Notice of 1st and 2nd Reading Binder

The general purpose of proposed **"Colwood Land Use Bylaw No. 151, 1989, Amendment No. 207 (CD39 – 3494 Wishart Road), Bylaw No. 2005, 2023"** is to amend the Colwood Land Use Bylaw No. 151, 1989 to enable the development of 50 townhomes.

Within the binder, please find a copy of:

1. Staff Report to the Planning and Land Use Committee – 3494 Wishart Road (December 4, 2023)
2. Staff Presentation to the Planning and Land Use Committee – 3494 Wishart Road (December 4, 2023)
3. Applicant Presentation to the Planning and Land Use Committee – 3494 Wishart Road (December 4, 2023)
4. Proposed Bylaw No. 2005 (Land Use Bylaw Amendment – CD39 Zone)
5. Notice of Amending Bylaw

Minutes and videos of Council are publicly available and can be accessed through the following link:

- City of Colwood - Home (civicweb.net)

1.

Colwood

STAFF REPORT

To: Planning and Land Use Committee
Date: December 4, 2023
From: Kelsea Fielden, Planner I
RE: Rezoning Application – 3494 Wishart Road

RECOMMENDATION

THAT the Planning and Land Use Committee recommend to Council:

THAT the Colwood Land Use Bylaw No. 151, 1989, Amendment No. 207, Bylaw No. 2005, 2023 be considered for 1st and 2nd reading;

AND FURTHER THAT prior to adoption of the Colwood Land Use Bylaw No. 151, 1989, Amendment No. 207, Bylaw No. 2005, 2023, the following long-term conditions be registered with a Section 219 Covenant Development Agreement:

1. DELAYED CLEARING OF THE LANDS
   a. The Owner covenants and agrees with the City that, irrespective of the issuance of an Environmental Development Permit, the Lands shall not be cleared, blasted or built upon unless and until the City is in receipt of a Building Permit application for the site, and the City provides written authorization to proceed with land alterations.

Prior to the issuance of a Development Permit:

2. CASH-IN-LIEU OF REPLACEMENT TREES
   a. The Owner shall, at their own expense, and to the satisfaction of the Director of Development Services or the Director of Engineering, provide the City a cash-in-lieu contribution to the Community Amenities Reserve Fund, in the amount established by the Urban Forest Bylaw applicable at the time, as long as the amount is no less than $1,000 per any required replacement tree that cannot be accommodated on-site, as part of the tree replacement ratio requirements of the City's Urban Forest Bylaw, and a part of the approved landscape and tree planting plan required for a joint Form & Character and Environmental Development Permit. For clarity, the cash-in-lieu contribution will be calculated and payable prior to Building Permit issuance, once final architectural and landscape plans have been accepted by City of Colwood.

3. CONSERVATION COVENANT / HABITAT RESOTRATION & ENHACEMENT
   a. The Owner shall register a Section 219 Covenant over the lands agreeing to retain in total a minimum 1,000m^2 for environmental conservation and restoration purposes and require installation of signage to mark the area highlighting the purpose of the conservation intent (as outlined in the Environmental Impact Assessment). This area will be maintained at the Owner's expense. Herein this paragraph:

      conservation means retaining open green space areas in a natural state, limiting tree/vegetation removal (except for the removal of invasive plant species), and limiting disturbances to the forest floor; and

restoration means restoring open green space areas to a natural state when conservation is deemed impractical due to safety hazards during site preparation and active construction as identified by a qualified professional. Restoration work in open green space areas must be undertaken under the guidance of a registered biologist.

b. The Owner shall, at their own expense, and to the satisfaction of the Director of Development Services or Director of Engineering, submit a habitat restoration and enhancement plan and cost estimate for the area proposed to be protected by an environmental covenant including removal of invasive plant species, replanting of disturbed areas with native plant species, irrigation and other as deemed appropriate by the Qualified Professional, who is to oversee the installation of the works.

c. The Owner shall provide a 110% security deposit, at their own expense, and to the Satisfaction of the Director of Development Services or Director of Engineering, to complete the habitat restoration and enhancement plan. The Owner agrees that the City will hold the deposit for a minimum of one growing season after installation. A request to the City for the release of the deposit must be accompanied with a completion letter prepared by the Qualified Professional confirming that the planting and restoration works are in good health and consistent with the habitat restoration and enhancement plan.

4. STATUTORY RIGHT OF WAYS
   a. The Owner shall register a blanket Statutory Right of Way (SRW) enabling access to City staff as well as public access over the environmental conservation and restoration area described in Section 3.a (above). The purpose of the public access SRW is to enable the construction of and public use of a trail system to access lands beyond, provided the City identifies a need to create such public access in the future. Access for City staff to enter the area is also meant to enable monitoring of the terms of the Section 219 Conservation Covenant.

5. AMENITY AREA
   a. The Owner shall register, to the satisfaction of the Director of Development Services or Director of Engineering, a Section 219 covenant agreeing that the property owners, current and future, are responsible for maintaining in good order a play structure as part of the strata's common amenities.

Prior to the issuance of a Building Permit

6. OFF-SITE WORKS AND BC TRANSIT IMPROVEMENTS
   a. The Owner agrees to complete frontage improvements on Wishart Road (or enter into a Servicing Agreement with the City of Colwood for the required frontage improvements on Wishart Road) as required by applicable City of Colwood policies or bylaws, as amended from time to time, and will be responsible for the installation of a new bus shelter and seating in accordance with BC Transit standards applicable at the time of Building Permit issuance.

   b. The Owner agrees to file a plan of road dedication for the Delora Drive extension.

   c. The Owner also agrees to construct the Delora Drive extension (or enter into a Servicing Agreement with the City of Colwood for the required frontage improvements on Delora

Drive), in accordance with applicable City of Colwood policies, standards and bylaws, as amended from time to time.

7. CRITICAL ROOT ZONE PROTECTION
   a. The Owner agrees to submit a report or memo prepared by an ISA Certified Arborist at the time of Building Permit submission, which shall approve the site plan design, confirm that all proposed buildings and structures (including retaining walls) shown on the site plan are outside the Critical Root Zone of all protected trees that were identified for retention (or as TBD) as part of the issued joint Form & Character and Environmental Development Permit, and confirm that adequate tree fencing has been installed around all protected trees that were identified for retention (or TBD).

Prior to the issuance of an Occupancy

AND THAT the Owner agrees they are not entitled to an Occupancy Permit, until they register a Statutory Right of Way (SRW) over the internal strata road and walkways granting access to emergency services.

SUMMARY AND PURPOSE

The purpose of this report is to present to the Planning and Land Use Committee Rezoning Application RZ000005, which is requesting an amendment to the Land Use Bylaw to rezone 3494 Wishart Road (**Figure 1**) from the Rural 1 (A1) Zone to a new Comprehensive Development (CD) Zone. The applicant has provided a letter of rationale (**Appendix 1**) for the proposal of 50 townhomes within 17 blocks as shown in the site plan (**Appendix 2**).

The proposal features housing for families (3-bedroom townhome units), which would contribute to a key area of need identified in the City of Colwood's 2020 Housing Needs Assessment. The rezoning application is consistent with the Official Community Plan (OCP) built form policies for lands designated as Neighbourhood – Hillside and Shoreline. The applicant inventoried the natural assets of the site (**Appendix 4**), including a Tree Management Plan (**Appendix 6**), to prepare a site plan that protects the formative features of the land in accordance with site adaptive planning principles outlined in the Official Community Plan. A site adaptive planning design rationale (**Appendix 10**) has been submitted by the project biologist and arborist endorsing the proposed site plan.

Figure 1: Subject Property

STRATEGIC PLAN AND RELATED POLICIES

Colwood Strategic Plan 2019-2023

The proposal aligns with prosperity priorities outlined in the Strategic Plan 2019-2023 by creating and increasing greater housing choices and maximizing the proportion of residents who can access transit and meet daily needs within walking distance of home.

Housing Needs Report (Urban Matters 2020)

The Housing Needs Report prepared by Urban Matters (2020) indicates that housing for families is a key area of local need in the Capital Regional District. In the Westshore communities, prospective buyers specifically look for housing options that can provide additional spaces for their households as they expand. This demonstrates a need for housing that can provide 3+ bedrooms. It was noted that new townhomes are often preferred by families as they are easier to maintain, and smaller lot subdivisions provide affordable housing options without having to sacrifice space.

BACKGROUND

Applicant Information

Applicant:	Walking Stick Developments Inc.
Owner:	Tom and Kerry Dayton
Address:	3494 Wishart Road
Legal:	LOT 3 SECTION 62 ESQUIMALT PLAN VIP10219
Current Zoning:	Rural 1 (A1) zone
Proposed Zoning:	New Comprehensive Development Zone (CD39)
Current OCP Designation:	Neighbourhood – Hillside and Shoreline
Development Permit Areas:	Environmental – Hillside Natural Hazard – Steeply Sloped

APPLICATION REVIEW

1. Proposal

The applicant is requesting an amendment to the Land Use Bylaw No. 151 to rezone 3494 Wishart Road from the Rural 1 (A1) Zone to a new Comprehensive Development (CD) Zone. The zoning change would enable the construction of a 50-unit townhouse development within 17 blocks, consisting of 3-storey townhomes with 3+-bedroom units.

2. Site Context

The subject property is 3.3 acres (13,664m^2) and is located in South Colwood along Wishart Road, approximately 1.0km from Latoria Road. The property is a wide and long hillside lot that features a gradual grade change increasing towards Triangle Mountain. There are previously disturbed areas, including the existing driveway and single family dwelling and various outbuildings. The neighbourhood is primarily residential with a range of densities. **Table 1** summarizes the land uses and zones of properties adjacent to the site.

Table 1 | Zones and Land Uses Adjacent the Site

	Existing Zone	Existing Use	Dwelling Units	Status
North	AR1 & CD22	Single Family Homes and Small Lot Subdivision	49	Complete.
East	RBCD1 & CD18	Townhomes and Small Lot Subdivision	112	Complete.
South	CD26	Single Family Homes	12	Currently under construction.
West	A1	Single Family Home	1	Largely forested area.

3. Land Use Bylaw No. 151

Table 2 compares the permitted land uses and regulatory conditions imposed on the lands by the existing A1 zone, and the proposed land uses for the new CD zone. The amending bylaw for Council consideration is attached as **Appendix 12**.

Table 2 | Comparison of Current Zoning and Proposed Zoning

	A1	Proposed new CD zone
Permitted Uses	Agriculture Intensive agriculture Cemeteries Community Care Facility Dog boarding and breeding kennels Golf course One-family dwelling and two-family dwelling Riding academies, riding stables Home occupation Secondary Suite Accessory buildings and structures Silviculture Accessory Dwelling Unit	Attached Housing Duplex Home Occupation – Office Use Only Show Homes Accessory Buildings and Structures
Density (FAR)	N/A	0.7
Maximum units	1 single family dwelling or two-family dwelling.	50 units
Height	10.5m/12.0m	11.0m
Lot Coverage	10%	30%
Setbacks		
• Front Yard	7.5m	6.0m
• Side Yard	3.0m	3.0m
• Side Yard	3.0m	1.5m
• Rear Yard	10.0m	6.0m

4. Official Community Plan (OCP) Bylaw No. 1700

The subject property is designated as Neighbourhood – Hillside and Shoreline in the Official Community Plan, which supports ground-oriented buildings, including multi-unit townhouses up to approximately 3 storeys as permitted under Policy 7.2.20(c) and 7.2.21(a). Further supported land use objectives include maintaining existing character and scale of existing areas, while increasing housing diversity through sensitive infill that are compatible in terms of scale and intensity. The proposal is consistent with OCP Objective 6.2.4. and corresponding Policy 6.2.4.1, which supports moderate residential growth in established single-detached neighbourhoods in the Controlled Growth Area in the form of ground-oriented townhouses. **Table 3** describes the OCP objectives for the land use designation and how the proposal aligns with each objective.

Table 3 | Compliance of Proposed Development with OCP Land Use Designation

Neighbourhood Hillside & Shoreline Policies		Proposal	Staff comment
7.2.20.c **Land Uses**	Ground-oriented multi-unit residential, including duplexes, townhouses, and apartments.	Ground-oriented townhouses.	OCP Policy met.
7.2.21. b. **Built form**	Ground-oriented buildings up to approximately three storeys.	3-storey townhouses.	OCP policy met.

7.2.21.d.	FAR ranging up to approximately 1.2.	0.7 FAR.	OCP policy met.
Density			
7.2.19.a.	Maintain the existing character and scale of existing predominantly single-detached residential areas, while increasing housing diversity through sensitive infill approaches.	Townhouses respect the existing neighbourhood context which features a diverse dwelling stock ranging from mid- to low- density developments.	OCP policy met.
7.2.19.b.	Improving the public realm for pedestrians.	Providing frontage improvements including a new sidewalk with a bus shelter and seating along Wishart Road and the extension of Delora Drive.	OCP policy met.
7.2.19.e.	Designing buildings, public open spaces, and transportation networks to protect natural assets.	Public open spaces and buildings have been sited to protect the highest ecological valuable assets of the site.	OCP policy met.
7.2.22.b.	Strong focus on site adaptive policies, including clustering of development to be set back from and preserve nature features and sensitive ecosystems.	The proposal features clustered development blocks, and the key natural features have been protected.	OCP policy met.
7.2.22.e.	When considering development on greenfield sites, retain a minimum of 40% of the site area as part public and part private open space.	The proposal features 35% open space as a combination of park dedication, general landscaping, and private space for each unit.	OCP policy generally met.

Open Space

The Neighbourhood – Hillside and Shoreline designation is expected to be exceptionally supportive of protecting natural features and sensitive ecological areas and follow site adaptive planning principles. To support the land use objectives, 40% of hillside sites should be retained as part public and private open space. The proposal is providing a total of 35% open space as a combination of public and private areas (including the proposed conservation area). **Table 4** shows the amount and percentage calculations of the open space for the site.

Table 4 | Open Space Calculations

Open Space	Amount	Percentage
Overall lot area	13,664m^2	100%
Proposed Open Space Areas:	4,820m^2	35%
Conservation Covenant Area	1,038m^2	8.3%
Open/Green Space	3,317m^2	26.5%
Private Amenity Space	465m^2	4%
Total	**4,820m^2**	**35%**

Staff are of the opinion the intention of the 40% open space has been achieved with this proposal. Please note, road dedication for the Delora Drive extension accounts for 8% of the site, but is not included in the open space calculations.

In addition to meeting the land use designation objectives, this proposal also complies with other key goals as outlined in Section 3.2 of the OCP, including:

1. **Residents have realistic transportation choices**
   a. Residents will choose walking as the first choice for short trips with nearly all residents living within a 10-minute walk of a neighbourhood grocer, cafe, and/or other destinations that help meet their daily needs. For longer trips, residents will choose to get around by bicycle or transit.
      i. The proposal is within 1.0km of the Latoria Road and Veterans Memorial Parkway Neighbourhood Centre designation featuring a mixed-use development.
      ii. The Royal Bay 'Commons' Development is within a 1.0km distance of the site featuring mixed-use amenities for daily needs.
      iii. A BC Transit bus stop fronts the property, and the applicant will be responsible to upgrade the seating and shelter amenity. This requirement is embedded in the Development Agreement.

2. **Colwood is home to family-friendly neighbours that provide housing choices**
   a. Colwood continues to be home to family-friendly neighbourhoods, while increasing choices that meet a range of needs and lifestyles.
      i. The proposal features a private play amenity area meeting the $3m^2$ per bedroom recommendation from the OCP design guidelines for family-friendly developments.
      ii. To meet the projected 790-unit townhouse demand by 2028 outlined in the Colwood Housing Needs Assessment, this proposal can provide increased housing choices.

Transit Network

The Transit Network Map (Figure 12 in the OCP) and BC Transit classify Wishart Road as a Local Transit Network. A Local Transit Route provides connections from local neighbourhoods to Rapid and Frequent Transit Networks. The proposed development will be serviced with 1 route directly fronting the property. The additional density of 50 townhomes has been endorsed by BC Transit and can be seen as achieving Policy 8.2.4.2, which encourages the City to work with BC Transit to extend the reach of the Rapid and Frequent Transit Networks to form connections between neighbourhoods, local destinations and the rest of the transit system. Frontage improvements will improve sidewalk accessibility and pedestrian connection to the bus stop.

Roadway Network

Delora Drive will be extended per the Council approved 2015 Transportation Master Plan. The conceptual plan (**Appendix 2**) is proposing an 18.0m road right of way (ROW) for the Delora Drive road dedication. A Development Variance Permit application will be required in the future to reduce the minimum ROW for a local road from 20.0m to 18.0m.

5. Site Adaptive Planning

A site adaptive planning approach was undertaken as per Section 18.4 and Policy 11.2.2.3 of the OCP, which requires that:

1. A natural assets inventory be provided to the City in support of site adaptive planning as a first step in the development approvals process; and
2. The developable footprint of a proposal be shaped by the formative systems on the site as identified in the natural assets inventory.

Natural Assets Inventory

The Environmental Impact Assessment (**Appendix 4**) identified the forested area along the western edge as the highest habitat value on the site. Staff are recommending that this area be protected by a Section 219 conservation and restoration covenant with an public access SRW which may achieve key goals of the Parks and Recreation Master Plan discussed in greater detail below.

There are also multiple rocky outcrops outlined in **Appendix 8** with two of the outcrops within direct conflict of the Delora Drive extension. The rocky outcrops may provide suitable habitat for reptiles; however, the biodiversity value has been significantly reduced by previous disturbance and invasive vegetation. A memorandum (**Appendix 5**) has been provided by the applicant's civil consultant highlighting the technical constraints of the Delora Drive extension and how the current configuration achieves the highest level of protection and least disturbance to the land which will reduce the blasting and grading for site preparation.

Figure 2: Natural Assets Inventory

Tree Inventory

The current Tree Management Plan (**Appendix 6**) has identified the need to remove 78 of the 110 bylaw protected trees within influencing distance of the proposed development. An additional 10 trees are tagged as 'TBD' and will require careful protection and review by the project arborist. There are 10 mature trees on-site with 5 being retained (**Figure 2**). This aligns with the Hillside Objective 19.1.s and Guideline 22.1.l for conserving and minimizing disruption of mature trees.

The applicant will be responsible for replacing protected trees located within private property at a ratio of 2:1, at a minimum, per the Urban Forest Bylaw No. 1735. This currently amounts to a minimum of 150 replacement trees. If any required replacement trees cannot be accommodated on-site as part of an approved landscape plan for the site, the applicant will be subject to the cash-in-lieu framework outlined in the Development Agreement conditions. The conceptual landscape plan (**Appendix 3**) provides a high-level replanting scheme.

6. Parks and Recreation Master Plan

The Parks and Recreation Master Plan (PRMP), endorsed in 2021, outlines the desire for a Beach to Mountain Route Network (**Appendix 11**), which is focused on linking the beach through the neighbourhoods of The Beachlands (previously Royal Beach), Royal Bay, and Latoria to the high point in Havenwood Park adjacent to the Triangle Mountain neighbourhood. The proposed SRW along the western edge may provide an opportunity in the future to connect to Havenwood Park from Outlook Park as opposed to only a road connection to Windthrop Road.

The applicant has proposed park dedication at the rear of the property, however, staff are recommending Council instead consider a conservation covenant with a public access SRW as outlined in the Development Agreement. The public access SRW is intended to accommodate a potential trail connection in the future, allowing staff the opportunity to explore a west to east connection point of the Beach to Mountain Route Network if access to lands beyond is negotiated through the development of adjacent lands.

7. Off-site works

Frontage works along Wishart Road and the Delora Drive extension are to be completed in accordance with the standards contained in the Subdivision Servicing Bylaw No. 285 and in alignment with Colwood's

Transportation Master Plan as amended by Council from time to time. Frontage improvements shall include sidewalk, curb, street lighting, boulevard, and trees. There is no road dedication along Wishart Road being considered as part of this rezoning application.

8. Traffic Impact Study

A Traffic Impact Assessment (TIA) was conducted by Bunt & Associates (**Appendix 7**). The study concluded the development is not expected to have a noticeable impact on the surrounding road network. The City's Engineering Department has reviewed and accepted the TIA analysis.

9. Site Servicing

A civil, lighting, off-site landscape and irrigation, stormwater management plan and sewer and drain design drawings will be required prior to Building Permit issuance.

