m from stream boundary)	192m^2
	Medium (m) (1-2 m from stream boundary)	192m^2
	Dry (d) (2-10 m from stream boundary)	1537m^2
Total SZ Area:	**Total Restoration Area:**	**1921m^2**

Table 1: Soil Zone division and total Riparian Restoration Area Calculation

Based on the numbers in Table 1, the total SPEA in Phase VI is 1921m^2. The discrepancy between the Phase 6 SPEA measurement computer calculated (1935m^2) and the total restoration area (1921m^2) is that a portion of the SPEA is within the road, therefore the calculation is reduced to accommodate.

5.3 Native Plant Volunteers

Native plants are abundant on the land, thriving and in healthy condition. Native vegetation observed within the riparian assessment area includes:

Herbaceous and ground layer species: Sedges (*Carex* spp.), Sword Fern (*Polystichum munitum*), Foxglove (*Digitalis purpurea*), Skunk Cabbage (*Lysichiton americanus*), and Horsetail (*Equisetum* spp.)

Shrubs and small trees: Nootka Rose (*Rosa nutkana*), Willow (*Salix* spp.), Red Huckleberry (*Vaccinium parvifolium*), Oregon Grape (*Mahonia* spp.), Thimbleberry (*Rubus parviflorus*), Salmonberry (*Rubus spectabilis*), and Mountain Ash (*Sorbus* spp.)

Tree species: Red Alder (*Alnus rubra*), Western Red Cedar (*Thuja plicata*), Grand Fir (*Abies grandis*), and Western Hemlock (*Tsuga heterophylla*)

5.4 Planting Guide:

Calculated at 6m×6m spacing one plant at each grid intersection within permitted bands. Intersections that land on utilities/hardscape or outside permitted areas may be shifted ≤1 m while remaining in the same band. Rounded to the nearest whole plant. The following restoration plant species table 2 is based on the Riparian Plants of BC guidelines and includes the most beneficial native shrubs and trees with corresponding soil zone for supporting stream health, habitat diversity, and water retention:

Zone	Common Name	code	Botanical Name	Quantity (6m x 6m spacing)
Dry (d) – m²	Douglas-fir	mp	*Pseudotsuga menziesii*	12
	Western Red Cedar	pt	*Thuja plicata*	14
	Red-flowering Currant^	sr	*Ribes sanguineum*	3
Dry Zone Total				**29**
Medium (m) – m²	Douglas-fir	mp	*Pseudotsuga menziesii*	6
	Vine Maple^	ca	*Acer circinatum*	2
	Bigleaf Maple^	ma	*Acer macrophyllum*	6
Medium Zone Total				**14**
Wet (w) – m²	Western Red Cedar	pt	*Thuja plicata*	5
	Red-osier Dogwood^	sc	*Cornus sericea*	2

Zone	Common Name	code	Botanical Name	Quantity (6m x 6m spacing)
	Nootka Rose^	nr	*Rosa nutkana*	2
Wet Zone Total				**9**
Total				**52**

*Table 2: Recommended Riparian Restoration plant species. *^ denotes fruit bearing*

5.5 Budget for Labor – Planting

Item	Cost
Manual Labor – 3 ppl:	$1720/day
Planting days estimated:	2
Sub-total:	$ 3440.00
GST	$172.00
Total:	**$3612.00**

Suggested Planting Company: Arbutiful Landscaping: 250-701-3092 (arbutiful@gmail.com)

5.6 Budget for Plants

Common Name	Botanical Name	Qty	Unit Price	Line Total
Douglas-fir	*Pseudotsuga menziesii*	18	$ 48.00	$864.00
Western Red Cedar	*Thuja plicata*	19	$ 48.00	$912.00
Red-flowering Currant	*Ribes sanguineum*	3	$ 7.85	$22.50
Vine Maple	*Acer circinatum*	2	$ 27.00	$54.00
Bigleaf Maple	*Acer macrophyllum*	6	$ 27.00	$162.00
Red-osier Dogwood	*Cornus sericea*	2	$ 7.85	$15.70
Nootka Rose	*Rosa nutkana*	2	$ 7.85	$15.70
	Subtotal			$2,045.90
	GST (5%)			$102.30
	PST (7%)			$143.21
	Total			**$2,291.41**

Table 3: Streamside Native Plant prices are subject to change. Delivery charge varies, and plant availability is subject to nursery stock.