10. Building and Life Safety

All upgrades necessary to serve the development are the responsibility of the developer. A Fire Underwriters Survey (FUS) report is required at the Development Permit stage and prior to Building Permit approval.

11. Community Amenity Contributions

The applicant is proposing to meet Council's Community Amenity Contribution policy as identified in **Table 5**.

Table 5 | Preliminary summary of developer contributions

Contributions by Type	Rate per unit	Total	Bylaw/Policy Reference
CAC Fund	$7,500*/unit	$375,000	Policy COM 003 as amended
Affordable Housing Reserve Fund	$1,500*/unit	$75,000	Policy COM 003 as amended
Fire Hall Fund	$583*/unit	$29,150	Council resolution
School DCCs (payable to SD62)	$900/unit	$45,000	CRD Bylaw No. 2019-01
Road DCCs	$4,539.74/unit	$226,987	Bylaw No. 1839
Water DCCs (payable to CRD)	$2,557/unit	$127,850	CRD Bylaw No. 2758
Sewer enhancement fees	$2,095/unit	$104,750	Bylaw No. 1500
Park DCC**	$2,455.67/unit	$122,783.50	Bylaw No. 1990
Total contributions		**$1,106,520.50**	

** Subject to annual CPI increases*

***Payable on any Building Permit application associated with this rezoning that is submitted after October 10, 2024.*

12. Legal Encumbrances and Additional Permits

There are no legal documents on title that affect this application. If approved, a Section 219 covenant for the long-term Development Agreement conditions will be registered prior to adoption.

13. Public Engagement

As required by Development Application Consultation Policy DEC 001, the applicant hosted two open houses on August 31st and September 7th, 2023, at the Colwood Holiday Inn. A summary of the applicant's engagement summary is included in **Appendix 9**.

OPTIONS / ALTERNATIVES

THAT the Planning and Land Use Committee consider recommending to Council one of the following options:

Option 1: The staff recommendation; OR

Option 2: THAT staff provide additional information before Council considers an amending bylaw for Rezoning Application No. RZ000005 for 3494 Wishart Road; OR

Option 3: THAT Rezoning Application No. RZ000005 for 3494 Wishart Road be denied; OR

Option 4: THAT Committee provides another option for Council's consideration.

COMMUNICATIONS

A development notification sign was posted on the subject property as required under the Land Use Application Procedures Bylaw No. 427. The application and supporting documents will be available for public viewing on the City's website from November 27, 2023 to January 8, 2024. Prior to first reading of an amending bylaw, the City will mail postcard notices to owners and occupants within a 75-meter radius of the subject property and post notice on the City's website and in two consecutive issues of a local newspaper.

TIMELINES

FINANCIAL CONSIDERATION

Rezoning the subject property to permit a higher density of development will increase the assessed value of the lands, thus increasing its taxable value. **Table 5** provides a preliminary estimate of the developer contributions for the proposed 50 townhouse units. The City will accept the Delora Drive road dedication of 1,140m^2 which will be asset managed appropriately if the application is approved.

CONCLUSIONS

The proposal meets the policy objectives of the Neighbourhood – Hillside and Shoreline designation as well as the City's broader OCP goals of increasing housing choices that meets a range of needs and lifestyles as emphasized in the Housing Needs Assessment. The proposal inventoried the natural assets of the site which resulted in a site plan that responds to site adaptive planning principles while also meeting the transportation needs of the City. Committee may wish to recommend to Council that they endorse the staff recommendation.

Respectfully submitted,

Kelsea Fielden, BA
Planner I

Yazmin Hernandez B.
Yazmin Hernandez, MCIP RPP
Director of Development Services

ADMINISTRATORS COMMENTS:

I have read the report and endorse the recommendation

Robert Earl
Chief Administrative Officer

Attachments:

Appendix 1: Letter of Rationale
Appendix 2: Site Plan
Appendix 3: Landscape Plan
Appendix 4: Environmental Impact Assessment
Appendix 5: Road Profile Technical Memorandum
Appendix 6: Tree Management Plan
Appendix 7: Traffic Impact Assessment
Appendix 8: Site Survey
Appendix 9: Public Consultation Summary
Appendix 10: Site Adaptive Planning Design Rationale
Appendix 11: Beach to Mountain Trail Route Network
Appendix 12: Colwood Land Use Bylaw No. 151, 1989, Amendment No. 207 (CD39 – 3494 Wishart Road), Bylaw No. 2005, 2023

Appendix 1

Mayor and Council

City of Colwood
3300 Wishart Rd
Colwood, BC
V9c 1R1

Dear Mayor and Council,

Re: Application to Rezone 3494 Wishart Rd

Proposal Overview

This application is to rezone a 3.36 acre property at 3494 Wishart Road. The property currently has a home built in the 1940's and is zoned A1 Rural. While the property is considered a greenfield site it has been extensively cleared and altered over the years and there are a number of invasive species present throughout. There are residential developments on the North side, South side and to the East of the property.

This proposal is for a 49 unit subdivision with a CD zoning classification; split between nine townhomes (three buildings) above the Delora Drive Extension and forty townhomes (twelve buildings) off a strata road connecting to Wishart Road. In order to ensure these homes are suitable for families each townhome will have 3 bedrooms and most will include a home office/den. Through the application of site adaptive planning principles this subdivision has been designed to minimize its environmental impact and fit into the existing hillside and neighbourhood. While still providing much needed family housing. This proposal is in close proximity to many neighbourhood amenities, the frequent transit network and schools making it an ideal location for responsible development.

Thank you for taking the time to review this application.

Sincerely,

Gary
Lunn

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1. Planning and OCP Compatibility

The first step in the design process was to review the Colwood Official Community Plan for this area and determine what is deemed appropriate. This property falls under the Neighbourhood – Hillside and Shoreline classification, as such there are a broad range of uses set out in the OCP. Ranging from single family homes to 4 storey apartment buildings and 6 storey condominium buildings. As outlined below we felt townhouses were the most suitable option for this property and neighbourhood.

a) Townhouses are a responsible compromise between the existing the neighbourhood (primarily single family homes & townhomes) while still providing a moderate increase in density.
b) Townhouses have been identified in the Colwood Housing Needs Assessment as an area that will need significant growth to meet the expected future population.
c) Townhouses are far more attainable for families than single family homes while still providing ample space compared to condominiums and apartments.
d) Compared to single family homes townhouses can be clustered together allowing a much larger portion of the property to remain open/greenspace.

OCP Policy Adherence

1. *7.2.20.C – Land Use: Ground oriented multi-unit residential including duplexes and townhouses*
   Townhouses are proposed.

2. *7.2.21.A – Built Form: Ground oriented buildings up to approximately three storeys.*
   All townhouses will be three stories, some will be mid-level entry.

3. *7.2.21.C – Density: FAR ranging up to 1.2*
   The total floor area ratio is 0.7, well under the maximum density outlined in the OCP.

4. *7.2.22.A -: Adhering to the "Other Directions" in the Neighbourhood land use designation.*
   Site Adaptive Planning has been incorporated into each step of the design and planning process. Preserving the existing neighbourhood environment.

5. *7.2.22.B: Strong Focus on site adaptive policies, including clustering of development to be set back from and preserve nature features and sensitive ecosystems.*
   The subdivision has been designed with clustered units and minimal topography alternations. The western section of the property has been designated as open/green space as that is the most valuable habitat identified by the Biologist.

6. *7.2.22.C: Protecting and optimizing views from publics spaces.*
   No impact on public views is anticipated, new public spaces along the Delora Drive extension and park dedication will increase public views.

7. *7.2.22.D: Applying alternative infrastructure standard, where feasible, such as reduced rights-of way requires, to reduced the development footprint.*
   The Delora Drive right of way has been reduced to 15 metres to minimize disturbances (same width as neighbouring property at 3510 Wishart Rd) and the strata road will be 6.2 metres wide.

8. *7.2.22.e: When considering development on greenfield sites, retain a minimum of 40% of the site area as part public and part private opens pace.*

   Our proposed development will retain 40% of the site (5,465 sq metres) as open and green space through a combination of the park dedication, the municipal property dedication and private green space. Particularly on the West side of the property as identified in the environmental assessment.

Site Adaptive Planning Features

a) Pedestrian connections have been prioritized not only for the residents of the development but to allow nearby residents access through the subdivision to access the pedestrian, transit and cycling infrastructure along Wishart Road.
b) The West portion of the property has the steepest slope and most vegetation, this area was identified by the Biologist as the highest value natural area. It has been designated for retention and remediation (invasive species removal). This minimizes the tree removal on steep slopes.
c) The subdivision has been designed to minimize retaining walls. Along the property boundary there are few retaining walls required and where they are needed, they will be small (1.2 metres).
d) The siting of buildings and roads has been designed to minimize alterations to the existing topography.
e) Invasive species will be removed as part of habitat restoration.
f) Native species will be used for trees and shrubs planted in the development.

Streets and Mobility

The proposed development optimizes multimodal connections. Pedestrians from the subdivision and surrounding area will have access through the strata road to multiple bus routes along Wishart Road. Sidewalks will be constructed along the Wishart Road frontage and the Delora Drive extension (part of the Colwood Transportation Plan). In both cases extending existing sidewalks and Delora Drive are consistent with OCP Policy 8.2.2.1 "*expansion of the pedestrian network and building sidewalks where there are gaps*". In order to aid the transition to electric vehicles every townhome will have an electric car charging station in the garage.

Park Areas and Natural Assets

This subdivision and the surrounding neighbourhood are and will be home to many families, as such it's critical that there are nearby parks for children to play and experience nature. Which is why a park dedication on the North side of the property is proposed. This park dedication will allow families to enjoy the natural assets of the area. There are a number of trees that will be retained to enhance the natural character of the park.

The Biologist determined the area on the West side of the property was the highest value natural asset due to the steeper slope, existing trees and neighbouring forested undeveloped land. This area has been designated as natural green space. As per the Biologist recommendation invasive species in this area will be removed. As shown on the site plan in Appendix A, around most of the perimeter of the property a green space buffer has been incorporated to minimize disturbance to neighbouring properties and trees.

Parking

During new development parking is always an area of concern for the existing neighbourhood and prospective residents, particularly regarding parking for visitors. Every townhouse will have 2 parking spaces, for a total of 98 residential spaces. There will be 9 guest parking spaces along the lower strata road and 4 municipal parking spaces along the Delora Drive extension. This will provide more than double the required visitor parking spaces. There will be a total of 2.26 parking spaces per townhouse.

2. Environmental Assessment

Colwood has made sustainability a key component of all future development and is at the forefront of Site Adaptive Planning. Targeted growth must be balanced with environmental stewardship to foster healthy communities in the present and well into the future. To ensure this development fits within these parameters Corvadae Environmental Consulting completed a comprehensive environmental assessment which determined that this development would have a low overall impact on the existing environment.

The complete environmental assessment is available in Appendix C.

Key Environmental Assessment Findings

a) Previous property occupants have cleared and disturbed the majority of the property.
b) No habitat or probable habitat for any protected species observed.
c) There was no evidence of any present or past sharp tail snakes on the property. It was also noted that several requirements of their habitats are not present at this property.
d) No bird nests were observed during the assessment.
e) The only area identified with a relatively valuable natural environment is on the Western edge of the property.
f) Development has been proposed for areas of the property that have been previously disturbed.
g) Invasive species are prevalent throughout the property and remediation would be beneficial.

3. Community Amenity Contribution

As per the interim community amenity contributions policy $7,500 will be contributed to the Community Amenity Fund and $1,500 will be contributed to the Affordable Housing fund for each additional unit. There are a total of 48 additional units being added to this property for a total contribution of $360,000 to the Community Amenity Fund and $72,000 to the Affordable Housing Fund.

Parks Fee

The proposal includes a park dedication on the North side of the property that would be accessed from Delora Drive. This would allow pedestrian access through the park and then through the strata road (SRW for pedestrian access) to the transit stations along Wishart Road.

4. Servicing Plan

Detailed engineered drawings will be provided with the subdivision application. The servicing plan will be engineered to meet all municipal standards and subject to approval by municipal staff. That being said the existing services have be reviewed to ensure that the current design is feasible and no major design changes or offsite upgrades will be required. An analysis by OnPoint Project Engineers of the existing utility capacity is available in Appendix D.

Hydro

For the lower 40 units Hydro will be run underground along the strata road with the power being dropped from the pole on Wishart Road, which is currently located on the municipal boulevard just in front of 3494 Wishart Rd. The upper 9 units on Delora drive will receive power from underground lines that will extend from the existing road.

Municipal Water

As per municipal regulations there will be a single municipal water connection for the lower 40 units along the strata road with individual water meters for each home monitored by the strata. The upper 9 units will not be part of the strata and will each have a municipal water metre.

Sewer

The lower 40 units will tie into the municipal sewer line along Wishart Rd that was installed as part of the previous development at 3510 Wishart Road and the upper 9 townhouses will tie into the sewer extension along Delora Drive.

Storm Water

In Appendix D Onpoint Project Engineers have submitted a storm water management plan that outlines their methodology for the storm water management system to ensure the offsite flow rates stay at or below the current levels. The lower 40 units will tie into the municipal storm line along Wishart Rd that crosses Wishart Road and runs into Royal Bay and the upper 9 townhouses will tie into the storm extension along Delora Dr.

Natural Gas

In order to maximize the sustainability of the development there will be no natural gas. Heating will be by heat pumps and appliances will all be electric.

5. Arborist Assessment

Talmack Urban Forestry was hired to complete a comprehensive tree inventory and impact assessment. In order to maximize the number of trees retained the townhouse buildings have been clustered together.

There are a number of trees that we intend to retain, however there will be some work in the critical root zone and as such in the Tree Impact Assessment they have been marked as to be determined (TBD). During construction the arborist will be onsite when work is done near these trees and the arborist will determine if they can remain. The full Tree Impact Assessment is available in Appendix E and lists which trees will be retained, removed and to be determined.

6. Traffic Analysis

In order to ensure that this development does not have a detrimental effect on local traffic Bunt & Associates was hired to conduct a traffic study. Their report is available in Appendix F. Their analysis concludes that this development will not noticeably impact traffic at any of the nearby intersections or roads based on the planned levels of density and activity.

The traffic engineer reviewed accessibility through the strata road and Delora Drive confirming vehicle traffic can operate unimpeded. They confirmed that all municipal parking requirements were met or exceeded. A swept path analysis was conducted to ensure the municipal fire department's 47' Piece Fire Truck is able to safely enter and exit the subdivision.

7. Summary

By incorporating site adaptive planning principles throughout the design process the end result is a progressive new neighbourhood that balances the needs of all stakeholders. We are excited to provide a much-needed supply of attainable family housing that balances the character of the neighbourhood while meeting the goals of the Official Community Plan. If the rezoning and subdivision applications are successful, I will personally oversee the construction and completion of this sustainable family neighbourhood as I have at all of our previous housing projects in Greater Victoria over the past 13 years.

I appreciate the time taken to review this application, please do not hesitate to contact me for any reason at 250-589-1547 or email me at gl@garylunn.com.

Sincerely,

Gary Lunn

Appendix A - Conceptual Site Plan

Appendix 2

Proposal Summary

Areas

Total Site:	13,664 Sq M (147,077 Sq Ft)
Delora Drive Dedication	1,140 Sq M (12,277 Sq Ft), 8%
Park Dedication	1,038 Sq M(11,172 Sq Ft), 7.6%
Total Site Minus Road Dedication	12,524 Sq M (134,800 Sq Ft)
Open/Green Space (incl Park Dedication)	4,355 Sq M (46,882 Sq Ft), 35%
Private Amenity Space	465 Sq M (5,005 Sq Ft)
Floor Area Ratio	0.6-0.7
Lot Coverage	30 % (After Road Dedication)
Parcel Frontage	68.58 Metres
Gross Floor Area	8,365 Sq M (90,040 Sq Ft)

Unit Type and Details

Type A	1600 Sq ft, 3 Story (Mid lvl entry)	3 Bed + Den	16
Type B	1500 Sq Ft, 3 story (Lvl 2 Walkout)	3 Bed + Den	18
Type C	1500 Sq Ft, 3 story	3 Bed + Den	16

Total Units 50

Proposed Zoning

USE: Comprehensive Development
Max Building Height: 11.0 M (Measured from existing grade as per Bylaw 151)

Front Yard Setback:	6.0 M
Rear Yard Setback:	6.0 M
South Property Line Setback:	3.0 M
North Property Line Setback:	1.5 M
Interior Sideyard Setback: (minimum of 2 M between buildings)	1.0 M

Parking Specifications

Required

2 per Unit	
Number of Units 50	
Required Spaces 100	
Guest Parking .1 per Unit	
Required Guest Spaces	5
Required HC Spaces	2

Provided

2 per Unit (1 in Driveway & 1 in Garage)	100 Spaces
Visitor (Strata Rd)	7
Visitor (Delora Dr)	4
Handicap	2
Total (Handicap & Strata)	9

Legend

- Private Green Space
- Private Amenity Space
- Municipal Road Dedication
- Wood Chip Trail
- Park Dedication

1 / A1 Site Concept Plan
Scale 1 : 300

PROFESSIONAL SEALS

List of Drawings

A1	Concept Plan
A2	Grading & Elevation Details
A3	Satelite View

Issued/Revised

No:	Date	Description
1	08/07/2023	Rezoning
1	09/19/2023	Rezoning R1

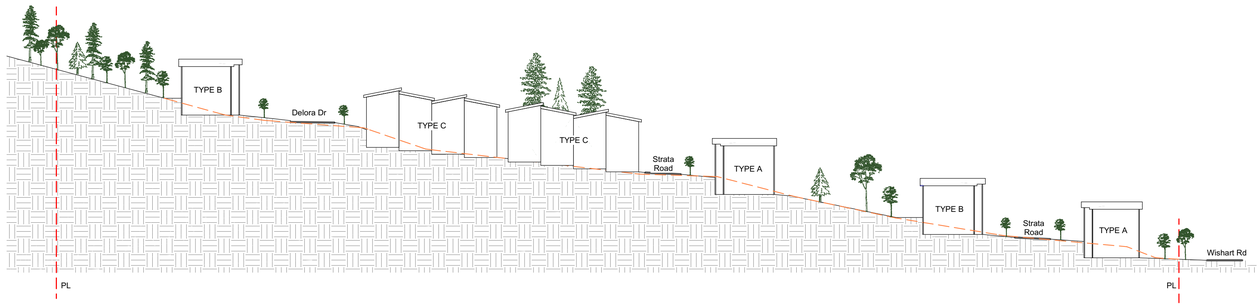
Walking Stick Drafting

Date:	
Sheet No	A1
Scale:	1 : 500

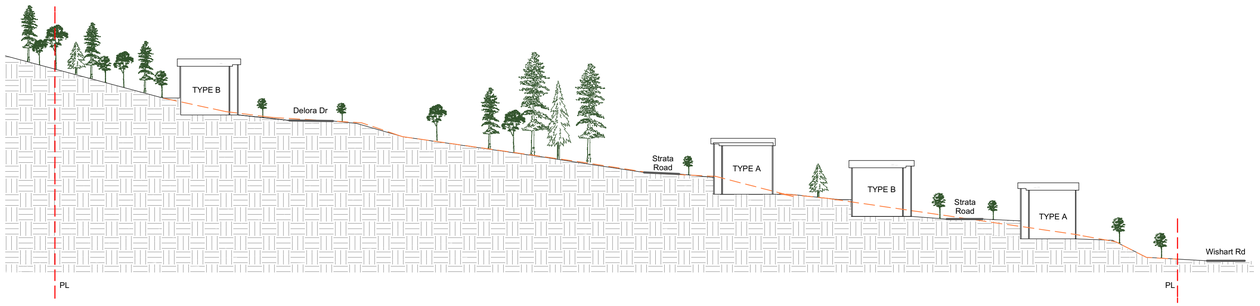
Project:

3494 Wishard Rd

Appendix A - Grading Plan, Section Views and Mass Modeling



1 / A2 Site Section - North
1 : 500



2 / A2 Site Section - North
1 : 500

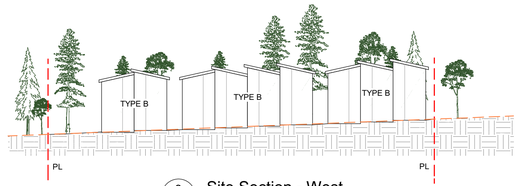
Legend

Property Line

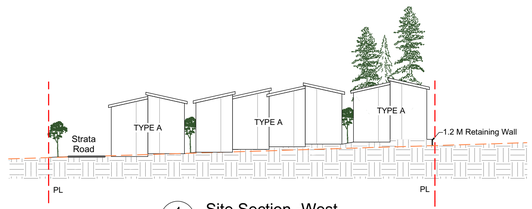
Existing Average Grade

Existing Grade

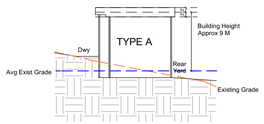
Finished Grade



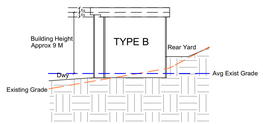
3 / A2 Site Section - West
1 : 500



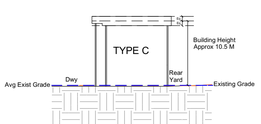
4 / A2 Site Section -West
1 : 500



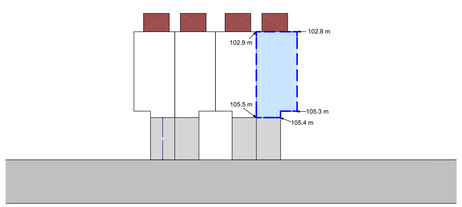
6 / A2 Height Calculation - Typ Unit A
1 : 400



7 / A2 Height Calculation - Type Unit B
1 : 400

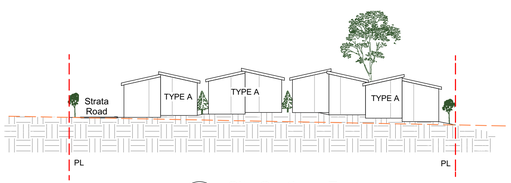


8 / A2 Height Calculation - Typ Unit C
1 : 400



(102.8 + 102.9 +105.5 +105.4 +105.3)/5 = 104.34 m - Avg Existing Grade

9 / A2 Typical Avg Grade Calculation
1 : 400



5 / A2 Site Section - East
1 : 500

PROFESSIONAL SEALS

List of Drawings

A1	Concept Plan
A2	Grading & Elevation Details
A3	Satelite View

Issued/Revised

No:	Date	Description
1	08/07/2023	Rezoning
1	09/19/2023	Rezoning R1

Walking Stick Drafting

Date:	
Sheet No	A2
Scale:	

Project:

3494 Wishard Rd

Appendix 3

1 Landscape Schematic Plan
Scale: 1:250

1:250

Landscape Schematic Plan - 3494 Wishart Road

Revision B : Sept. 20, 2023
Revision A : Aug. 30, 2023

LADR LANDSCAPE ARCHITECTS
#3-864 Queens Ave. Victoria B.C. V8T 1M5
Phone: (250) 598-0105

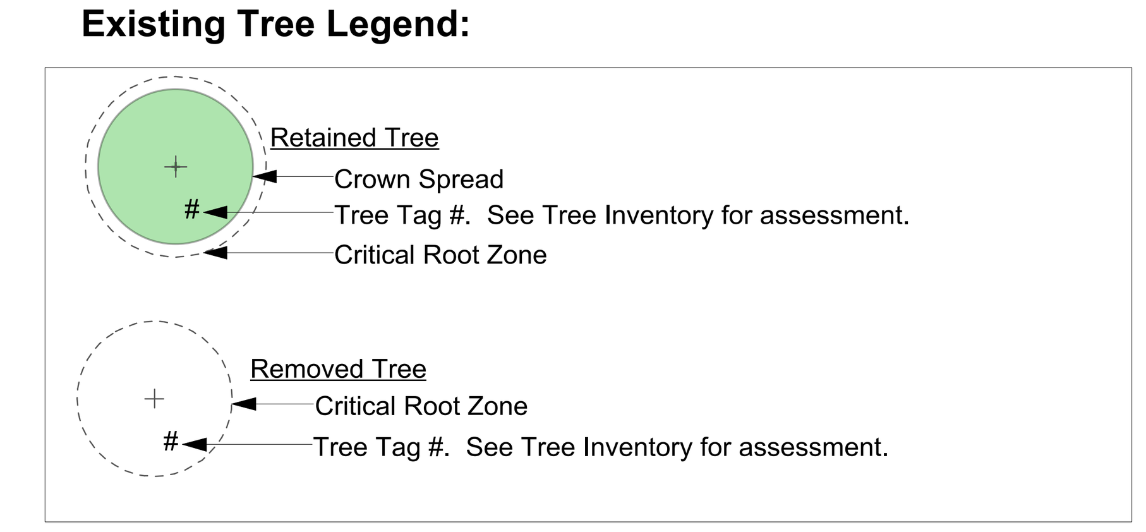
Project No: 2310 16 May 2023

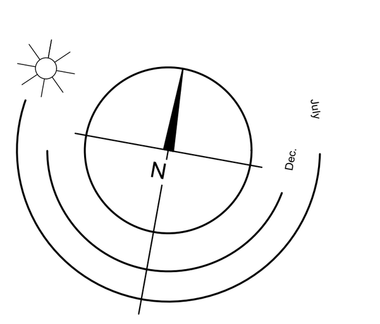
1 Tree Management Plan
Scale: 1:250

Tree Inventory Table

Tag or ID #	Surveyed? (Yes/No)	Location (On, Off, Shared, City)	Bylaw protected? (Yes/No)	Name: Common	Name: Botanical	dbh (cm)	Calculated DBH	Dripline diameter (m)	Critical root zone radius (m)	Relative Tolerance	Condition: Health	Condition: Structural	Retention Suitability (on-site trees)	General field observations/remarks	Tree retention / location comments	Retention status
562	Yes	Shared	No	Red alder	*Alnus rubra*	58		12	8.7	Poor	Poor	Poor	Unsuitable	Measured below union, decay in trunk, multiple large failures, surface rooting	Currently outside of striking distance of targets	Remove
037	Yes	On	No	English walnut	*Juglans regia*	30, 29, 25, 27	55.6	12	8.3	Poor	Good/fair	Fair	Unsuitable	Historical topping, sap sucker injury, active inclusions between scaffold limbs weakly attached epicormics		Remove
36	Yes	On	No	English walnut	*Juglans regia*	45		10	6.8	Poor	Good/fair	Fair	Unsuitable	Historically topped sapsucker damage, weakly attached epicormics		Remove
033	Yes	On	Yes	Arbutus	*Arbutus menziesii*	38		8	5.7	Poor	Fair	Fair	Unsuitable	Measured below union, asymmetrical crown, leans heavily to the east, twig dieback, rooted against stump		Remove
34	Yes	On	Yes	Bigleaf maple	*Acer macrophyllum*	34, 34, 29, 21	60.0	10	7.2	Moderate	Good	Fair	Unsuitable	Lower trunk is enveloping metal, some deadwood, quadradominance from base, included bark		Remove
035	Yes	On	Yes	Bigleaf maple	*Acer macrophyllum*	126		17	15.1	Moderate	Fair	Fair/poor	Conditional	Decay on south side (former failed stem) response growth around it, codominant at ~2.5m, failed second stem with large end weighted lateral, large epicormics, large deadwood in primary leader	Monitor health, prune, deadwood, assess for potential mitigation options	TBD
563	Yes	On	Yes	Bigleaf maple	*Acer macrophyllum*	150		13	18.0	Moderate	Fair	Poor	Unsuitable	Multiple stems, old stump with water sprout growth		Remove
564	Yes	On	Yes	Western red cedar	*Thuja plicata*	44		8	6.6	Poor	Good	Good/fair	Unsuitable	Suppressed by grand fir, growing 1.5m north of neighbouring fence line, slightly asymmetrical		Remove
565	Yes	On	Yes	Grand fir	*Abies grandis*	45		7	6.8	Poor	Good	Good/fair	Unsuitable	Asymmetrical crown from alder, growing right beside neighbours fence (northside)		Remove
OS1	Yes	Off	No	Red alder	*Alnus rubra*	~22, ~9	23.8	10	3.6	Poor	Fair	Fair	Suitable	Previous stem failure, included bark in union, high crown, overhangs propert by ~6m		Retain
OS2	Yes	Off	Yes	Douglas fir	*Pseudotsuga menziesii*	~55		10	8.3	Poor	Good	Good/fair	Suitable	Corrected lean,		Retain
OS3	Yes	Off	Yes	Western red cedar	*Thuja plicata*	~45		9	6.8	Poor	Good/fair	Good/fair	Suitable	Asymmetrical crown		Retain
OS4	Yes	Off	Yes	Western red cedar	*Thuja plicata*	~55		9	8.3	Poor	Good/fair	Good/fair	Suitable	Asymmetrical crown due to competition,		Retain
566	Yes	On	Yes	Bigleaf maple	*Acer macrophyllum*	114		13	13.7	Moderate	Poor	Poor	Unsuitable	Main stem failure, extensive decay, large poorly attached epicormics, hollow trunk, severely end weighted scaffold limbs	Currently outside of striking distance of targets	Remove
567	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	53		9	8.0	Poor	Good/fair	Fair/poor	Unsuitable	Historically topped, shear planes and cracked limbs, deflections in upper trunk		Remove
568	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	41		7	6.2	Poor	Fair/poor	Fair/poor	Unsuitable	Deflection in upper trunk, suppressed, dead top,		Remove
569	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	65, 67	93.3	13	14.0	Poor	Good	Fair/poor	Unsuitable	Stems fused at base, multiple deflections, secondary leaders, very end weighted limbs, asymmetrical crowns		Remove
570	Yes	On	Yes	Arbutus	*Arbutus menziesii*	11		2	1.7	Poor	Poor	Poor	Unsuitable	Functionally dead	Currently outside of striking distance of targets, small size limits dmage that could occur	Remove
571	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	70		11	10.5	Poor	Good/fair	Good/fair	Unsuitable	Asymmetrical crown, surface root to the south, irregular bark pattern on lower trunk		Remove
572	Yes	On	Yes	Arbutus	*Arbutus menziesii*	60		10	9.0	Poor	Fair/poor	Fair/poor	Unsuitable	Substantial cavity on lower trunk, signs of canker infection, canopy weighted to the north, fused with Douglas fir until around 2.5m		Remove
573	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	45		7	6.8	Poor	Fair	Fair/poor	Unsuitable	Suppressed, fused with arbutus, mechanical injury on trunk at ~9m, sparse canopy		Remove
574	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	45		5	6.8	Poor	Fair	Fair	Unsuitable	Narrow crown, epicormic on trunk, irregular bark pattern on lower trunk		Remove
575	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	51		5	7.7	Poor	Fair/poor	Fair/poor	Unsuitable	Irregular bark pattern in lower trunk, stressed, epicormics on trunk, missing top, lower deadwood		Remove
576	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	37		5	5.6	Poor	Fair/poor	Fair	Suitable	Sparse, stressed, narrow, epicormics on trunk, irregular bark pattern on lower trunk	Monitor health, assess prior to installation of playground	Retain
577	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	61		12	9.2	Poor	Fair	Fair	Suitable	Asymmetrical crown, quite stressed, deadwood,	Monitor health, assess prior to installation of playground	Retain
578	Yes	On	Yes	Bigleaf maple	*Acer macrophyllum*	3x38, 25	70.4	16	8.4	Moderate	Good	Fair	Suitable	Seam in western most leader, included bark, hangers,		Retain
579	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	70		12	10.5	Poor	Good/fair	Fair	Suitable	Asymmetrical crown, lots of deadwood	Crown clean/deadwood if retaining	Retain
580	Yes	On	Yes	Western red cedar	*Thuja plicata*	46		9	6.9	Poor	Fair	Fair	Suitable	Asymmetrical crown, suppressed by fir		Retain
581	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	52		7	7.8	Poor	Fair	Fair	Suitable	Corrected lean, deadwood, sparse asymmetrical crown	Monitor health, assess prior to installation of playground, deadwood, and crown clean	Retain
582	Yes	On	Yes	Western red cedar	*Thuja plicata*	47		7	7.1	Poor	Fair	Fair	Suitable	Suppressed, asymmetrical crown,	Monitor health, assess prior to installation of playground	Retain
583	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	34		6	5.1	Poor	Good	Good/fair	Suitable	Asymmetrical crown, highly vigorous, surface rooting,		Retain
584	Yes	On	Yes	Arbutus	*Arbutus menziesii*	40		11	6.0	Poor	Good/fair	Fair	Suitable	Measured at roughly 1.4m from germination point, heavy lean east		Retain
585	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	72		13	10.8	Poor	Good/fair	Good/fair	Conditional	Asymmetrical crown weighted to the west,	Arborist supervision while excavating within CRZ	TBD
586	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	36		6	5.4	Poor	Fair/poor	Fair	Unsuitable	Narrow asymmetrical crown, corrected leans, bends in trunk, health stress, epicormics on trunks		Remove
587	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	61		11	9.2	Poor	Good/fair	Good/fair	Unsuitable	Asymmetrical crown, irregular bark pattern on lower trunk		Remove
588	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	30		6	4.5	Poor	Good/fair	Good/fair	Unsuitable	Rooted on edge of bank (fill), vigorous upper canopy		Remove
589	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	30		5	4.5	Poor	Good/fair	Good/fair	Unsuitable	Asymmetrical crown, vigorous upper canopy, rooted on edge of bank (fill)		Remove
590	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	33		5	5.0	Poor	Good/fair	Good/fair	Unsuitable	Asymmetrical crown, rooted on edge of bank (fill)		Remove
591	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	38		7	5.7	Poor	Good/fair	Good/fair	Unsuitable	Asymmetrical crown, rooted on edge of bank (fill)		Remove
592	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	38		8	5.7	Poor	Good/fair	Good/fair	Unsuitable	Asymmetrical crown, rooted on edge of bank (fill)		Remove
593	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	31		7	4.7	Poor	Good/fair	Good/fair	Unsuitable	Corrected lean, quite vigorous,		Remove
594	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	31		8	4.7	Poor	Good/fair	Good/fair	Unsuitable	Quite vigorous, surface rooting		Remove
032	Yes	On	Yes	Arbutus	*Arbutus menziesii*	39, 18	43.0	8	6.4	Poor	Fair	Far/poor	Unsuitable	Hanger, cavity at base,		Remove
30	Yes	On	Yes	Western red cedar	*Thuja plicata*	93		12	14.0	Poor	Good/fair	Fair/poor	Unsuitable	Big surface roots, codom @~1.5m, recent top failure, stump beside tree		Remove
031	Yes	On	Yes	Arbutus	*Arbutus menziesii*	49, 36	60.8	14	9.1	Poor	Fair	Fair	Unsuitable	Codom @ 0.5m attachment okay, balsam cavity on eastern side, twig dieback, some deadwood		Remove
595	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	43, 20, 12	48.9	12	7.3	Poor	Good/fair	Poor	Unsuitable	Growing on old stump, surface rooting,		Remove
596	Yes	On	Yes	Arbutus	*Arbutus menziesii*	20		4	3.0	Poor	Fair/poor	Poor	Unsuitable	Reminants of larger tree, substantial decay at base		Remove
597	Yes	On	Yes	Arbutus	*Arbutus menziesii*	30		7	4.5	Poor	Good/fair	Fair/poor	Unsuitable	Canopy weighted to the east, cavity at base		Remove
025	Yes	On	Yes	Arbutus	*Arbutus menziesii*	41, 34		11	8.0	Poor	Fair/poor	Fair	Unsuitable	Canopy weighted to the north, third stem removed, sparse brown foliage		Remove
598	Yes	On	Yes	Arbutus	*Arbutus menziesii*	22		5	3.3	Poor	Fair/poor	Fair/poor	Unsuitable	Leans south, crown mostly epicormics		Remove
599	Yes	On	Yes	Arbutus	*Arbutus menziesii*	25		11	3.8	Poor	Fair/poor	Fair	Unsuitable	ressed, brown leaves, lots of epicormics		Remove
600	Yes	On	Yes	Arbutus	*Arbutus menziesii*	40		12	6.0	Poor	Fair/poor	Fair	Unsuitable	Stressed, brown leaves, lots of epicormics		Remove
27	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	70		14	10.5	Poor	Good	Fair/poor	Unsuitable	Corrected lean, codominant		Remove
601	Yes	On	Yes	Arbutus	*Arbutus menziesii*	38		4	5.7	Poor	Fair/poor	Poor	Unsuitable	Measured below union, sharp deflection with decay/cavity on underside, dead codom, large deadwood, twig dieback, small browning foliage		Remove
602	Yes	On	Yes	Arbutus	*Arbutus menziesii*	24		8	3.6	Poor	Fair	Good/fair	Unsuitable	Twig dieback, stunted		Remove
26	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	67		14	10.1	Poor	Good	Fair	Unsuitable	Asymmetrical due to historic tree to the east, end weighted limbs		Remove
603	Yes	On	Yes	Arbutus	*Arbutus menziesii*	27		7	4.1	Poor	Fair	Fair/poor	Unsuitable	Deflected leader, canopy weighted to the south		Remove
604	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	31		8	4.7	Poor	Good/fair	Good/fair	Unsuitable	Asymmetrical crown, surface roots, small deadwood in crown		Remove
605	Yes	On	Yes	Arbutus	*Arbutus menziesii*	9, 5, 4	11.0	6	1.7	Poor	Poor	Poor	Unsuitable	Water sprouts from removed tree		Remove
606	Yes	On	Yes	Arbutus	*Arbutus menziesii*	14		3	2.1	Poor	Fair	Fair/poor	Unsuitable	Growing over slab of rock,		Remove
24	Yes	On	Yes	Arbutus	*Arbutus menziesii*	36, 32, 28, 15, 11, 5	58.9	13	8.8	Poor	Fair/poor	Fair/poor	Unsuitable	Couple of large stems that have failed/removed decay from these old wounds, twig dieback		Remove
607	Yes	On	Yes	Arbutus	*Arbutus menziesii*	~30		3	4.5	Poor	Poor	Poor	Unsuitable			Remove
608	Yes	On	Yes	Western red cedar	*Thuja plicata*	27, 32	41.9	7	6.3	Poor	Fair	Fair	Unsuitable	Codom from 0.4m, tops are dead, branches trying to establish apical dominance, suppressed by arbutus		Remove
609	Yes	On	Yes	Arbutus	*Arbutus menziesii*	27		6	4.1	Poor	Fair	Fair/poor	Unsuitable	Lean to the northwest, canopy weighted to northwest, dead lateral, rooted next to large decaying stump,		Remove
610	Yes	On	Yes	Arbutus	*Arbutus menziesii*	12, 9, 3	15.3	5	2.3	Poor	Poor	Poor	Unsuitable	Growing from stump, leans heavily to south		Remove
611	Yes	On	Yes	Arbutus	*Arbutus menziesii*	31		7	4.7	Poor	Fair	Fair/poor	Unsuitable	Pronounced cavity, twig dieback,		Remove
612	Yes	On	Yes	Arbutus	*Arbutus menziesii*	12		4	1.8	Poor	Fair/poor	Fair/poor	Unsuitable	Cavity at base, lots of dieback		Remove
613	Yes	On	Yes	Arbutus	*Arbutus menziesii*	~20		4	3.0	Poor	Fair	Fair/poor	Unsuitable	Cavity at base, twig dieback,		Remove
615	Yes	On	Yes	Arbutus	*Arbutus menziesii*	26, 18	31.6	7	4.7	Poor	Fair	Fair	Unsuitable	Codom at 0.4m, twig dieback,		Remove
614	Yes	On	Yes	Arbutus	*Arbutus menziesii*	6, 3, 1	6.8	2	1.0	Poor	Poor	Poor	Unsuitable	Sprouts from decaying stump		Remove
616	Yes	On	Yes	Arbutus	*Arbutus menziesii*	10		1	1.5	Poor	Poor	Poor	Unsuitable	Measured 1.4m from germination point, mostly dead, previously topped		Remove
617	Yes	On	Yes	Arbutus	*Arbutus menziesii*	21		4	3.2	Poor	Fair	Poor	Unsuitable	Cavity at base, measured at ~1m, lower trunk nearly fused with small maple, some twig dieback, branch failure		Remove
028	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	75		13	11.3	Poor	Good	Fair	Unsuitable	Asymmetrical crown, small deadwood south side (canopy competition), very large exposed and damaged surface root to the east, newly exposed on south side		Remove
029	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	81		13	12.2	Poor	Good	Fair	Unsuitable	Pronounced root flare, asymmetrical crown, surface roots to the east, some deadwood, end weighted lower limbs, newly exposed south side		Remove
618	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	44		5	6.6	Poor	Fair	Fair	Conditional	Irregular bark pattern, very asymmetrical crown, some epicormics on trunk, newly exposed on south side	Arborist supervision while excavating within CRZ	TBD
619	Yes	On	Yes	Western red cedar	*Thuja plicata*	31		9	4.7	Poor	Good	Good/fair	Suitable	Some chlorosis on south side (newly exposed), girdling roots,		Retain
OS5	Yes	Off	Yes	Arbutus	*Arbutus menziesii*	~15		8	2.3	Poor	Fair	Fair	Suitable	2.5m south of pl, most of crown on property, leaning, lower live crown ratio, newly exposed on south side		Retain
OS6	Yes	Off	Yes	Western red cedar	*Thuja plicata*	44		9	6.6	Poor	Good	Fair	Suitable	Newly exposed on south side, asymmetrical crown, multiple leaders		Retain
OS7	Yes	Off	Yes	Western red cedar	*Thuja plicata*	~20		5	1.7	Poor	Fair	Fair	Suitable	Asymmetrical crown, competing (suppressed), newly exposed on south side		Retain
OS8	Yes	Off	Yes	Arbutus	*Arbutus menziesii*	~32		8	4.8	Poor	Fair/poor	Fair/poor	Suitable	Weighted to east, newly exposed to south, 3.5m south of pl, high crown, branch failure, low live crown ratio		Retain
OS9	Yes	Off	Yes	Douglas fir	*Pseudotsuga menziesii*	40		6	6.0	Poor	Fair	Fair	Suitable	0.5m south of pl, asymmetrical crown, high narrow crown		Retain
OS10	Yes	Off	Yes	Douglas fir	*Pseudotsuga menziesii*	85		13	12.8	Poor	Good/fair	Fair	Suitable	~2.5m south of pl, large surface roots, deadwood, extended limbs		Retain
620	Yes	On	Yes	Bigleaf maple	*Acer macrophyllum*	23, 19, 1	29.8	8	3.6	Moderate	Fair	Fair/poor	Suitable	Growing from stump		Retain
621	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	47		5	7.1	Poor	Fair	Poor	Suitable	Historical failure, asymmetrical narrow crown		Retain
622	Yes	On	Yes	Arbutus	*Arbutus menziesii*	10		3	1.5	Poor	Fair/poor	Fair/poor	Conditional	Cavity at base, twig dieback	Arborist supervision while excavating within CRZ	TBD
623	Yes	On	Yes	Arbutus	*Arbutus menziesii*	13		3	2.0	Poor	Fair	Poor	Unsuitable	Sprouting from old stump		Remove
624	Yes	On	Yes	Arbutus	*Arbutus menziesii*	25, 16	29.7	7	4.5	Poor	Fair/poor	Fair/poor	Unsuitable	Codom from base, cavity at base, twig dieback, branch failures		Remove
625	Yes	On	Yes	Arbutus	*Arbutus menziesii*	21, 4	21.4	5	3.2	Poor	Fair	Poor	Conditional	Large cavity, tearout injury,	Monitor health	TBD
626	Yes	On	Yes	Arbutus	*Arbutus menziesii*	20, 8	21.5	6	3.2	Poor	Fair	Fair/poor	Conditional	Third stem (decayed),		TBD
627	Yes	On	Yes	Arbutus	*Arbutus menziesii*	8		1	1.2	Poor	Fair/poor	Fair/poor	Suitable	Substantial decay at base (has holding wood good for size), stressed, low live crown ratio		Retain
628	Yes	On	Yes	Arbutus	*Arbutus menziesii*	20		5	3.0	Poor	Fair	Fair/poor	Conditional	Some twig dies back, basal decay		TBD
629	Yes	On	Yes	Arbutus	*Arbutus menziesii*	15		6	2.3	Poor	Fair	Fair/poor	Suitable	Browning, twig dieback, cavity at base		Retain
630	Yes	On	Yes	Arbutus	*Arbutus menziesii*	18		4	2.7	Poor	Fair	Fair	Suitable	Twig dieback, codom, rooted beside stump, little bit of decay at base		Retain
631	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	38		8	5.7	Poor	Fair	Fair	Unsuitable	High narrow asymmetrical crown (due to presence of large trees historically), epicormics in trunk (stressed),		Remove
632	Yes	On	Yes	Arbutus	*Arbutus menziesii*	25, 22, 14, 12	38.1	7	5.7	Poor	Fair	Fair/poor	Unsuitable	Some decay at base, twig dieback		Remove
633	Yes	On	Yes	Arbutus	*Arbutus menziesii*	12		3	1.8	Poor	Fair/poor	Fair/poor	Unsuitable	Cavity at base, twig dieback		Remove
634	Yes	On	Yes	Arbutus	*Arbutus menziesii*	21, 18	27.7	6	4.1	Poor	Fair	Fair/poor	Unsuitable	Codom at base, small foliage, twig dieback, leaning to the east, cavity at base		Remove
635	Yes	On	Yes	Arbutus	*Arbutus menziesii*	23		4	3.5	Poor	Fair	Fair	Unsuitable	Small cavity at base, twig dieback, deflected leader (past leader failure), small lower trunk wound (compartmentalizing)		Remove
636	Yes	On	Yes	Arbutus	*Arbutus menziesii*	27		7	4.1	Poor	Fair	Fair/poor	Unsuitable	~3m long wound with decay in lower trunk (starting to seal), twig dieback in lower canopy		Remove
637	Yes	On	Yes	Western red cedar	*Thuja plicata*	100		11	15.0	Poor	Fair	Poor	Unsuitable	Measured below unions, multiple leaders emerging from ~2m, cavity with decay near base, active inclusions in most unions, west side stem failure (35cm),		Remove
638	Yes	On	Yes	Western red cedar	*Thuja plicata*	44		8	6.6	Poor	Good	Good/fair	Unsuitable	Codom tops (small),		Remove
639	Yes	On	Yes	Bigleaf maple	*Acer macrophyllum*	55		13	6.6	Moderate	Good/fair	Fair/poor	Unsuitable	Past stem failure (now cavity at base extensive decay no fruiting bodies), tri dominant leaders active seam, some deadwood, exposed roots on top side of slope		Remove
640	Yes	On	Yes	Grand fir	*Abies grandis*	42			6.3	Poor	Dead	Dead	Unsuitable	Fine twigs remaining	Unlikely to hit targets	Remove
641	Yes	On	Yes	Arbutus	*Arbutus menziesii*	17, 4	17.5	6	2.6	Poor	Fair	Fair/poor	Conditional	Decay at base larger stem historically removed, rooted on mound		TBD
642	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	63		12	9.5	Poor	Good	Good/fair	Unsuitable	Asymmetrical crown,		Remove
643	Yes	On	Yes	Grand fir	*Abies grandis*	33		5	5.0	Poor	Fair	Poor	Unsuitable	Highly irregular taper, lower trunk wounds, codom, deflected leader		Remove
644	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	70		10	10.5	Poor	Good/fair	Good/fair	Unsuitable	Asymmetrical high crown, some deadwood, epicormic growth on trunk		Remove
645	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	55, 60, 24	84.9	8	12.7	Poor	Good	Good/fair	Unsuitable	Larger stem has some deadwood		Remove
646	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	60, 24	64.6	8	9.7	Poor	Good	Good/fair	Unsuitable			Remove
647	Yes	On	Yes	Arbutus	*Arbutus menziesii*	9		2	1.4	Poor	Poor	Poor	Conditional	Growing on decayed stump		TBD
648	Yes	On	Yes	Arbutus	*Arbutus menziesii*	47		10	7.1	Poor	Fair	Fair/poor	Suitable	Surface roots, growing on rock, twig dieback, hangers, deadwood,		Retain
649	Yes	On	Yes	Douglas fir	*Pseudotsuga menziesii*	45		8	6.8	Poor	Good/fair	Good/fair	Suitable	Slight lean corrected,		Retain
NT1	Yes	On	Yes	Arbutus	*Arbutus menziesii*	~39		7	5.9	Poor	Fair/poor	Fair/poor	Unsuitable	Large tearouts on western stem, epicormic growth, browning, formerly OS11		Remove
OS12	No	Off	Yes	Bigleaf maple	*Acer macrophyllum*	~35, ~25, ~22, ~14	50.3	11	6.0	Moderate	Fair/poor	Fair/poor	Conditional	Surface roots, large failures, deadwood, epicormic growth, ~2.5m north of fence		TBD

Existing Tree Legend:





1:250

Tree Preservation Plan - 3494 Wishart Road

Revision B : Sept. 20, 2023
Revision A : Aug. 30, 2023

LADR LANDSCAPE ARCHITECTS
#3-864 Queens Ave. Victoria B.C. V8T 1M5
Phone: (250) 598-0105

Project No: 2310 16 May 2023

Appendix 4



ENVIRONMENTAL ASSESSMENT

FOR 3494 WISHART ROAD, COLWOOD BC

PREPARED FOR:
DAVID LUNN
WALKING STICK DEVELOPMENTS INC.
7401 VEYANESS ROAD
SAANICHTON, BC, V8M 1V9

AND

CITY OF COLWOOD
3300 WISHART ROAD
COLWOOD, BC, V9C 1R1

CORVIDAE PROJECT #2023-038
MAY 2023

CORVIDAE
ENVIRONMENTAL CONSULTING INC
6526 WATER STREET, SOOKE, BC

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CAVEAT

This Environmental Assessment (EA) has been prepared with the best information available at the time of writing, including the City of Colwood Official Community Plan, communications with the client, a site visit, review of site plans and design drawings and other documentation relevant to the project. This EA has been developed to assist the project in remaining in compliance with relevant environmental regulations, acts and laws pertaining to the project and to identify and mitigate the expected impacts of the project.

1 INTRODUCTION

Corvidae Environmental Consulting Inc. (Corvidae) is pleased to provide this Environmental Assessment (EA) for a rezoning application and proposed residential development at 3494 Wishart Road in Colwood, BC (the Site) (PID: 005-210-089; LOT 3, PLAN 10219). The Site is currently zoned as Rural 1 (A1). Site boundaries and environmental features are presented in Figure 1.

Currently on the Site is an existing dwelling, several accessory structures, and a horse paddock area. The Site has been cleared of natural vegetation in many areas and has been highly impacted by invasive species. The western extent remains forested, and several rocky outcrops occur throughout the Site. A polygon that represents potential habitat for sharp-tailed snake is mapped in the west (Figure 2). The potential for sharp-tailed snake to occur in this area is considered low based on habitat characteristics (see Section 4.6 of this report for further details). The Site occurs within two Development Permit Areas (DPA), the Hillside Environmental DPA and Natural Hazards DPA (Figure 2).

The landowner is proposing to rezone the Site to allow for a future 49-unit townhouse development. Several areas of green space will be retained as part of the development, particularly at the western boundary where habitat value is greater. An extension of Delora Drive, a public road, is planned in the western extent. The Site plan is presented in Figure 3.

This document addresses the requirements outlined in Part D of the City of Colwood Bylaw No. 1700, provides a detailed assessment on the environmental conditions on the Site, potential impacts of the proposed development, and recommendations for the protection of environmentally sensitive features and methods to minimize impacts of the proposed development.

Site Location and Environmental Features

Mature tree
Rock outcrop
Property Boundary
Ditch
Forested area

N

0 25 50 100 Meters

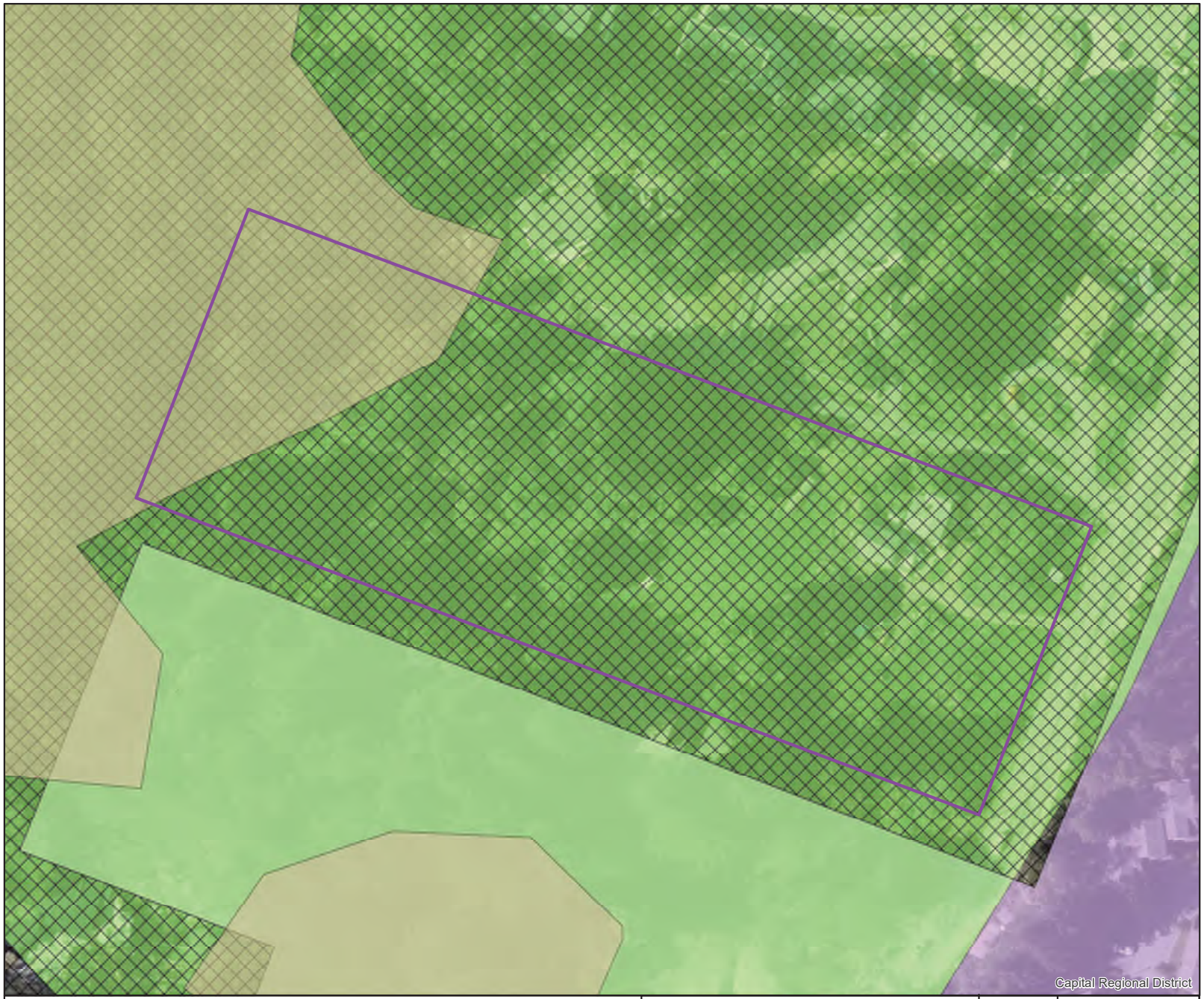
Project: 3494 Wishart Road | Sources: Capital Regional District

CORVIDAE ENVIRONMENTAL CONSULTING INC

Rev. #	Date
0	April 10, 2023
1	April 30, 2023

Corvidae Project No.
COR-2023-038

Figure 1



Development Permit Areas

- Potential Sharp Tailed Snake Habitat
- Environmental DPA - Hillside
- Natural Hazards DPA - Steeply Sloped Areas (>30%)
- Form-Character DPA - Neighbourhood
- Property Boundary

N

0 25 50 100 Meters

Project: 3494 Wishart Road | Sources: Capital Regional District

CORVIDAE ENVIRONMENTAL CONSULTING INC

Rev. #	Date
0	April 30, 2023

Corvidae Project No.
COR-2023-038

Figure 2

Proposed Development Site Plan

Mature trees
Ditch
Road
Retaining Wall
Rock Outcrop
Site Plan
Forested area
Property Boundary

N

0 10 20 40 Meters

Project: 3494 Wishart Road | Sources: Capital Regional District

CORVIDAE ENVIRONMENTAL CONSULTING INC

Rev. #	Date
0	April 30, 2023
1	September 19, 2023

Corvidae Project No.
COR-2023-038

Figure 3

1.1 OBJECTIVES

The purpose of this EA is to assess the current terrestrial and riparian environments onsite, identifying terrestrial and aquatic habitat, sensitive ecosystems, and wildlife habitat, including wildlife trees, nests, and any other wildlife features. This EA also identifies the presence of threatened or endangered species on or around the Site, which includes a 2-kilometre (km) buffer around the Site boundaries. As part of the EA, Corvidae completed a detailed field assessment to document biophysical features, habitat and verify available ecosystem inventory data.

From this information potential impacts have been determined and mitigations provided to protect the natural environment, its ecosystems and associated biological diversity. This report and planning meet the environmental requirements in the City of Colwood Official Community Plan, zoning by-laws and addresses provincial and federal laws.

1.2 REGULATORY FRAMEWORK

This environmental assessment is designed to comply with the provisions set out in the City of Colwood Official Community Plan (OCP) for development permit areas and for compliance with the provisions for environmental protection contained in the following relevant legislation:

Municipal

- City of Colwood OCP, Bylaw No. 1700 (City of Colwood 2018)

Hillside DPA

Objectives

19.1.q. Protect wildlife habitat and corridors, and environmentally sensitive areas on hillsides

19.1.r. Identify significant features prior to development, and protect hillside character and natural features

19.1.s. Conserve unique natural features such as landforms, rock outcrops, mature trees and vegetation, hilltops, and ridge lines.

19.1.t. Minimize blasting and re-contouring of hillsides.

Guidelines

22.1.a. Open space and corridors between development areas or lots should be retained to provide continuous habitat linkages within the site and surrounding area. Significant features such as rock outcrops, streams, cliffs, and stands of trees should be incorporated into the open space and corridors as much as possible.

22.1.b. Windfirm treed buffers must be maintained between the subject parcel and adjacent lots, and should also be applied along major roads fronting the development.

22.1.c. Where trees are not present, and soils are suitable, new trees which are native to the Coastal Douglas-Fir Biogeoclimatic Zone must be planted.

22.1.g. Post-development, exposed soil on steep slopes subject to erosion shall be re-vegetated with vegetation native to the Coastal Douglas-Fir Biogeoclimatic zone or otherwise protected from run-off erosion.

22.1.h. Avoid using fast-growing non-native plants to retain soils. Temporary erosion control measures must be maintained during and post-construction until native vegetation is re-established and capable of protecting slopes from erosion.

22.1.i. Avoid tree removal on steep slopes. Trees intercept precipitation and reduce stormwater runoff volumes, protect soils from erosion, and protect the scenic quality of the community.

22.1.k. Do not clear more trees and vegetation than is necessary to install services for any given phase of the development.

22.1.l. Take advantage of topography and minimize disruption of rock outcroppings, sensitive ecosystems, mature trees and culturally significant features.

22.1.m. Design sites to incorporate, protect and enhance remnant riparian zones, watercourses, and urban forests and to optimize opportunities to establish new ecological connections through the site, such as urban forest corridors and watercourses.

Natural Hazards DPA

Objectives

19.1.u. Protect lives and property from hazardous conditions such as landslides and erosion by avoiding development on unstable or hazardous areas.

19.1.v. Protect people and development from flooding and erosional processes associated with extreme weather events and potential sea level rise in ways that do not lead to hardening of shorelines and loss of environmental and recreational values.

19.1.w. Protect lives and property from interface wildfire.

Guidelines

23.1.a. Development on lands with slopes greater than 30% must be avoided. Development may be considered on slopes greater than 30% only where it can be demonstrated that the proposed development will not create geotechnical, ecological, or visual impacts, can be sensitively integrated with terrain, and presents no hazards to people or property.

23.1.b. Grading or alteration of key topographic features such as knolls, ridgelines, rocky outcrops, cliffs, and ravines must be avoided.