5.7 Total Budget:

Category	Amount
Plants – total (incl. GST & PST)	$2,291.41
Labour – planting	$3,612.00
Total	**$5,903.41**

Table 4: The total budget to bond is $5,903.41.

5.8 Schedule

Area	Timing	Plants	Density	Comments
SPEA	Late 2025/early 2026	Plant specimens in Planting Guide (trees min. 4 ft height)	1 plant / 6m x 6m	Follow suggestions for container planting; create watering basins; mulch lightly.
SPEA	Starting November 2025	Invasive species removal (Scottish broom, Himalayan blackberry, English holly, thistle)	-	Remove immediately on sight. Full extraction with roots; haul debris to approved disposal facility. Recommended 3x/year. (fall/spring/summer)
SPEA	October 2026 +	Replace plants that did not survive over the previous year	1 plant / 6m x 6m	Minimum 80% survival rate; if more than 20% die, replanting required.

Table 5: Planting schedule for 2025 plus additional work in 2026 and beyond for 3 years.

5.9 Planting Guide:

Common Name	Botanical Name	Description
Douglas-fir	*Pseudotsuga menziesii*	Large, long-lived conifer providing shade, windbreak, and habitat for birds and small mammals. Strong root system aids in slope stability.

Western Red Cedar	*Thuja plicata*	Evergreen conifer valued for year-round cover and soil stabilization; tolerates moist to dry conditions.
Red-flowering Currant^	*Ribes sanguineum*	Deciduous shrub with pink to red flowers attracting hummingbirds and pollinators; produces berries eaten by birds and mammals.
Red Alder	*Alnus rubra*	Fast-growing deciduous tree that fixes nitrogen, improving soil fertility; provides shade and leaf litter for aquatic life.
Vine Maple^	*Acer circinatum*	Small tree/shrub with arching branches; provides fall color, nectar for pollinators, and seeds for birds and small mammals.
Bigleaf Maple^	*Acer macrophyllum*	Large deciduous tree offering extensive canopy cover; seeds and flowers provide food for birds, mammals, and insects.
Red-osier Dogwood^	*Cornus sericea*	Multi-stemmed shrub with red stems; stabilizes banks and provides berries for wildlife.
Nootka Rose^	*Rosa nutkana*	Native shrub with pink flowers and edible rose hips; excellent for wildlife forage, nesting, and creating natural barriers.

Table 6: common name and description.