The guiding principle for the use of Development Permits is found within the *Local Government Act*. Development Permit Areas can be designated for purposes such as, but not limited to: protecting, enhancing and restoring the biodiversity and ecological values and functions of environmentally sensitive areas; fostering compatibility between development, existing land uses and environmentally sensitive areas; maintaining connectivity between sensitive ecosystems; and protecting water quality and quantity.

Provincial

- *Wildlife Act* (1996)
- Invasive Species Council of BC
- *Weed Control Act* (1996, current as of October 2016)

Federal

- *Migratory Birds Convention Act* (1994)
- *Species at Risk Act* (SARA) (2002)

1.3 DEVELOPMENT PERMIT AREAS

As per Figure 18 and 19 of the City of Colwood OCP, the Site occurs within the Hillside Environmental DPA, and Natural Hazards DPA. Development Permit Area boundaries on the Site are presented in Figure 2.

The objectives of the Natural Hazards DPA include the protection of lives and property from hazardous conditions, potential erosion and flooding associated with extreme weather events and sea-level rise, and wildfire. Commentary regarding development requirements to ensure human safety and slope stability within the Natural Hazards DPA on the Site will not be included in this report. As plans progress, a geotechnical evaluation (submitted separately) prepared by a registered geotechnical professional is required to certify that the site is safe for its intended use.

2 SCOPE OF WORK

Corvidae completed an environmental assessment for the Site and documented the ecological features. Background information was reviewed, including applicable databases. The following features were documented and provided in this report:

- Areas of sensitivity, including mapped potential sharp-tailed snake habitat.
- Areas of habitat and biodiversity values, including rocky outcrops.
- Plant communities and plant species on site.
- Potential wildlife presence and wildlife habitat.
- Soil types and terrain.
- Surface water flow patterns.

Following the field assessment, the biophysical features were mapped, and buffer areas have been identified. Mitigations to minimize the impacts of the proposed residential development on the environment have been provided in Section 6.

3 METHODS

3.1 DESKTOP REVIEW

Baseline biophysical conditions were compiled by reviewing the best available data and information including existing reports for the area and conducting searches of online provincial and federal databases:

- BC Conservation Data Centre (BC CDC 2023a and 2023b).
- BC HabitatWizard (Province of BC 2023).
- Aerial photographs of the Site (Google Earth 2023).
- CRD mapping system and database (CRD 2023).
- City of Colwood GIS Mapping (City of Colwood n.d.)
- Colwood Official Community Plan Bylaw No. 1700 (City of Colwood 2018).

3.2 FIELD ASSESSMENT

A field assessment of the Site was completed by a Qualified Environmental Professional (QEP) from Corvidae. The assessment included characterization of vegetation and habitat types, wildlife sign and species observations, wildlife habitat, surface water flow patterns, and assessed the current conditions of the Site.

4 ENVIRONMENTAL SITE ASSESSMENT

Corvidae completed a site visit on April 4, 2023. Site photographs are included as Appendix A.

4.1 LAND USE

A primary residence and various accessory structures are present within the Site. Open areas (grass lawn), and a horse paddock area are located in the eastern portion, closest to Wishart Road. Surrounding land use is primarily rural residential and higher density residential. The Site is bound by residential properties to the north, and by Wishart Road to the east. To the south is a residential development undergoing construction, and to the west is a large rural property that borders Havenwood Park.

4.2 CLIMATE AND BIOGEOCLIMATIC ZONE

The project is located within the Coastal Douglas-fir (CDF) biogeoclimatic zone, specifically in the Moist Maritime Coastal Douglas-fir Subzone (CDFmm) (BC CDC 2023b). The CDFmm occurs at low elevations (<150 m) along southeast Vancouver Island, the southern Gulf Islands, and part of the Sunshine Coast. The CDFmm has the mildest climate in Canada. This subzone has a long growing season with warm, dry summers and mild, wet winters.

4.3 TERRAIN AND SOILS

Soils in the CDF biogeoclimatic zone are generally derived from morainal, colluvial, and marine deposits, and are typically Brunisols, grading with increased precipitation to Humo-Ferric Podzols (Nuszdorfer *et. al.* 1991). Soils on the Site are described as rapidly drained, Orthic Dystric Brunisols (60%) underlain by undifferentiated bedrock (20%) and well-drained Duric Dystric Brunisols (20%) (BC SIFT 2018). The terrain slopes upward from Wishart Road to the west. The slope of the Site is approximately 15% on average, with some areas approximately 30% in grade. Areas of exposed bedrock (rocky outcrops) are identified in Figure 1. A geotechnical evaluation prepared by a registered geotechnical professional will be completed during ongoing development planning.

4.4 SURFACE WATER

Natural surface water features (e.g., watercourses, wetlands, etc.) were not observed during the field assessment. A shallow grassy ditch is located along the eastern property boundary. The ditch flows into the municipal stormwater management system and does not connect to fish-bearing waters. Therefore, it does not require protections under the *Riparian Areas Protection Regulation,* B.C. Reg. 178/2019.

4.5 VEGETATION

Dry forests in the CDFmm zone are typically dominated by Douglas-fir (*Pseudotsuga menziesii*), arbutus (*Arbutus menziesii*), and western redcedar (*Thuja plicata*). Grand fir (*Abies grandis*) and shore pine (*Pinus contorta* var. *contorta*) may also be present. Salal (*Gaultheria shallon*), dull Oregon-grape (*Mahonia nervosa*), ocean spray (*Holodiscus discolor*), baldhip rose (*Rosa gymnocarpa*), and red huckleberry (*Vaccinium parvifolium*) are common in the shrub layer. Bracken fern (*Pteridium aquilinum*), snowberry (*Symphoricarpos albus*), grasses, and pacific sanicle (*Sanicula crassicaulis*) are common in the herb layer. Oregon beaked-moss (*Eurhynchium oreganum*), step moss

(Hylocomium splendens), and electrified cat's-tail moss (*Rhytidiadelphus triquetrus*) dominate the well-developed moss layer (Nuszdorfer *et. al.* 1991).

Most of the Site has been cleared of most natural vegetation and has been modified through landscaping and the spread of invasive species. However, in the western extent, a young second-growth forest remains (Figure 1). During the field assessment this area was identified as having the highest habitat value of the areas on the Site, as it is adjacent to undeveloped land and has been less impacted than other areas. However, there is still a high concentration of invasive species in the forested area. The forest canopy layer is dominated by arbutus and Douglas-fir. The understory is composed of native species such as oceanspray, dull Oregon-grape, tall Oregon-grape, baldhip rose, and sword fern. Numerous invasive species were observed in the understory including spurge-laurel, Himalayan blackberry, Scotch broom, and English holly.

Throughout the rest of the Site, treed patches occur, however these areas have been disturbed and lack native understory vegetation. Rock outcrops occur throughout the property. Plant diversity within the rock outcrop areas is low due to impacts from invasive species. Grass fields dominate the eastern portion of the Site, and remaining trees include red alder, arbutus, and bigleaf maple. Some mature trees (>80 years) occur on the Site and are identified in Figure 1.

Five invasive plant species were observed on the Site: Cherry-laurel, English holly, Himalayan blackberry, Scotch broom, and spurge-laurel. These are listed as "Control" species as per the Coastal Invasive Species Committee (2023). It is recommended that efforts to control these species are focused within high value conservation areas and that the use of Biological Control, if available, is utilized on a landscape scale. Measures to remove and prevent invasive species are discussed in Section 6 of this report. All vegetation species noted during the April 4, 2023 field visit are included below in Table 1.

Table 1. Plant species observed on site during the April 4, 2023 field visit.

Common Name	Scientific Name	BC Provincial Status[1]	*SARA* Schedule 1 Status[2]
Arbutus	*Arbutus menziesii*	Yellow	--
Baldhip rose	*Rosa gymnocarpa*	Yellow	--
Bigleaf maple	*Acer macrophyllum*	Yellow	--
Broad-leaved stonecrop	*Sedum spathulifolium*	Yellow	--
Cherry-laurel	*Prunus laurocerasus*	**Invasive**; Exotic	--
Common dandelion	*Taraxacum officinale*	Exotic	--
Daffodil	*Narcissus pseudonarcissus*	Exotic	--
Douglas-fir	*Pseudotsuga menziesii*	Yellow	--
Dull Oregon-grape	*Mahonia nervosa*	Yellow	--
Electrified cat's-tail moss	*Rhytidiadelphus triquetrus*	Yellow	--
English holly	*Ilex aquifolium*	**Invasive**; Exotic	--
Garry oak	*Quercus garryana*	Yellow	--
Grass sp.	*Poa sp.*	--	--
Grassland saxifrage	*Micranthes integrifolia*	Yellow	--
Hairy honeysuckle	*Lonicera hispidula*	Yellow	--
Himalayan blackberry	*Rubus armeniacus*	**Invasive**; Exotic	--
Licorice fern	*Polypodium glycyrrhiza*	Yellow	--
Nootka rose	*Rosa nutkana*	Yellow	--

Common Name	Scientific Name	BC Provincial Status[1]	*SARA* Schedule 1 Status[2]
Oceanspray	*Holodiscus discolor var. discolor*	Yellow	--
Orchard grass	*Dactylis glomerata*	Exotic	--
Reed canarygrass	*Phalaris arundinacea*	Exotic	--
Red alder	*Alnus rubra*	Yellow	--
Rock cotoneaster	*Cotoneaster horizontalis*	Exotic	--
Scotch broom	*Cytisus scoparius*	**Invasive**; Exotic	--
Smooth hawksbeard	*Crepis capillaris*	Exotic	--
Snowberry	*Symphoricarpos sp.*	--	--
Spurge-laurel	*Daphne laureola*	**Invasive**; Exotic	--
Sword fern	*Polystichum munitum*	Yellow	--
Tall Oregon-grape	*Mahonia aquifolium*	Yellow	--
Thistle sp.	*Cirsium sp.*	--	
Wild carrot	*Daucus carota*	Exotic	--
Yarrow sp.	*Achillea sp.*	--	--

[1] BC CDC 2023a
[2] Government of Canada 2023

4.6 WILDLIFE

Trees on the Site may provide nesting and roosting habitat for birds, including migratory songbirds, year-round resident species, raptors, and owls. No nests were observed during the assessment. The Site is likely also to be utilized as a movement corridor and refuge for large mammals, including black bears, cougars, and deer. Two black-tailed deer were observed foraging in the forested area to the west.

The northwestern extent of the Site is overlapped by an area of mapped potential sharp-tailed snake habitat (CRD 2021) (Figure 2). Sharp-tailed snake is a red-listed species in BC and is designated as Endangered under Schedule 1 of SARA. Suitable habitat for Sharp-tailed Snake must provide sites for thermoregulation, egg laying, incubation, and inactive phases (overwintering/hibernation and summer inactivity/aestivation) as well as foraging opportunities. Sharp-tailed Snakes are generally found within open canopy forest, dominated by Douglas-fir, arbutus, and/or Garry oak, which provides the mosaic of shaded/cool/moist and open/warm patches required for the snakes to carry out their lifecycle. Critical habitat is identified whenever sparsely forested or treeless rocky openings (~10 m diameter and greater) with warm (southerly) aspects are found. Open habitats must be surrounded by open canopy forest habitat that support prey populations (slugs) and provide opportunities for thermoregulation. In both open habitats and adjacent forest, 3-dimesional features composed of rock or coarse woody debris that provide microhabitats must be present (Environment and Climate Change Canada [ECCC] 2020). No federally designated critical habitat is mapped in the area (ECCC 2020).

Potential for sharp-tailed snake to occupy this area on the Site is considered low. While some optimal biophysical features were observed, including rocky outcrops with southern exposure and an adjacent canopy comprised of the appropriate tree species (e.g., Douglas-fir and arbutus), the area is heavily impacted by invasive vegetation and the site overall lacks 3-dimensional features composed of rock (e.g., talus slopes or patches, or fissures in rock outcrops) and coarse woody debris (including large

decaying logs or stumps with sloughing bark). Habitat quality in this area can be improved through restoration of retained green space discussed below in Section 6.

The rocky outcrops that occur on the Site may provide suitable habitat for other reptiles, including garter snakes, as well other vertebrate (e.g., mammals and birds) and invertebrate species and are designated in the City of Colwood OCP as a key topographic feature (2018). During the site assessment the species in Table 2 were observed on or near the Site.

Table 2. Wildlife species observed on site during the April 4, 2023 field visit.

Common Name	Scientific Name	BC Provincial Status[1]	*SARA* Schedule 1 Status[2]
Black-tailed deer	*Odocoileus hemionus*	Yellow	--
American robin	*Turdus migratorius*	Yellow	--
Northern flicker	*Colaptes auratus*	Yellow	--
Ruby-crowned kinglet	*Corthylio calendula*	Yellow	--
Spotted towhee	*Pipilo maculatus*	Yellow	--
Turkey vulture	*Cathartes aura*	Yellow	--
White-crowned Sparrow	*Zonotrichia leucophrys*	Yellow	--
Yellow-rumped warbler	*Setophaga coronata*	Yellow	--

[1] BC CDC 2023a
[2] Government of Canada 2023

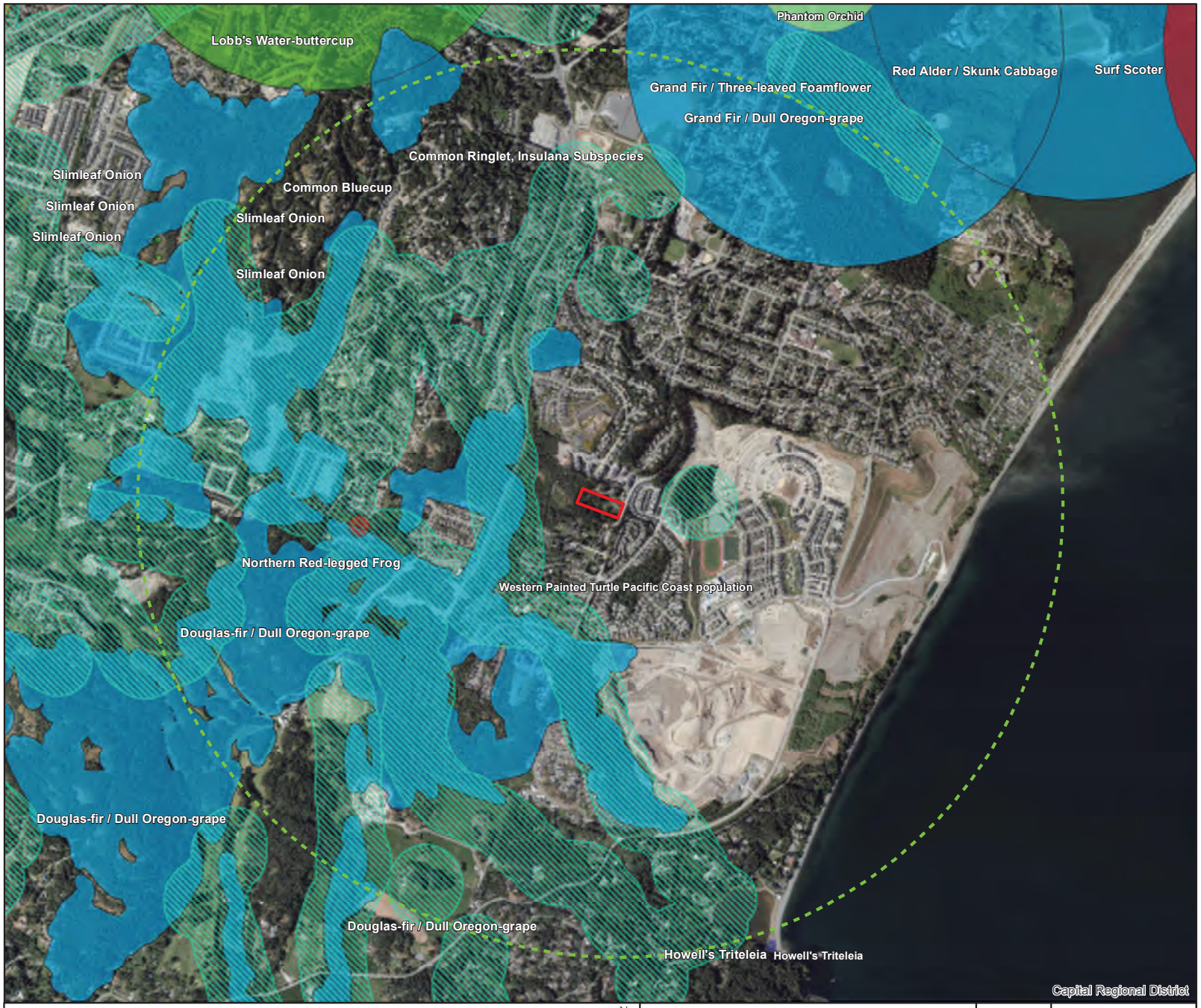
4.7 SPECIES AT RISK

A query of the BC CDC iMap tool yielded occurrences of 2 species and 3 ecosystems at risk within a two-kilometer radius of the Site, as well as one masked occurrence (BC CDC 2023b) (Table 3). No at-risk species or ecosystem occurrences are mapped on the Site. The locations of these occurrences in relation to the Site are provided in Figure 4. None of the species or ecosystems listed in Table 3 were detected during the site assessment, nor was suitable habitat identified on the Site for the species mentioned.

Table 3. Species at risk that may occur in the vicinity of 3494 Wishart Road, Colwood, BC.

Common Name	Scientific Name	BC Provincial Status[1]	*SARA* Schedule 1 Status[2]
Species			
Slimleaf Onion	*Allium amplectens*	Blue	n/a
Northern Red-legged Frog	*Rana aurora*	Blue	Special Concern
Ecosystems			
Douglas-fir / dull Oregon-grape	*Pseudotsuga menziesii / Mahonia nervosa*	Red	n/a
Grand fir / three-leaved foamflower	*Abies grandis / Tiarella trifoliata*	Red	n/a
Grand fir / dull Oregon-grape	*Abies grandis / Mahonia nervosa*	Red	n/a

[1] BC CDC 2023a
[2] Government of Canada 2023



Species at Risk and Critical Habitat within 2 km

Critical Habitat

- Property Boundary
- 2 km area around property boundary
- Howell's Triteleia
- Phantom Orchid
- Western Painted Turtle Pacific Coast population

Species at Risk

- Ecological Community
- Invertebrate
- Vascular Plant
- Vertebrate

N

0 500 1,000 2,000 Meters

Project: 3494 Wishart Road | Source: Capital Regional District, DataBC

CORVIDAE ENVIRONMENTAL CONSULTING INC

Rev. #	Date
0	April 30, 2023

Corvidae Project No.
COR-2023-038

Figure 4

5 POTENTIAL ENVIRONMENTAL EFFECTS

The potential impacts of the proposed development of the Site on the environment are:

- Impacts on areas with potential habitat and biodiversity values (e.g., rocky outcrops)
- Loss of native vegetation and spread of invasive plant species.
- Change in wildlife habitat availability and wildlife mortality risk.
- Sediment movement in the project area.

The residual environmental impacts of the activities on the Site will be reduced by the implementation of the mitigation and restoration measures recommended in Section 6 of this report.

AREAS WITH POTENTIAL HABITAT & BIODIVERSITY VALUES (ROCKY OUTCROPS)

Intact, undisturbed rocky outcrops provide habitat for many at-risk species, and thus have high biodiversity value. The habitat and biodiversity value of the rocky outcrops on the Site has been significantly reduced by previous disturbance and the spread of invasive vegetation. However, if restored, these topographic features still have the potential to provide habitat and increased biodiversity.

VEGETATION

The effects of trees and vegetation removal may include loss of biodiversity of plant species and increased susceptibility to invasive plants not only in the cleared area but also in adjacent plant communities. Vegetation and plant communities immediately adjacent to cleared areas may experience changes due to windthrow and changes in microclimate (increased light and moisture penetration).

INVASIVE SPECIES

Invasive plants are particularly adept at colonizing degraded plant communities and disturbed soils. Invasive plants establish readily in disturbed areas as they have a wide ecological tolerance and grow and propagate quickly. The effects of invasive plant establishment may be the reduction or displacement of native species by capturing resources and occupying habitats.