5.10 Planting Plan

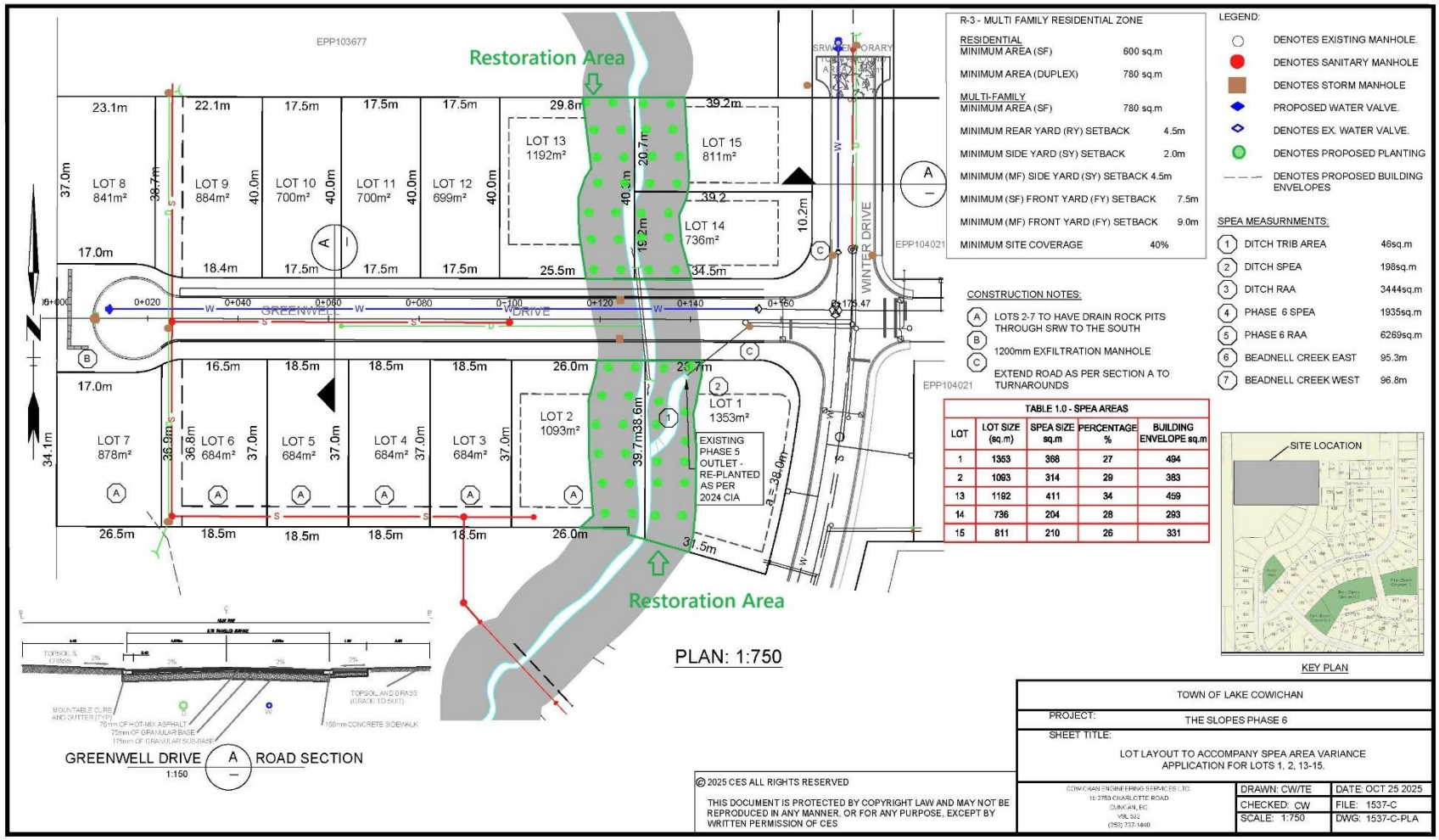

Figure 3. Restoration area to be planted on a square grid 1 (dot)plant/ 6m x 6m density. The restoration area is 1921m².

5.11 Planting Methodology

- Identify and preserve native regrowth.
- Plant native species using proper spacing to allow for mature growth. Use a 6m x 6m ($36m^2$) square-grid density. This plant density is recommended to allow for adequate crown development (coverage) for the shade ZOS (zone of sensitivity). It promotes a natural, open grown appearance.
- Incorporate a variety of species, including fruit-bearing and non-fruit bearing coniferous and deciduous trees.
- Plant during the dormant season to minimize stress on plants.
- Follow soil zone guidelines: dry (d), medium (m), and wet (w).
- Irrigation may be applied for the first two summers post-planting, will need to be requested for each individual lot pending sale.

Suggestions for successful container planting:

1. Dig a hole slightly larger than the container size and add nutrient-rich soil to the hole.
2. Bone meal be added. No fertilizer due to the proximity of the watercourse.
3. Mound soil around the plant to create a depression that will catch moisture. 'Water in' before planting and after.
5. Establish a watering schedule for the first 3+ years to allow the root systems to establish.
6. Maintain native plants by weeding invasive species out.
7. Monitor plants for browsing. If the browse is excessive then apply a repellant.