WILDLIFE AND WILDLIFE HABITAT

Loss and alteration of terrestrial habitat can result in the loss of habitat for wildlife species. Tree and shrub clearing can directly alter or remove wildlife habitat. Noise from site preparation and construction may temporarily disturb and displace remaining wildlife.

EROSION AND SEDIMENT

Removal of vegetation during construction exposes soils to erosion and can result in the movement of sediment on the Site. Damage or degradation of soil surfaces during construction can include loss of soil structure, increased erosion, and soil compaction.

6 RECOMMENDED ENVIRONMENTAL PROTECTION MEASURES

The mitigation measures provided in this report are designed to protect sensitive ecosystems and were developed in accordance with:

- The City of Colwood OCP (City of Colwood 2018),
- Procedures for Mitigating Impacts on Environmental Values (Environmental Mitigation Procedures) (BC Ministry of Environment [MOE] 2014a),
- Develop with Care 2014: Environmental Guidelines for Urban and Rural Land Development in British Columbia (Government of BC 2014), and
- Environmental Best Management Practices for Urban and Rural Land Development in British Columbia (BC Ministry of Water, Land and Air Protection 2004).

AREAS WITH POTENTIAL HABITAT & BIODIVERSITY VALUES (ROCKY OUTCROPS)

The rocky outcrops on the Site have been highly impacted by disturbance. Where possible, it is recommended that rocky outcrops be retained and restored through the removal of invasive species and seeded with a native seed blend. The following are recommended species to include in a native seed mix blend for application on rocky outcrops: Western fescue (*Festuca occidentalis), Alaska oniongrass* (*Melica subulate*), blue wildrye (*Elymus glaucus*), California brome (*Bromus carinatus*), Columbia brome (*Bromus vulgaris*), western fescue (*Festuca occidentalis*) and Pacific sanicle (*Sanicula crassicaulis*).

VEGETATION

The forested area (Figure 1) provides the highest habitat value of the areas on the Site, as it is adjacent to undeveloped land and has been less impacted than other areas. It is recommended that the proposed development retain a portion of this forested area as green space. Tree protection fencing will be required around retained trees within the development to protect retained green space and the drip and root zones of trees near active construction areas. Enhancement of green space is also recommended through the removal of invasive species and subsequent installation of native plants. Table 4 details native plant species that are suitable for the area. Recommended plant density following invasive removal is 1 to 2 m^2 for shrubs and 3 m^2 for trees.

It is recommended that areas disturbed by project construction or activities that are not part of the permanent footprint also be replanted with native vegetation. Overall plant density should be approximately one plant per 1 to 2 m^2 of disturbed space. The purpose of using native species is to reduce irrigation maintenance in the future. The optimal time for revegetation is in the fall, prior to the wet winter season. However, planting at any time of the year (with irrigation as needed) is acceptable to prevent invasive species. A replacement ratio of 2:1 is recommended for all trees greater than 50 cm DBH (diameter breast height) on the Site that will need to be removed as part of the development proposal.

Table 4. Recommended native vegetation to plant in disturbed areas and within green space

Common Name	Species
TREES	
Arbutus	*Arbutus menziesii*
Douglas-fir	*Pseudotsuga menziesii*
SHRUBS AND FERNS	
Common snowberry	*Symphoricarpos albus*
Dull Oregon-grape	*Mahonia nervosa*
Oceanspray	*Holodiscus discolor*
Rose species	*Rosa nutkana / gymnocarpa*
Salal	*Gaultheria shallon*
Sword fern	*Polystichum munitum*

INVASIVE SPECIES

Any invasive species encountered on the Site will require removal. Invasive species should be removed using the most appropriate methods, at the correct time of year, and plant material must be disposed of correctly to avoid re-establishment or spread. Following removal, re-seed, or re-plant bare soil with desirable, competing vegetation. Details of removal methods for the invasive species onsite are provided below in Table 5.

There is a high concentration of invasive vegetation on the Site, particularly in the western extent. If needed, Corvidae recommends that a company specializing in invasive species removal to aid in weed removal. Corvidae recommends SHR Solutions (info@shrsolutions.ca) as they have helped with large scale invasive species management in the past.

Table 5. Removal and disposal methods for invasive species

Species	Removal Method	Removal Timing	Plant Disposal
Cherry laurel	Dig up or pull small plants. Cut large plants as close to the ground as possible and dig up stumps.	Remove in early spring before plants flower.	Bag all parts and dispose of properly in a landfill. Do not compost
Himalayan blackberry	Can be removed by pulling or cutting the canes from the ground. If possible, dig out the roots, paying careful attention not to damage nearby vegetation.	Removal should occur in the spring and early summer before they produce berries as canes that are cut as the plant is producing flowers are least likely to re-sprout.	Burned or bagged and disposed of properly in a landfill. Do not compost.
English holly	English holly can be removed by hand pulling small seedlings or cutting mature trees at ground level removing all plant material.	Removal is best done before flowering to eliminate seed production.	Holly does not root again once removed, so it can also be piled to desiccate on site. Can be bagged and disposed of properly in a landfill. Do not compost.

Species	Removal Method	Removal Timing	Plant Disposal
Scotch broom	Avoid disturbing the soil which can stimulate dormant broom seeds to sprout. Small broom plants can be pulled easily from the ground by hand without disturbing the soil. Larger plants should be cut below the root crown using loppers or a pruning saw.	Scotch broom removal should occur mid-April through early June, when in flower and before its seed pods begin to open.	Bagged and disposed of properly in a landfill or burning. Do not 'recycle' garden debris or compost.
Spurge-laurel	Spurge-laurel can be removed by pulling small plants or cutting larger plants just below the soil. Spurge laurel stems may re-sprout after cutting and numerous seedlings may germinate so repeated site visits are necessary. Always wear gloves when handling spurge laurel because it produces a noxious substance which can cause severe eye and skin irritation. Avoid spreading berries during removal.	Can be removed year-round.	Removed plants should be bagged and disposed of properly in a landfill. Do no transport inside an enclosed vehicle as the plants can cause respiratory irritation.

Mitigation measures to control and minimize the spread of invasive weeds on the site include:

- Clean all machinery before arrival onto the site to ensure that more weed seeds and other propagules (e.g., pieces of root) are not brought into the project area.
- If fill or topsoil is imported from external areas, ensure that it is from a weed-free source.

Any soil should not be left exposed until landscaping. Disturbed areas should be seeded with fast growing vegetation such as a mix with a native clover or seed mix to compete with weed species, fix nitrogen and provide soil stabilization right after clearing.

WILDLIFE AND WILDLIFE HABITAT

Mitigation measures to minimize impacts on wildlife and wildlife habitat include:

- Vegetation clearing should be completed outside of the migratory bird window (prior to March 15th or after August 31st; Government of Canada 2018). If vegetation clearing is scheduled within the sensitive time period for breeding birds, a QEP should conduct nest search surveys a maximum of 2-3 days prior to the start of activities. If an active nest is discovered during nest search or clearing activities, the nest will be subject to site-specific mitigation measures (e.g., protective buffer around the nest or unobtrusive monitoring) until the young have naturally fledged/left the area. Multiple nest sweeps may be required, particularly on large sites or in complex habitats such as mature trees. Nest search areas include both vegetation and onsite, man-made structures that are scheduled for removal.
- If clearing is scheduled between January 1 and August 15, a raptor nest survey should be completed by a QEP prior to clearing. Occupied or active nests would be subject to the actions described above. In addition, permits are required to remove eagle or osprey nests regardless of occupancy.

- Avoid additional removal of established trees or shrubs, where practical (outside of the project footprint), except for identified danger trees that cannot be avoided.

Restoration of the green space within the forested area is recommended to improve habitat value for sharp-tailed snake and other wildlife. Important restoration measures include the removal of invasive vegetation as described in Table 5, and replanting with native vegetation as described in Table 4. Further restoration measures include retaining natural cover like leaf litter, fallen logs, bark, and rocks. Placement of additional rocks or logs in sunny areas of the green space area is also recommended for resident reptiles, and to add habitat complexity.

EROSION AND SEDIMENT CONTROL

The primary focus of erosion and sediment control planning is erosion control; if there is no erosion then there is no sediment. Erosion control is far more cost effective to implement and manage than sediment control.

Mitigation options to minimize the potential effects of the project on the natural environment include:

- No soil should be left exposed for more than one growing season. Disturbed areas should be seeded with fast growing vegetation such as a mix with a native clover or seed mix to compete with weed species, fix nitrogen and provide soil stabilization right after vegetation removal.
- Heed weather advisories and scheduling initial clearing work to avoid excessively rainy periods (>10 cm in 24 hours) that may result in high flow volumes and/ or increase erosion and sedimentation.
- If movement of sediment or sediment laden water is detected during construction, particularly into the ditch along Wishart Road, flow should be captured, and sediment allowed to settle prior to entering the ditch and stormwater system. Possible mechanisms for prevention of sediment laden water entering the ditch directly include installation of sediment fencing or straw wattles, and/or use of a tiger floc system.
- Regularly inspect and maintain Erosion and Sediment Control measures for the duration of the project.

Measures must also be taken to prevent the risk of hazardous materials and contaminant spills, including oil, gas, and hydraulic fluid during construction. It is recommended that a large, labeled, mobile spill kit is kept onsite during construction works and that all construction equipment is kept in good working order without leaks.

7 CONCLUSION

The potential environmental impacts of the proposed development at 3494 Wishart Road have been presented in this report. The environmental impacts of the proposed development are reduced by concentrating the development plans in areas which have been historically disturbed and maintaining as much forest as possible in the west. As development plans progress, implementation of the mitigation and restoration measures recommended in this report, including invasive species removal, and native plant restoration within retained green space, will further minimize the residual impacts of the development on the environment resulting in relatively low overall environmental impact.

Report Prepared By:

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Jessica Harvey, M.Sc, R.P.Bio.,
Principal/Senior Biologist, Riparian QEP
Asio Environmental Consulting Inc.

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APPENDIX A – SITE PHOTOGRAPHS

Photo 1. View west from driveway off Wishart Road. April 4, 2023.

Photo 2. Front of the Site along Wishart Road (view northeast) with rocky outcrop in the foreground. April 4, 2023.

Photo 3. Middle of the Site with forested area in background (view northwest). April 4, 2023.

Photo 4. Middle of the Site (view north). April 4, 2023.

Photo 5. Treed area near middle of Site at north boundary (view south). April 4, 2023

Photo 6. Western forested area with Scotch broom in understory (view west). April 4, 2023.

Photo 7. Edge of forested area (view south). April 4, 2023.

Photo 8. Open area east of forest (view south). April 4, 2023.

Photo 9. Rocky outcrop east of forest (view southwest). April 4, 2023.

Photo 10. Rocky outcrop at northwest corner (view north). April 4, 2023.

Photo 11. Typical view of understory within sharp-tailed snake polygon. April 4, 2023.

Photo 12. Typical view of understory within sharp-tailed snake polygon. April 4, 2023.

Photo 13. Small rocky outcrop near Delora Road (view north). April 4, 2023.

Photo 14. View of ditch from south boundary looking northeast. April 4, 2023.

Photo 15. View of ditch from north boundary looking southwest. April 4, 2023.

Appendix 5

ONPOINT
PROJECT ENGINEERS LTD.

111-957 Langford Parkway
Victoria, BC V9B 0A5
T: (250) 478-7875
www.oppel.ca

File: 369-01

September 15, 2023

Walking Stick Developments Ltd.
7401 Veyaness Road
Saanichton, BC V8M 1V9

Attention: **David Lunn, P.Eng. (via email)**

Reference: **Technical Memorandum – Delora Drive Extension**
Site Adaptive Planning – 3494 Wishart Road

The purpose of this memorandum is to support the rezoning application for 3494 Wishart Road. This memo aims to outline the Site Adaptive Planning (SAP) methodology for designing the Delora Drive Road and right-of-way extension. On Point has developed a proposed alignment, profile and cross-section which incorporates the characteristics of SAP outlined in City of Colwood's *2018 Official Community Plan* hereafter referred to as the *OCP*.

This development is in a hillside development permit area, blasting and re-contouring of the hillside should be minimized per 19.1.T of the *OCP*. As shown on the attached site plan (Exhibit A) the proposed Delora Drive alignment closely follows natural grades reducing earthworks and limit retaining walls below 1.2m. The strata road will look to follow the natural grade and incorporate a small switchback on the north part of the property to achieve this. The strata road is planned to be in areas of the property previously cleared by the residents to avoid unnecessary site clearing per 18.4.4 of the *OCP*.

The Delora Drive cross-section was developed with a 1.5H:1V structural fill slope to limit the overall footprint of the road structure. Minimizing the road structure allows for more natural areas to be undisturbed aligning with principals of SAP. The fill slope could be planted with native plants in consultation with a landscape architect to compliment the retained natural habitat. Specifically, along the area of the park dedication as recommended in the Environmental Assessment by Corvidae Environmental Consulting Inc (Exhibit B). Wider sections of the road with fill slopes may require retaining walls. To mitigate this parking scallops have been placed in areas adjacent to building foundations. This serve as an acceptable solution per SAP guidelines indicated by City of Colwood planning staff in comments received by the owner for RZ-23-006 dated July 6, 2023.

The Delora Drive alignment was designed to preserve the area identified by the project biologist as high environmental value. Specifically, in the western section of the property outlined in Exhibit B. Delora Drive was maintained as east as possible to avoid western

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townhomes encroaching on the new growth forest identified on Tree Impact Assessment Plan by Talmack Urban Forestry (Exhibit C) along the western property boundary, and into the environmentally sensitive steep slope terrain. Exhibit A shows the current proposed design allows for effective connection of Delora Drive through 3486 Wishart Road if future developments are required to complete the connection.

In conclusion, the proposed building development at 3494 Wishart Road should limit some of the disruption to existing landscapes by implementing the concepts of Site Adaptive Planning outlined in the City of Colwood's *OCP*.

Regards,

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
D. A. MCCARTHY
56354
2023-09-15

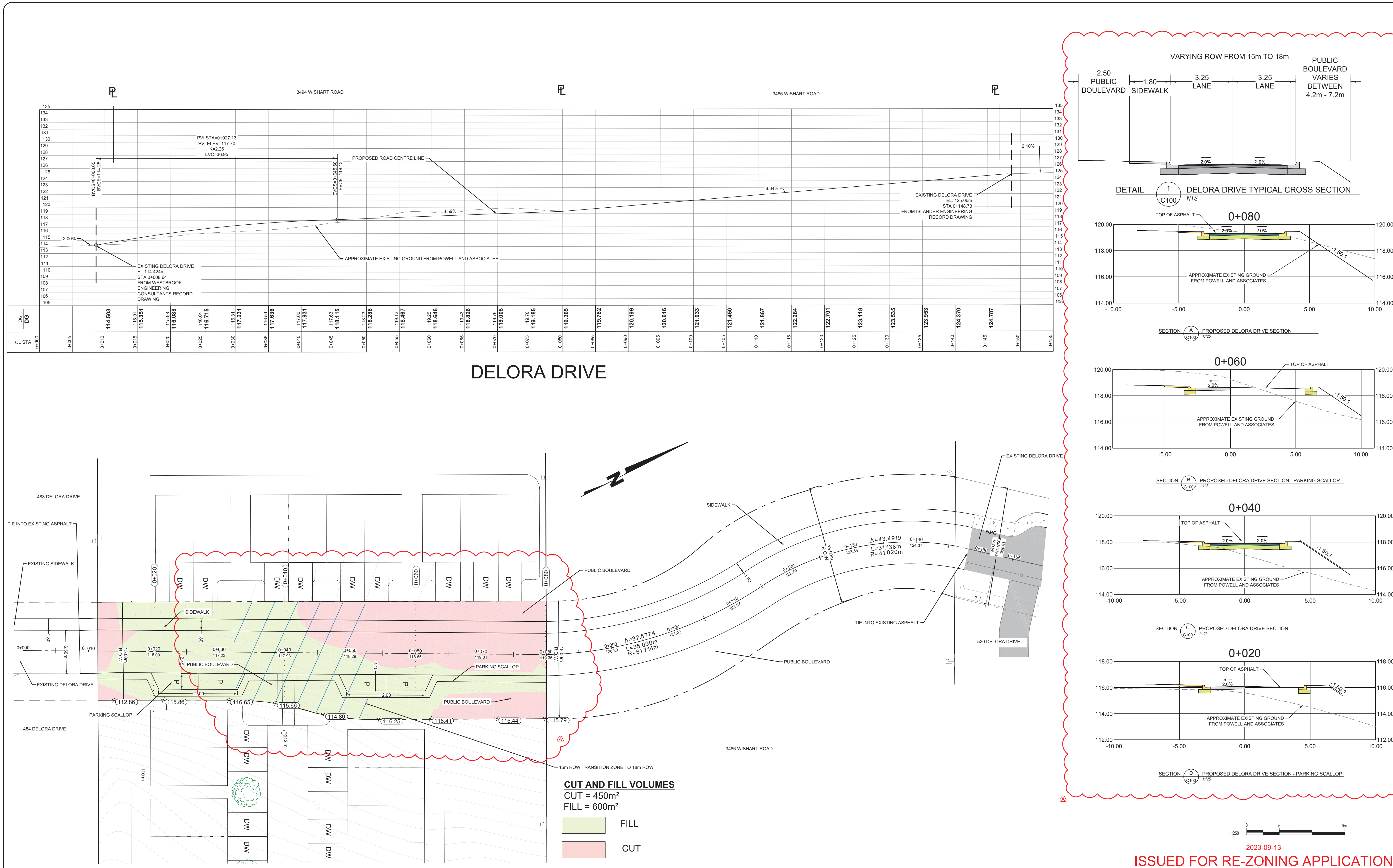
PERMIT TO PRACTICE
On Point Project Engineers Ltd.
2023-09-15
Drew McCarthy, P.Eng.
PERMIT NUMBER 1002973
Engineers and Geoscientists of BC

Neil O'Connor
Civil Designer

Drew McCarthy, P.Eng.
Engineer of Record

c.
Gary Lunn – Walking Stick Developments

Attachment: Exhibit A – Delora Drive Proposed Plan
Exhibit B – Corvidae Environmental Assessment ← Appendix C
Exhibit C – Talmack Tree Impact Assessment Site Plan ← Appendix E



CUT AND FILL VOLUMES
CUT = 450m²
FILL = 600m²

1:250

2023-09-13
ISSUED FOR RE-ZONING APPLICATION

ONPOINT PROJECT ENGINEERS LTD.
TEL: 250 478-7875 WWW.OPPEL.CA
SUITE 111 - 957 LANGFORD PKWY VICTORIA BC V9B 0A5

Contractor must check and verify all dimensions and conditions on site and report any discrepancies to engineer prior to proceeding with work.

DO NOT SCALE THE DRAWING
50mm

ISSUED No.	DESCRIPTION	DATE	REVISED No.	DESCRIPTION	DATE	SIGN
1	ISSUED FOR RE-ZONING APPLICATION	2023-05-04	A	PER COLWOOD COMMENTS	2023-09-13	NOC

DESIGN: NOC
DRAWN: NOC
ENGINEER: DM

SEAL
PERMIT TO PRACTICE

WALKING STICK DEVELOPMENTS LTD.

3494 WISHART ROAD
WALKING STICK DEVELOPMENTS LTD.
DELORA DRIVE ROAD EXTENSION
PROPOSED ALIGNMENT AND PROFILE

ON POINT PROJECT No. 369-01
GOVERNING AUTHORITY FILE No. ----
SHEET 1 OF 1
REV:A
ON POINT DRAWING No. 369-01-C100

Appendix 6

TALMACK
URBAN FORESTRY
Consultants Limited

Victoria, BC, V8Z 7H6
TEL: 250-479-8733
EMAIL: trees@talmack.ca
www.treehelp.ca

3494 Wishart Road, Colwood

Construction Impact Assessment &

Tree Management Plan

PREPARED FOR: David Lunn
Lunn Projects
7401 Veyaness Road,
Victoria, BC V8M 1V9

PREPARED BY: Talmack Urban Forestry Consultants Limited
Garrett Whelan
ISA Certified #ON-2772A
Tree Risk Assessment Qualified

DATE OF ISSUANCE: May 16, 2023

CONTENTS

APPENDICES

REVISION RECORD

REVISION	DESCRIPTION	DATE (YYYY-MM-DD)	ISSUED BY
F0	Original TPP report	2023-05-11	GW
F1	Updated TPP report	2023-05-16	GW
F2	Updated TPP report to reflect changed development plan	2023-09-19	GW

1. INTRODUCTION

David Lunn (Client) retained Talmack Urban Forestry Consultants Limited (Talmack) to complete a tree inventory, construction impact assessment and tree management plan for the following proposed project:

Site:	3494 Wishart Road, Victoria BC
Municipality:	City of Colwood
Client Name:	Lunn Projects
Dates of Site Visit(s):	April 5, 2023
Site Conditions:	Pre-Construction

The purpose of this report is to address requirements of the City of Colwood arborist report terms of reference, and Urban Forest Bylaw No. 1735. The findings of this report are based solely on the survey (Powell & Associates March 2023), and the proposed site plan. Currently, we have not received civil plans, grading plans, or architectural plans for review. As such we are limited in our ability to accurately determine the final retention status of all trees. This report outlines our current understanding of the proposed project and is subject to change upon review of the final plans.