BC Riparian Restoration Guidelines:

In conformity with the BC Riparian Restoration Guidelines (March 2008) Planting Guidelines:

- All riparian plantings should be based on a square grid density. All tree/shrub species should be of guaranteed nursery stock.
- The botanical name should be used when ordering stock to ensure that the desired native species is being purchased. Each specimen should be tagged with the botanical name and the tag should be left attached after planting.
- Stock planted during the Fall (Sept. - Oct.2025) and spring (March 2026) has the greatest likelihood of surviving. Regular watering for the first two years during the summer months may be required until the plants are established. Additional advice on proper planting procedures should be obtained from the nursery supplying the stock.
- Coniferous trees should comprise not less than 10% nor more than 25% of the tree stock planted.
- Tree stock should be a minimum of 1.2 m (4 ft) in height when purchased/planted.
- Planting on a given area being enhanced must be successful to an 80% take. If more than 20% die over one year, replanting is required.
- A minimum of 50% of trees and shrubs planted should be fruit-bearing species.

Structural Guidelines state: *"Wherever a development site will result in land clearing activities, the opportunity exists to salvage and translocate structural materials (i.e., downed wood, stumps, mossy rocks, vascular plants, non-vascular plants) into the remaining environmentally sensitive*

areas. These key forest floor features provide a diversity of habitats for both invertebrates and vertebrate species."

- Salvaged large woody debris and stumps from the development site should be placed in previously damaged riparian areas to provide structural habitat features for small wildlife and amphibians.
- Mossy rocks and herbs can be salvaged from the development site to help 'seed' the restored area with native groundcover species.
- Large projects are well-suited to the creation or translocation of wildlife trees within the area undergoing restoration/enhancement.

The purpose of planting is to *augment and jump-start the natural succession* of the site not to try and replicate or replace what previously existed in one season.

5.12 Aftercare and Ownership Responsibility

- During the first 3+ years, plant survival can be enhanced through proper planting techniques and deep watering during dry periods.
- Monitor 3x annually (spring, summer, fall).
- Fall planting is recommended to take advantage of seasonal rainfall.
- Mulch may be used to retain moisture.
- Browsing from deer, elk, and rabbits may be mitigated using repellents such as Plantskydd (available from Streamside Native Plants).

- Check plant survival, identify and remove invasives. If survival is poor, replanting will be necessary.
- Access control and deterrents (e.g., Nootka rose) may help reduce human disturbance and trampling.
- As subdivision progresses, responsibility for ongoing care and compliance should be transferred to new lot owners, with clear expectations for continued invasive control and replanting if necessary. Individual lots will need RAPR approval, and replanting will be necessary if plant survival decreases within the 3 years after planting.
- Document via photo-points.

6. Invasive Species Management

Historically, moon-scaping and excavation work took place on the subject property. These past activities have contributed to disturbance within the RAA and created ongoing invasive plant pressures. Consistent with the Ministry's direction for Phase 6, this plan prioritizes restoration that avoids any new disturbance to the SPEA while enabling efficient invasive removal and revegetation elsewhere. It was calculated that 960.5m^2 contains invasive species, listed in the table below. This area will need to be cleared of invasives and debris dealt with properly by hauling away to the local dump or equivalent.

Recommendation intent: We do not recommend mechanized invasive removal inside the SPEA. We do recommend (conditionally) mechanical removal by excavator within the RAA, with the

excavator parked outside the SPEA and reaching in under strict environmental controls and QEP oversight

SPEA (Stream Protection & Enhancement Area)

- No mechanized equipment inside SPEA, but the excavator bucket to pull invasives out.
- Hand methods include cut-and-paint/cut-stump for woody invasives; hand digging/grubbing for small plants.
- Preserve native root mats and ground cover, no soil scalping.

Mandatory controls for any mechanical work:

- QEP supervision: pre-work briefing, layout confirmation.
- SPEA protection: high-visibility orange snow fencing/flagging at the SPEA boundary; no track entry but bucket entry allowed into the SPEA.
- Erosion & Sediment Control (ESC): silt fence as needed; immediate cover (mulch) on disturbed soil.
- Disturbance limits: shallow grubbing only; avoid undercutting banks; protect native stumps/LWD/structural debris; suspend work during rainfall that creates runoff.
- Environmental safeguards: refuel and service >30 m from water; spill kit on site; collect and remove all arisings to an approved facility (no stockpiles in SPEA, RAA allowed but consider tarping).

- Timing windows: avoid Mar 1–Aug 31 bird-nesting unless QEP nest survey confirms no active nests.
- Rationale: Prohibiting machinery in the SPEA minimizes soil disturbance and sediment delivery risk to Beadnell Creek. Allowing a controlled excavator to use from the RAA efficiently removes mature invasive patches while maintaining SPEA integrity.

RAA (outside the SPEA)

- Development activities will occur for each lot; however, it is recommended that the invasive species be scraped and removed before individual sale. It is encouraged to leave as many native species as possible.

Species	**Method**	**Timing**
Himalayan Blackberry (*Rubus armeniacus*)	Cutting, root removal, herbicide	Late summer, post-fruiting
Scotch Broom (*Cytisus scoparius*)	Manual pulling (entire root), herbicide if permitted	Spring (before flowering) or Fall
English Holly (*Ilex aquifolium*)	Manual digging or cutting and herbicide	Spring – Fall
Thistle species (*Cirsium spp.*)	Manual removal before seed set	Late spring – early summer

Table 7: Invasive Species on Subject Property

Photos

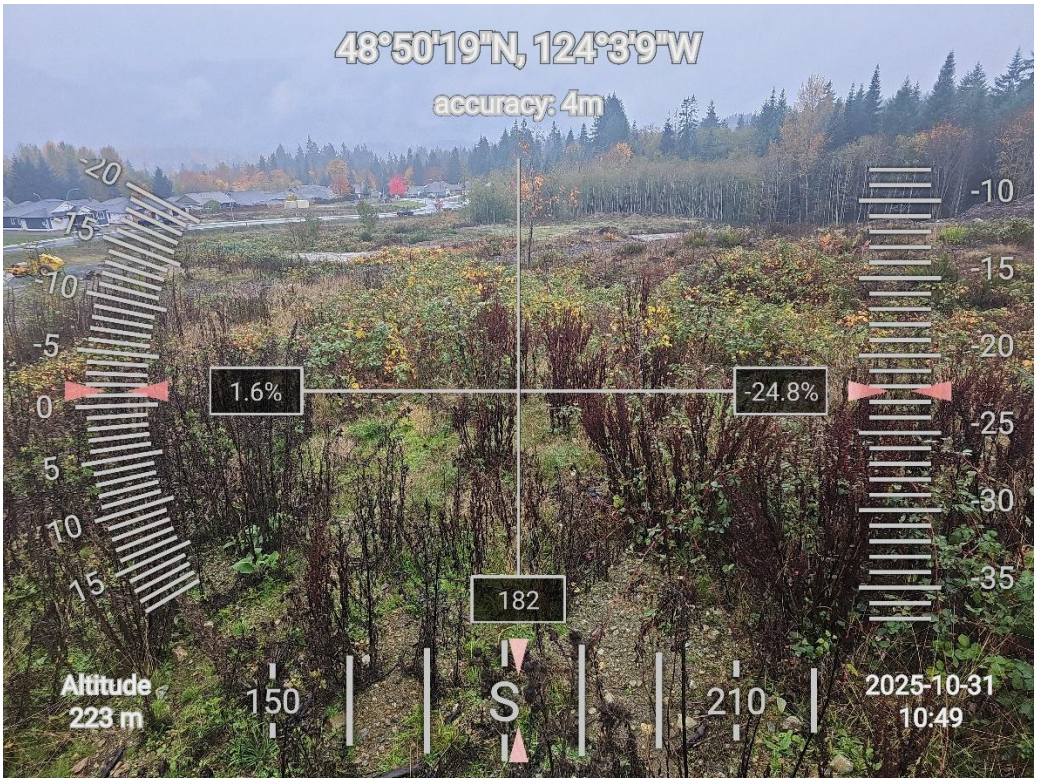

Figure 4. Looking south down the fork of Beadnell Creek and the SPEA/RAA. Lot 14/15 on the left, Lot 13 on the right.