2. TREE INVENTORY METHODOLOGY

For this report, the size, health, and structural condition of trees and hedges within influencing distance of the proposed development were documented (*Appendix A*). Onsite, bylaw protected trees and hedges were labeled with metal numerated tags. Trees located on neighbouring properties were not tagged but identified as OS# in the inventory table. Trees located on municipal properties were not tagged but identified as M# in the inventory table. One tree in the inventory was changed from OS11 to a NT1 as the tree was thought to be on a neighbouring property at the time of the inventory (before survey was completed). Each onsite tree was visually examined on a limited visual assessment basis (level 1), in accordance with Tree Risk Assessment Qualification (TRAQ) methods (Dunster *et al.* 2017) and ISA Best Management Practices.

3. EXECUTIVE SUMMARY

The client has proposed the construction of forty-two (42) dwellings, along with a park, greenspace, and an access road at 3494 Wishart Road, Colwood BC. As part of the development process, Talmack was retained to complete a tree inventory, construction impact assessment and tree management plan. A total of one hundred and fourteen (114) trees were included in the inventory. Of these one hundred and fourteen (114) trees there were one hundred and ten (110) that were considered bylaw protected by size/species. The tree inventory identified one hundred and three (103) onsite trees, and eleven (11) off-site trees within influencing distance of the proposed project.

Of the inventoried trees, seventy-eight (78) trees are proposed for removal, all of which are onsite trees. Sixteen (16) onsite trees and ten (10) offsite trees are to be retained. Nine (9) onsite trees and one (1) offsite tree have been given the status of “to be determined” (TBD).

As per City of Colwood requirements outlined in Bylaw No. 1735 one hundred and fifty (150) replacement trees will be required for the removal of seventy-five (75) bylaw protected trees. An additional twenty (20) replacement trees may be required depending on the final retention status of the nine (9) onsite bylaw protected “TBD” trees, and the

one (1) offsite bylaw protected “TBD” tree. At this stage a final landscape plan is not available, so the planned number of replacement trees onsite is unknown. Any replacement planting shortfall will require a cash-in-lieu payment to the City of Colwood at a rate of $250/tree.

4. TREE INVENTORY DEFINITIONS

Tag: Tree identification number on a metal tag attached to tree with nail or wire, generally at eye level. Trees on municipal or neighboring properties are not tagged.

NT: No tag due to inaccessibility or ownership by municipality or neighbor.

DBH: Diameter at breast height – diameter of trunk, measured in centimeters at 1.4m above ground level. For multi-stemmed trees, the DBH is equal to the summation of the DBH of the three largest stems. For trees on a slope, it is taken at the average point between the high and low side of the slope. * Measured over ivy, ~ Approximate due to inaccessibility or on neighbouring property

Dripline: Indicates the radius of the crown spread measured in meters to the dripline of the longest limbs.

Relative Tolerance Rating: Relative tolerance of the tree species to construction related impacts such as root pruning, crown pruning, soil compaction, hydrology changes, grade changes, and other soil disturbance. This rating does not consider individual tree characteristics, such as health and vigor. Three ratings are assigned based on our knowledge and experience with the tree species: Poor (P), Moderate (M) or Good (G).

Critical Root Zone: A calculated radial measurement in meters from the trunk of the tree. It is the optimal size of tree protection zone and is calculated by multiplying the DBH of the tree by 10, 12 or 15 depending on the tree’s Relative Tolerance Rating. This methodology is based on the methodology used by Nelda Matheny and James R. Clark in their book “Trees and Development: A Technical Guide to Preservation of Trees During Land Development.”

- 15 x DBH = Poor Tolerance of Construction
- 12 x DBH = Moderate
- 10 x DBH = Good

To calculate the critical root zone, the DBH of multiple stems is considered the sum of 100% of the diameter of the largest stem and 60% of the diameter of the next two largest stems. It should be noted that these measures are solely mathematical calculations that do not consider factors such as restricted root growth, limited soil volumes, age, crown spread, health, or structure (such as a lean).

Health Condition:

- Poor – significant signs of visible stress and/or decline that threaten the long-term survival of the specimen

- Fair – signs of stress
- Good – no visible signs of significant stress and/or only minor aesthetic issues

Structural Condition:

- Poor – Structural defects that have been in place for a long period of time to the point that mitigation measures are limited
- Fair – Structural concerns that are possible to mitigate through pruning
- Good – No visible or only minor structural flaws that require no to very little pruning

Suitability ratings are described as follows:

Rating: Suitable.

- A tree with no visible or minor health or structural defects, is tolerant to changes to the growing environment and is a possible candidate for retention provided that the critical root zone can be adequately protected.

Rating: Conditional.

- A tree with good health but is a species with a poor tolerance to changes to its growing environment or has a structural defect(s) that would require that certain measures be implemented, in order to consider it suitable for retention (i.e., retain with other codominant tree(s), structural pruning, mulching, supplementary watering, etc.)

Rating: Unsuitable.

- A tree with poor health, a major structural defect (that cannot be mitigated using ANSI A300 standards), or a species with a poor tolerance to construction impacts, and unlikely to survive long term (in the context of the proposed land use changes).

Retention Status:

- Remove – Not possible to retain given proposed construction plans
- Retain – It is possible to retain this tree in the long-term given the proposed plans and information available. This is assuming our recommended mitigation measures are followed
- TBD (To Be Determined) – The impacts on the tree could be significant. However, in the absence of exploratory excavations and in an effort to retain as many trees as possible, we recommend that the final determination be made by the supervising project arborist at the time of excavation. The tree might be possible to retain depending on the location of roots and the resulting impacts, but concerned parties should be aware that the tree may require removal.

5. SITE INFORMATION & PROJECT UNDERSTANDING

The project is proposed within the existing lot at 3494 Wishart Road, Colwood BC. It is understood that the following items will be completed under the proposal:

- Removal of selected onsite trees
- Demolition of existing onsite buildings

- Excavation for building foundations
- Grading of site
- Construction of road and new buildings
- Installation of new landscape features (park)

6. FIELD OBSERVATIONS

The site contains an existing buildings, horse paddock, trees, and hardscaping. The tree resources within influencing distance of the project are predominantly in the forested area at the western side of the property.

Figure 1 : Site context aerial photo. The approximate boundary of the proposed project at 3494 Wishart Road, Victoria BC is outlined in yellow.

7. TREE RISK ASSESSMENT

During our April 5, 2023 site visit and in conjunction with the tree inventory, onsite trees were assessed for risk, on a limited visual assessment basis (level 1), and in the context of the existing land uses. The time frame used for the purpose of our assessment is one year (from the date of the tree inventory). Unless otherwise noted herein, we did not conduct a detailed (level 2) or advanced (level 3) risk assessment, such as resistograph testing, increment core sampling, aerial examinations, or subsurface root/root collar examinations.

Existing Land Uses

We did not observe any trees that were deemed to be moderate, high, or extreme risk in the context of the existing land uses, that would require hazard abatement to eliminate present and/or future risks (within a 1-year timeframe). Targets considered during this TRAQ assessment included: existing structures (constant use), occupants of existing

structures (constant use), vehicles within the onsite parking areas (frequent use), occupants of vehicles travelling on Wishart Road (frequent use), and pedestrians travelling along existing roadways/sidewalks (frequent use).

Matrix 1. Likelihood matrix.

Likelihood of Failure	Likelihood of Impact			
	Very low	Low	Medium	High
Imminent	Unlikely	Somewhat likely	Likely	Very likely
Probable	Unlikely	Unlikely	Somewhat likely	Likely
Possible	Unlikely	Unlikely	Unlikely	Somewhat likely
Improbable	Unlikely	Unlikely	Unlikely	Unlikely

Matrix 2. Risk rating matrix.

Likelihood of Failure & Impact	Consequences of Failure			
	Negligible	Minor	Significant	Severe
Very likely	Low	Moderate	High	Extreme
Likely	Low	Moderate	High	High
Somewhat likely	Low	Low	Moderate	Moderate
Unlikely	Low	Low	Low	Low

Figure 2: Likelihood and Risk Rating Matrices used to evaluate tree risk in the ISA Tree Risk Assessment Manual, Second Edition (Dunster et al. 2017).

8. CONSTRUCTION IMPACT ASSESSMENT

8.1. RETENTION AND REMOVAL OF ONSITE TREES

The following bylaw protected onsite trees (indicated by tag #) are located where they may be possible to retain, provided the mitigation measures outline in this report are followed.

Retain and Protect sixteen (16) bylaw protected onsite trees

- 576, 577-583, 619-621, 627, 629, 630, 648, 649

The following bylaw protected onsite trees (indicated by tag #) are located where they may be possible to retain depending on the impacts during construction and their final retention status will be determined during excavation by the project arborist. The tree's owner should be notified prior to the day of excavation that their tree may not be able to be retained.

Retention status of nine (9) bylaw protected onsite trees "to be determined"

- 35, 585, 618, 622, 625, 626, 628, 641, 647

The following bylaw protected size onsite trees (indicated by tag/ID #) are located where they are likely to be impacted by proposed onsite construction and are proposed for removal (shown on the tree management plan in *Appendix B*):

Remove seventy-five (75) bylaw protected onsite trees

- 24-34, 563-575, 584, 586-617, 623, 624, 631-640, 642-646, NT1

The following non-bylaw protected size onsite trees (indicated by tag #) are located where they are likely to be impacted by proposed onsite construction and are proposed for removal (shown on the tree management plan in Appendix B):

Remove three (3) non-bylaw protected onsite trees

- 36, 37, 562

8.1.1. Additional Mitigation Measures for Onsite Trees

Several mitigation techniques will be employed to retain the onsite trees identified in the Tree Management Plan (*Appendix B*). Every effort will be made to preserve the trees marked as "to be determined"; however, the final retention status of these trees will be determined onsite by the project arborist during excavation and blasting activities.

Tree protection fencing, as indicated in *Appendix B*, will be installed to safeguard the trees and their CRZs from mechanical damage and compaction. The fencing will also prevent materials or fill from being piled within the CRZs of trees to be retained. Additionally, the tree protection zones encapsulate desired green spaces for the site, which will limit construction impacts to the soil and preserve these areas for future replanting operations.

When walking equipment through the CRZs of trees to be retained, plywood (2 layers of 19mm) or another soil compaction mitigation technique (see Section 9) should be used.

All excavation within the CRZs or blasting activities onsite must be supervised by the project arborist. Line drilling and pre-shearing should be used as blasting operations approach retained trees or trees that are "TBD" to prevent back breaking of the rock and impacting the trees.

8.2. RETENTION AND REMOVAL OF PRIVATE OFFSITE TREES

The following bylaw protected offsite trees (indicated by ID#) are located where they may be possible to retain, provided the mitigation measures outline in this report are followed.

Retain and Protect nine (9) bylaw protected off-site trees

- OS2-OS10

The following non-bylaw protected offsite tree (indicated by ID#) is located where it may be possible to retain, provided the mitigation measures outline in this report are followed.

Retain and Protect one (1) bylaw protected off-site tree

- OS1

The following bylaw protected offsite tree (indicated by ID #) is located where it may be possible to retain depending on the impacts during construction and the final retention status will be determined during excavation by the project arborist. The tree's owner should be notified prior to the day of excavation that their tree may not be able to be retained.

Retention status of one (1) bylaw protected off-site tree "to be determined"

- OS12

8.2.1. Additional Mitigation Measures for Offsite Trees

Similar mitigation techniques will be employed to retain the offsite trees identified in the Tree Management Plan (*Appendix B*). Every effort will be made to preserve the trees marked as "to be determined"; however, the final retention status of these trees will be determined onsite by the project arborist during excavation and blasting activities.

Tree protection fencing around OS1-OS4, as indicated in *Appendix B*, will be installed to safeguard the trees and their CRZs from mechanical damage and compaction. The fencing will also prevent materials or fill from being piled within the CRZs of trees to be retained.

When walking equipment through the CRZs of trees to be retained, plywood (2 layers of 19mm) or another soil compaction mitigation technique (see Section 9) should be used.

All excavation within the CRZs or blasting activities onsite must be supervised by the project arborist. Line drilling and pre-shearing should be used as blasting operations approach retained trees or trees that are “TBD” to prevent back breaking of the rock and impacting the trees.

9. IMPACT MITIGATION

Tree Protection Barrier: The areas surrounding the trees to be retained should be isolated from the construction activity by erecting protective barrier fencing (see *Appendix B* for municipal barrier specifications). Where possible, fencing should be erected at the perimeter of the critical root zone. The barrier fencing to be erected must be a minimum of 4 feet in height, of solid frame construction that is attached to wooden or metal posts. A solid board or rail must run between the posts at the top and the bottom of the fencing. This solid frame can then be covered with flexible snow fencing. The fencing must be erected prior to the start of any construction activity on site (i.e., demolition, excavation, construction), and remain in place through completion of the project. Signs should be posted around the protection zone to declare it off limits to all construction related activity. The project arborist must be consulted before this fencing is removed or moved for any purpose.

Arborist Supervision: All excavation occurring within the critical root zones of protected trees should be completed under supervision by the project arborist. Any severed or severely damaged roots must be pruned back to sound tissue to reduce wound surface area and encourage rapid compartmentalization of the wound. In particular, the following activities should be completed under the direction of the project arborist:

- All excavation with the critical root zones of retained bylaw protected trees
- Any pruning efforts of retained tree for access of equipment should be completed under the direction of the project arborist and fulfilled by an ISA certified arborist
- All blasting operations on the property

Methods to Avoid Soil Compaction: In areas where construction traffic must encroach into the critical root zones of trees to be retained, efforts must be made to reduce soil compaction where possible by displacing the weight of machinery and foot traffic. This can be achieved by one of the following methods:

- Installing a layer of hog fuel or coarse wood chips at least 20 cm in depth and maintaining it in good condition until construction is complete.
- Placing medium weight geotextile cloth over the area to be used and installing a layer of crushed rock to a depth of 15 cm over top.
- Placing two layers of 19mm plywood.
- Placing steel plates.

Demolition of the Existing Buildings: The demolition of the existing houses, driveways, and any services that must be removed or abandoned, must take the critical root zone of the trees to be retained into account. If any excavation or machine access is required within the critical root zones of trees to be retained, it must be completed under the supervision and direction of the project arborist. If temporarily removed for demolition, barrier fencing must be erected immediately after the supervised demolition.

Paved Surfaces Above Tree Roots:

If the new paved surfaces within the critical root zones of trees to be retained require excavation down to bearing soil and roots are encountered in this area, this could impact their health and structural stability. If tree retention is desired, a raised and permeable paved surface should be constructed in the areas within the critical root zone of the trees.

The objective is to avoid root loss and to instead raise the paved surface and its base layer above the roots. This may result in the grade of the paved surface being raised above the existing grade (the amount depending on how close roots are to the surface and the depth of the paving material and base layers). Final grading plans should take this potential change into account. This may also result in soils which are high in organic content being left intact below the paved area.

To allow water to drain into the root systems below, we also recommend that the surface be made of a permeable material (instead of conventional asphalt or concrete) such as permeable asphalt, paving stones, or other porous paving materials and designs such as those utilized by Grasspave, Gravelpave, Grasscrete and open-grid systems.

Mulching: Mulching can be an important proactive step in maintaining the health of trees and mitigating construction related impacts and overall stress. Mulch should be made from a natural material such as wood chips or bark pieces and be 5-8cm deep. No mulch should be touching the trunk of the tree. See “methods to avoid soil compaction” if the area is to have heavy traffic.

Blasting: Care must be taken to ensure that the area of blasting does not extend beyond the necessary footprints and into the critical root zones of surrounding trees. The use of small low-concussion charges and multiple small charges designed to pre-shear the rock face will reduce fracturing, ground vibration, and overall impact on the surrounding environment. Only explosives of low phytotoxicity and techniques that minimize tree damage should be used. Provisions must be made to ensure that blasted rock and debris are stored away from the critical root zones of trees.

Scaffolding: This assessment has not included impacts from potential scaffolding including canopy clearance pruning requirements. If scaffolding is necessary and this will require clearance pruning of retained trees, the project arborist should be consulted. Depending on the extent of pruning required, the project arborist may recommend that alternatives to full scaffolding be considered such as hydraulic lifts, ladders, or platforms. Methods to avoid soil compaction may also be recommended (see “Minimizing Soil Compaction” section).

Landscaping and Irrigation Systems: The planting of new trees and shrubs should not damage the roots of retained trees. The installation of any in-ground irrigation system must take into account the critical root zones of the trees to be retained. Prior to installation, we recommend the irrigation technician consult with the project arborist about the most suitable locations for the irrigation lines and how best to mitigate the impacts on the trees to be retained. This may require the project arborist supervise the excavations associated with installing the irrigation system. Excessive frequent irrigation and irrigation which wets the trunks of trees can have a detrimental impact on tree health and can lead to root and trunk decay.

Arborist Role: It is the responsibility of the client or his/her representative to contact the project arborist for the purpose of:

- Locating the barrier fencing

- Reviewing the report with the project foreman or site supervisor
- Locating work zones, where required
- Supervising any excavation within the critical root zones of trees to be retained
- Reviewing and advising of any pruning requirements for machine clearances

Review and site meeting: Once the project receives approval, it is important that the project arborist meet with the principals involved in the project to review the information contained herein. It is also important that the arborist meet with the site foreman or supervisor before any site clearing, tree removal, demolition, or other construction activity occurs and to confirm the locations of the tree protection barrier fencing.

10. DISCLOSURE STATEMENT

This arboricultural field review report was prepared by Talmack Urban Forestry Consultants Ltd. for the exclusive use of the Client and may not be reproduced, used, or relied upon, in whole or in part, by a party other than the Client without the prior written consent of Talmack Urban Forestry Consultants Ltd. Any unauthorized use of this report, or any part hereof, by a third party, or any reliance on or decisions to be made based on it, are at the sole risk of such third parties. Talmack Urban Forestry Consultants Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report, in whole or in part.

Arborists are professionals who examine trees and use their training, knowledge, and experience to recommend techniques and procedures that will improve a tree's health and structure or to mitigate associated risks. Trees are living organisms whose health and structure change and are influenced by age, continued growth, climate, weather conditions, and insect and disease pathogens. Indicators of structural weakness and disease are often hidden within the tree structure or beneath the ground. The arborist's review is limited to a visual examination of tree health and structural condition, without excavation, probing, resistance drilling, increment coring, or aerial examination. There are inherent limitations to this type of investigation, including, without limitation, that some tree conditions will inadvertently go undetected. The arborist's review followed the standard of care expected of arborists undertaking similar work in British Columbia under similar conditions. No warranties, either express or implied, are made as to the services provided and included in this report.

The findings and opinions expressed in this report are based on the conditions that were observed on the noted date of the field review only. The Client recognizes that passage of time, natural occurrences, and direct or indirect human intervention at or near the trees may substantially alter discovered conditions and that Talmack Urban Forestry Consultants Ltd. cannot report on, or accurately predict, events that may change the condition of trees after the described investigation was completed.

It is not possible for an Arborist to identify every flaw or condition that could result in failure, nor can he/she guarantee that the tree will remain healthy and free of risk. The only way to eliminate tree risk entirely is to remove the entire tree. All trees retained should be monitored on a regular basis. Remedial care and mitigation measures recommended are based on the visible and detectable indicators present at the time of the examination and cannot be guaranteed to alleviate all symptoms or to mitigate all risk posed.