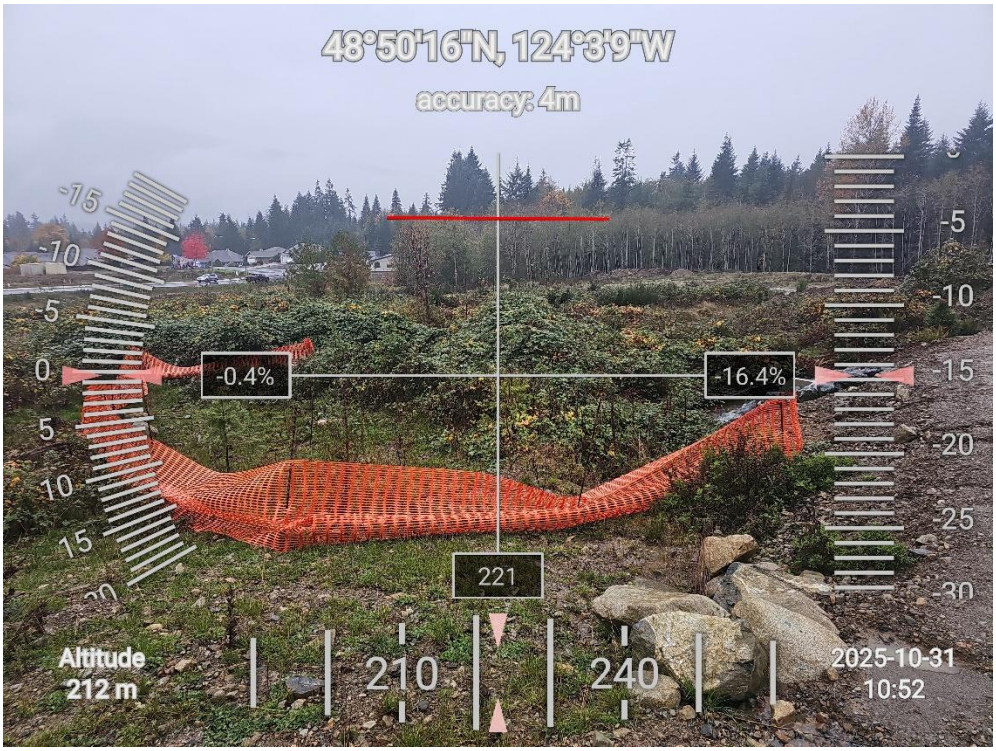

Figure 5. SPEA Restored for unnamed ditch in Lot 1. Portion of SPEA in Phase VI needs restored.

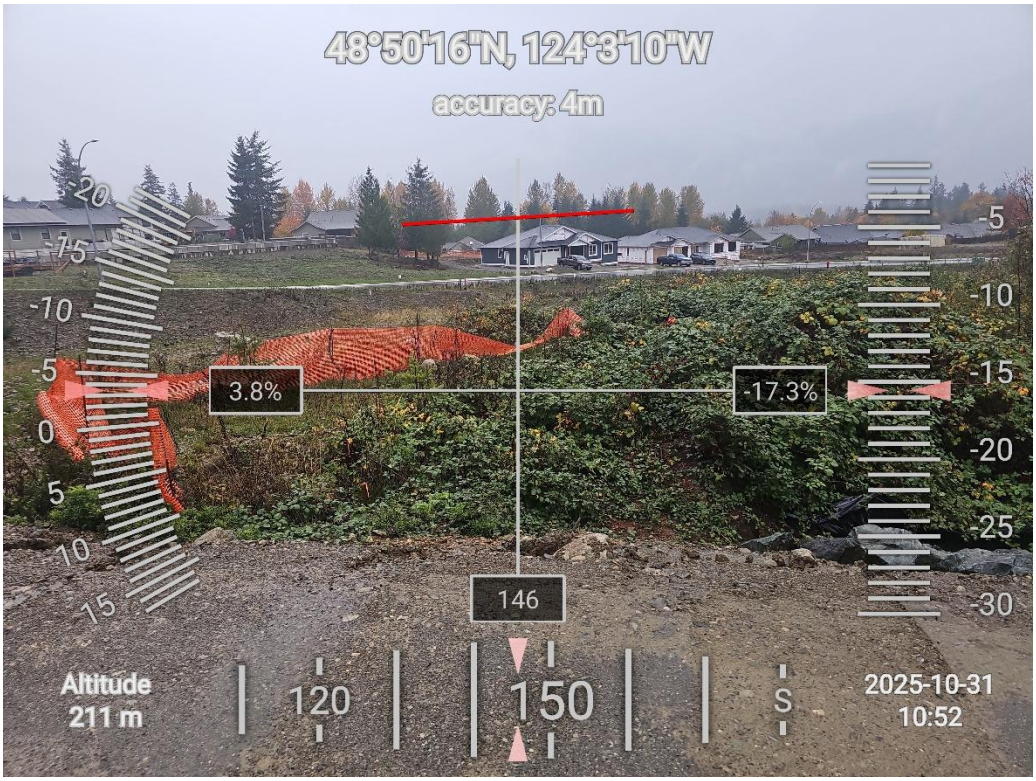

Figure 6. Invasive species that need to be removed in Lot 1. Standing on the proposed road location.

Figure 7. Lot 14/15 Invasive species removal and SPEA restoration area.

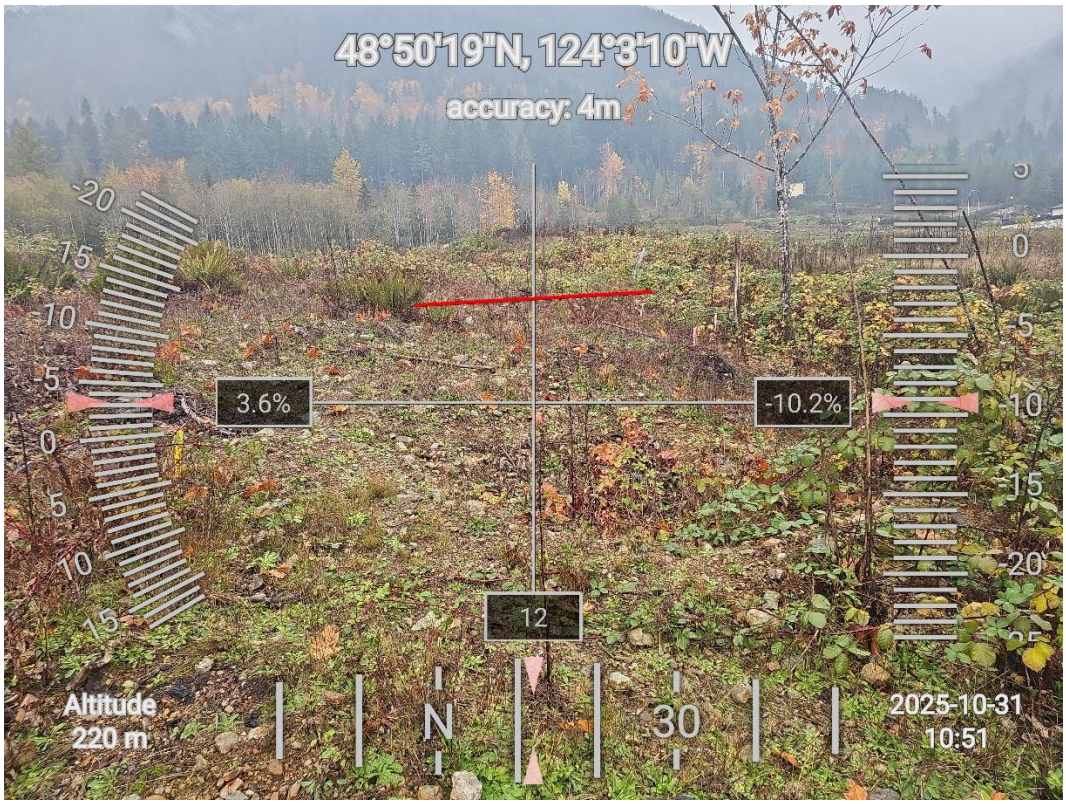

Figure 8. Lot 13 SPEA invasive species removal and restoration area. Many mature Swordfern plants.

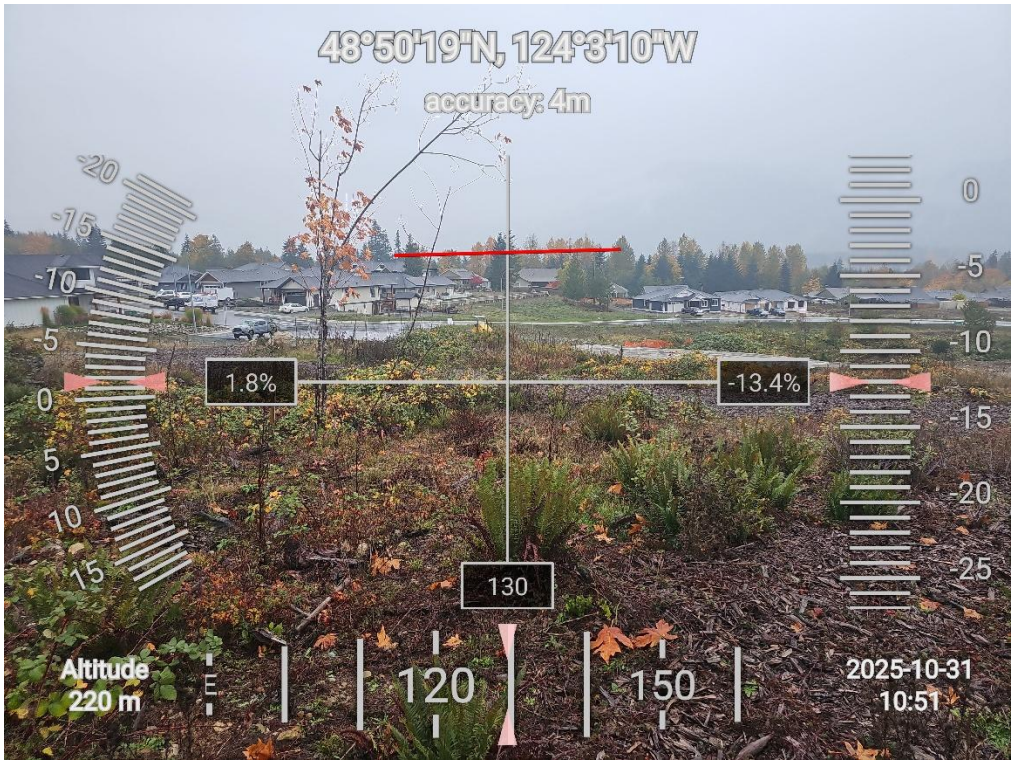

Figure 9. Looking southeast, Lot 13, with lots of native understory plants, mostly Himalayan blackberry, to be removed.

Conclusion

Invasive species removal is recommended to occur as early as possible in 2025, or early 2026 following mandatory protocols for both mechanical and manual removal to ensure effective extraction. All resulting debris must be disposed of using appropriate methods. Riparian planting should be scheduled for the dormant season in late Winter 2025 or January 2026 whenever seasonally appropriate, to ensure plant survival and after the invasive species have been entirely removed. Invasive species growth will need to be monitored following the schedule and native plants will need to survive beyond 3 years.

This report provides sufficient guidance to complete the planting in accordance with the recommended container planting techniques. All work must be carried out under the direction of a Qualified Environmental Professional (QEP) to ensure regulatory compliance.

Following the completion of restoration activities, the current landowner is responsible for maintaining and safeguarding the restored areas until each lot is sold. Additional planting or maintenance may be required for individual lots to maintain the integrity of the riparian restoration, as informed by future development and future owner site-specific RAPR assessments.