Immediately following land clearing, grade changes or severe weather events, all trees retained should be reviewed for any evidence of soil heaving, cracking, lifting or other indicators of root plate instability. If new information is discovered in the future during such events or other activities, Talmack Urban Forestry Consultants Ltd. should be requested to re-evaluate the conclusions of this report and to provide amendments as required prior to any reliance upon the information presented herein.

11. IN CLOSING

We trust that this report meets your current needs. Once more details such as a servicing plans, final building footprints, grading plans, and final architectural designs become available we would be happy to review the documents and make any necessary changes to the Tree Protection Plan. Should there be any questions regarding the information within this report, please do not hesitate to contact the undersigned.

Yours truly,

Talmack Urban Forestry Consultants Ltd.

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12. REFERENCES

Capital Regional District (CRD). 2022. CRD Regional Map. Retrieved data from https://maps.crd.bc.ca/Html5Viewer/?viewer=public&

Dunster, J.A., E.T. Smiley, N. Matheny, and S. Lily. 2017. Tree Risk Assessment Manual, International Society of Arboriculture (ISA).

The City of Colwood Urban Forest Bylaw No. 1735.

13. COMPANY INFORMATION

General Liability: Intact Insurance, Policy No. 5V2147122: $5,000,000

APPENDIX A - TREE INVENTORY TABLE

Table 2: Tree Inventory Table

Tag or ID #	Surveyed? (Yes/No)	Location (On, Off, Shared, City)	Bylaw protected? (Yes/No)	Name		dbh (cm)	Calculated DBH	Dripline diameter (m)	Critical root zone radius (m)	Relative Tolerance	Condition		Retention Suitability (on-site trees)	General field observations/remarks	Tree retention / location comments	Retention status
				Common	Botanical						Health	Structural				
562	Yes	Shared	**No**	Red alder	*Alnus rubra*	58		12	8.7	Poor	Poor	Poor	Unsuitable	Measured below union, decay in trunk, multiple large failures, surface rooting	Currently outside of striking distance of targets	**Remove**
037	Yes	On	**No**	English walnut	*Juglans regia*	30, 29, 25, 27	55.6	12	8.3	Poor	Good/fair	Fair	Unsuitable	Historical topping, sap sucker injury, active inclusions between scaffold limbs weakly attached epicormics		**Remove**
36	Yes	On	**No**	English walnut	*Juglans regia*	45		10	6.8	Poor	Good/fair	Fair	Unsuitable	Historically topped sapsucker damage, weakly attached epicormics		**Remove**
033	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	38		8	5.7	Poor	Fair	Fair	Unsuitable	Measured below union, asymmetrical crown, leans heavily to the east, twig dieback, rooted against stump		**Remove**
34	Yes	On	**Yes**	Bigleaf maple	*Acer macrophyllum*	34, 34, 29, 21	60.0	10	7.2	Moderate	Good	Fair	Unsuitable	Lower trunk is enveloping metal, some deadwood, quadradominance from base, included bark		**Remove**
035	Yes	On	**Yes**	Bigleaf maple	*Acer macrophyllum*	126		17	15.1	Moderate	Fair	Fair/poor	Conditional	Decay on south side (former failed stem) response growth around it, codominant at ~2.5m, failed second stem with large end weighted lateral, large epicormics, large deadwood in primary leader	Monitor health, prune, deadwood, assess for potential mitigation options	**TBD**
563	Yes	On	**Yes**	Bigleaf maple	*Acer macrophyllum*	150		13	18.0	Moderate	Fair	Poor	Unsuitable	Multiple stems, old stump with water sprout growth		**Remove**
564	Yes	On	**Yes**	Western red cedar	*Thuja plicata*	44		8	6.6	Poor	Good	Good/fair	Unsuitable	Suppressed by grand fir, growing 1.5m north of neighbouring fence line, slightly asymmetrical		**Remove**

565	Yes	On	**Yes**	Grand fir	*Abies grandis*	45		7	6.8	Poor	Good	Good/fair	Unsuitable	Asymmetrical crown from alder, growing right beside neighbours fence (northside)		**Remove**
OS1	Yes	Off	**No**	Red alder	*Alnus rubra*	~22, ~9	23.8	10	3.6	Poor	Fair	Fair	Suitable	Previous stem failure, included bark in union, high crown, overhangs propert by ~6m		**Retain**
OS2	Yes	Off	**Yes**	Douglas fir	*Pseudotsuga menziesii*	~55		10	8.3	Poor	Good	Good/fair	Suitable	Corrected lean,		**Retain**
OS3	Yes	Off	**Yes**	Western red cedar	*Thuja plicata*	~45		9	6.8	Poor	Good/fair	Good/fair	Suitable	Asymmetrical crown		**Retain**
OS4	Yes	Off	**Yes**	Western red cedar	*Thuja plicata*	~55		9	8.3	Poor	Good/fair	Good/fair	Suitable	Asymmetrical crown due to competition,		**Retain**
566	Yes	On	**Yes**	Bigleaf maple	*Acer macrophyllum*	114		13	13.7	Moderate	Poor	Poor	Unsuitable	Main stem failure, extensive decay, large poorly attached epicormics, hollow trunk, severely end weighted scaffold limbs	Currently outside of striking distance of targets	**Remove**
567	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	53		9	8.0	Poor	Good/fair	Fair/poor	Unsuitable	Historically topped, shear planes and cracked limbs, deflections in upper trunk		**Remove**
568	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	41		7	6.2	Poor	Fair/poor	Fair/poor	Unsuitable	Deflection in upper trunk, suppressed, dead top,		**Remove**
569	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	65, 67	93.3	13	14.0	Poor	Good	Fair/poor	Unsuitable	Stems fused at base, multiple deflections, secondary leaders, very end weighted limbs, asymmetrical crowns		**Remove**
570	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	11		2	1.7	Poor	Poor	Poor	Unsuitable	Functionally dead	Currently outside of striking distance of targets, small size limits dmage that could occur	**Remove**
571	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	70		11	10.5	Poor	Good/fair	Good/fair	Unsuitable	Asymmetrical crown, surface root to the south, irregular bark pattern on lower trunk		**Remove**

572	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	60		10	9.0	Poor	Fair/poor	Fair/poor	Unsuitable	Substantial cavity on lower trunk, signs of canker infection, canopy weighted to the north, fused with Douglas fir until around 2.5m		**Remove**
573	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	45		7	6.8	Poor	Fair	Fair/poor	Unsuitable	Suppressed, fused with arbutus, mechanical injury on trunk at ~9m, sparse canopy		**Remove**
574	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	45		5	6.8	Poor	Fair	Fair	Unsuitable	Narrow crown, epicormic on trunk, irregular bark pattern on lower trunk		**Remove**
575	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	51		5	7.7	Poor	Fair/poor	Fair/poor	Unsuitable	Irregular bark pattern in lower trunk, stressed, epicormics on trunk, missing top, lower deadwood		**Remove**
576	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	37		5	5.6	Poor	Fair/poor	Fair	Suitable	Sparse, stressed, narrow, epicormics on trunk, irregular bark pattern on lower trunk	Monitor health, assess prior to installation of playground	**Retain**
577	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	61		12	9.2	Poor	Fair	Fair	Suitable	Asymmetrical crown, quite stressed, deadwood,	Monitor health, assess prior to installation of playground	**Retain**
578	Yes	On	**Yes**	Bigleaf maple	*Acer macrophyllum*	3x38, 25	70.4	16	8.4	Moderate	Good	Fair	Suitable	Seam in western most leader, included bark, hangers,		**Retain**
579	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	70		12	10.5	Poor	Good/fair	Fair	Suitable	Asymmetrical crown, lots of deadwood	Crown clean/deadwood if retaining	**Retain**
580	Yes	On	**Yes**	Western red cedar	*Thuja plicata*	46		9	6.9	Poor	Fair	Fair	Suitable	Asymmetrical crown, suppressed by fir		**Retain**
581	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	52		7	7.8	Poor	Fair	Fair	Suitable	Corrected lean, deadwood, sparse asymmetrical crown	Monitor health, assess prior to installation of playground, deadwood, and crown clean	**Retain**
582	Yes	On	**Yes**	Western red cedar	*Thuja plicata*	47		7	7.1	Poor	Fair	Fair	Suitable	Suppressed, asymmetrical crown,	Monitor health, assess prior to installation of playground	**Retain**

583	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	34		6	5.1	Poor	Good	Good/fair	Suitable	Asymmetrical crown, highly vigorous, surface rooting,		**Retain**
584	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	40		11	6.0	Poor	Good/fair	Fair	Suitable	Measured at roughly 1.4m from germination point, heavy lean east		**Retain**
585	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	72		13	10.8	Poor	Good/fair	Good/fair	Conditional	Asymmetrical crown weighted to the west,	Arborist supervision while excavating within CRZ	**TBD**
586	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	36		6	5.4	Poor	Fair/poor	Fair	Unsuitable	Narrow asymmetrical crown, corrected leans, bends in trunk, health stress, epicormics on trunks		**Remove**
587	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	61		11	9.2	Poor	Good/fair	Good/fair	Unsuitable	Asymmetrical crown, irregular bark pattern on lower trunk		**Remove**
588	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	30		6	4.5	Poor	Good/fair	Good/fair	Unsuitable	Rooted on edge of bank (fill), vigorous upper canopy		**Remove**
589	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	30		5	4.5	Poor	Good/fair	Good/fair	Unsuitable	Asymmetrical crown, vigorous upper canopy, rooted on edge of bank (fill)		**Remove**
590	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	33		5	5.0	Poor	Good/fair	Good/fair	Unsuitable	Asymmetrical crown, rooted on edge of bank (fill)		**Remove**
591	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	38		7	5.7	Poor	Good/fair	Good/fair	Unsuitable	Asymmetrical crown, rooted on edge of bank (fill)		**Remove**
592	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	38		8	5.7	Poor	Good/fair	Good/fair	Unsuitable	Asymmetrical crown, rooted on edge of bank (fill)		**Remove**
593	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	31		7	4.7	Poor	Good/fair	Good/fair	Unsuitable	Corrected lean, quite vigorous,		**Remove**
594	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	31		8	4.7	Poor	Good/fair	Good/fair	Unsuitable	Quite vigorous, surface rooting		**Remove**

032	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	39, 18	43.0	8	6.4	Poor	Fair	Far/poor	Unsuitable	Hanger, cavity at base,		**Remove**
30	Yes	On	**Yes**	Western red cedar	*Thuja plicata*	93		12	14.0	Poor	Good/fair	Fair/poor	Unsuitable	Big surface roots, codom @~1.5m, recent top failure, stump beside tree		**Remove**
031	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	49, 36	60.8	14	9.1	Poor	Fair	Fair	Unsuitable	Codom @ 0.5m attachment okay, balsam cavity on eastern side, twig dieback, some deadwood		**Remove**
595	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	43, 20, 12	48.9	12	7.3	Poor	Good/fair	Poor	Unsuitable	Growing on old stump, surface rooting,		**Remove**
596	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	20		4	3.0	Poor	Fair/poor	Poor	Unsuitable	Reminants of larger tree, substantial decay at base		**Remove**
597	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	30		7	4.5	Poor	Good/fair	Fair/poor	Unsuitable	Canopy weighted to the east, cavity at base		**Remove**
025	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	41, 34		11	8.0	Poor	Fair/poor	Fair	Unsuitable	Canopy weighted to the north, third stem removed, sparse brown foliage		**Remove**
598	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	22		5	3.3	Poor	Fair/poor	Fair/poor	Unsuitable	Leans south, crown mostly epicormics		**Remove**
599	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	25		11	3.8	Poor	Fair/poor	Fair	Unsuitable	ressed, brown leaves, lots of epicormics		**Remove**
600	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	40		12	6.0	Poor	Fair/poor	Fair	Unsuitable	Stressed, brown leaves, lots of epicormics		**Remove**
27	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	70		14	10.5	Poor	Good	Fair/poor	Unsuitable	Corrected lean, codominant		**Remove**

601	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	38		4	5.7	Poor	Fair/poor	Poor	Unsuitable	Measured below union, sharp deflection with decay/cavity on underside, dead codom, large deadwood, twig dieback, small browning foliage		**Remove**
602	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	24		8	3.6	Poor	Fair	Good/fair	Unsuitable	Twig dieback, stunted		**Remove**
26	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	67		14	10.1	Poor	Good	Fair	Unsuitable	Asymmetrical due to historic tree to the east, end weighted limbs		**Remove**
603	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	27		7	4.1	Poor	Fair	Fair/poor	Unsuitable	Deflected leader, canopy weighted to the south		**Remove**
604	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	31		8	4.7	Poor	Good/fair	Good/fair	Unsuitable	Asymmetrical crown, surface roots, small deadwood in crown		**Remove**
605	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	9, 5, 4	11.0	6	1.7	Poor	Poor	Poor	Unsuitable	Water sprouts from removed tree		**Remove**
606	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	14		3	2.1	Poor	Fair	Fair/poor	Unsuitable	Growing over slab of rock,		**Remove**
24	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	36, 32, 28, 15, 11, 5	58.9	13	8.8	Poor	Fair/poor	Fair/poor	Unsuitable	Couple of large stems that have failed/removed decay from these old wounds, twig dieback		**Remove**
607	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	~30		3	4.5	Poor	Poor	Poor	Unsuitable			**Remove**
608	Yes	On	**Yes**	Western red cedar	*Thuja plicata*	27, 32	41.9	7	6.3	Poor	Fair	Fair	Unsuitable	Codom from 0.4m, tops are dead, branches trying to establish apical dominance, suppressed by arbutus		**Remove**
609	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	27		6	4.1	Poor	Fair	Fair/poor	Unsuitable	Lean to the northwest, canopy weighted to northwest, dead lateral, rooted next to large decaying stump,		**Remove**

610	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	12, 9, 3	15.3	5	2.3	Poor	Poor	Poor	Unsuitable	Growing from stump, leans heavily to south		**Remove**
611	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	31		7	4.7	Poor	Fair	Fair/poor	Unsuitable	Pronounced cavity, twig dieback,		**Remove**
612	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	12		4	1.8	Poor	Fair/poor	Fair/poor	Unsuitable	Cavity at base, lots of dieback		**Remove**
613	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	~20		4	3.0	Poor	Fair	Fair/poor	Unsuitable	Cavity at base, twig dieback,		**Remove**
615	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	26, 18	31.6	7	4.7	Poor	Fair	Fair	Unsuitable	Codom at 0.4m, twig dieback,		**Remove**
614	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	6, 3, 1	6.8	2	1.0	Poor	Poor	Poor	Unsuitable	Sprouts from decaying stump		**Remove**
616	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	10		1	1.5	Poor	Poor	Poor	Unsuitable	Measured 1.4m from germination point, mostly dead, previously topped		**Remove**
617	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	21		4	3.2	Poor	Fair	Poor	Unsuitable	Cavity at base, measured at ~1m, lower trunk nearly fused with small maple, some twig dieback, branch failure		**Remove**
028	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	75		13	11.3	Poor	Good	Fair	Unsuitable	Asymmetrical crown, small deadwood south side (canopy competition), very large exposed and damaged surface root to the east, newly exposed on south side		**Remove**
029	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	81		13	12.2	Poor	Good	Fair	Unsuitable	Pronounced root flare, asymmetrical crown, surface roots to the east, some deadwood, end weighted lower limbs, newly exposed south side		**Remove**
618	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	44		5	6.6	Poor	Fair	Fair	Conditional	Irregular bark pattern, very asymmetrical crown, some epicormics on trunk, newly exposed on south side	Arborist supervision while excavating within CRZ	**TBD**

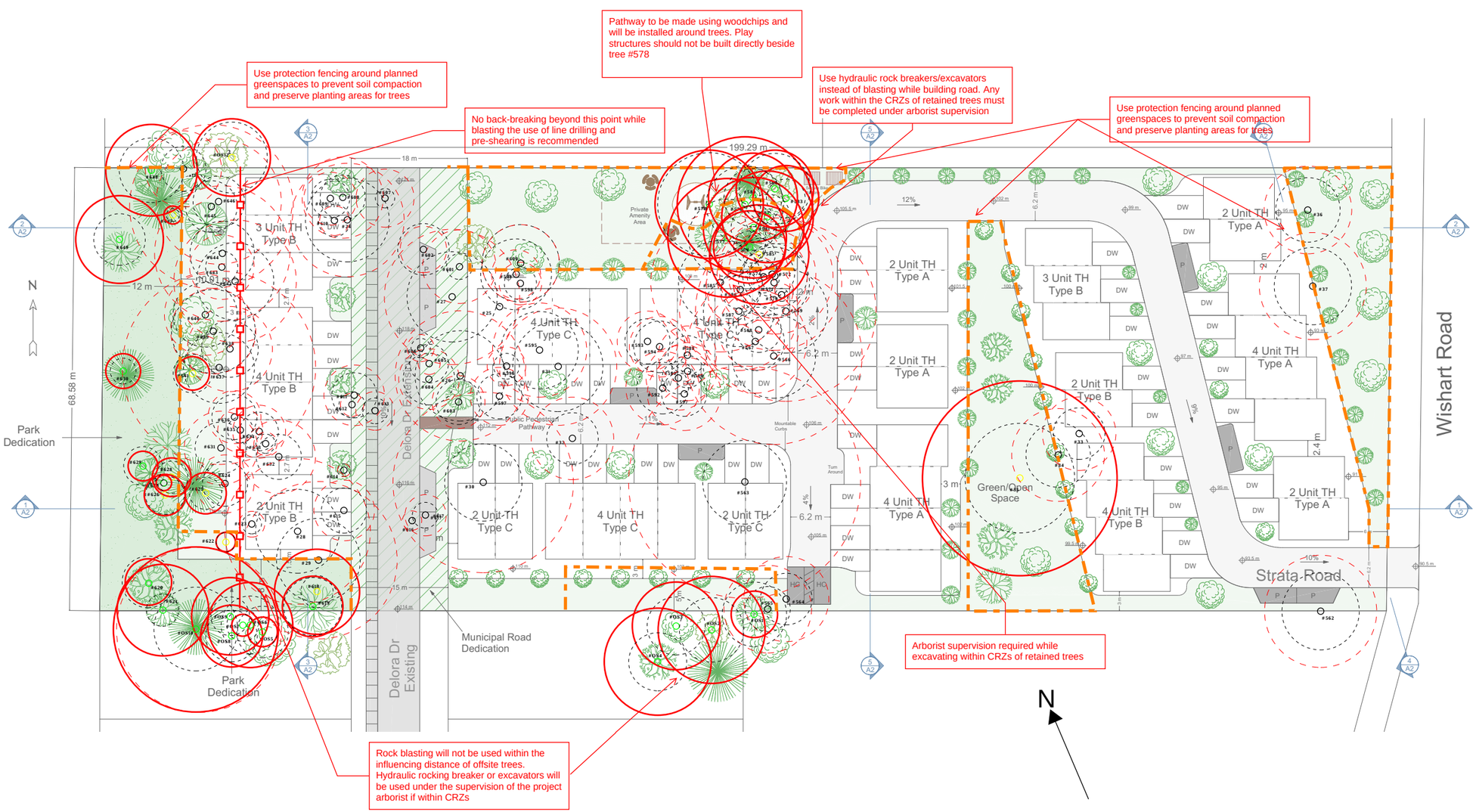
619	Yes	On	**Yes**	Western red cedar	*Thuja plicata*	31		9	4.7	Poor	Good	Good/fair	Suitable	Some chlorosis on south side (newly exposed), girdling roots,		**Retain**
OS5	Yes	Off	**Yes**	Arbutus	*Arbutus menziesii*	~15		8	2.3	Poor	Fair	Fair	Suitable	2.5m south of pl, most of crown on property, leaning, lower live crown ratio, newly exposed on south side		**Retain**
OS6	Yes	Off	**Yes**	Western red cedar	*Thuja plicata*	44		9	6.6	Poor	Good	Fair	Suitable	Newly exposed on south side, asymmetrical crown, multiple leaders		**Retain**
OS7	Yes	Off	**Yes**	Western red cedar	*Thuja plicata*	~20		5	1.7	Poor	Fair	Fair	Suitable	Asymmetrical crown, competing (suppressed), newly exposed on south side		**Retain**
OS8	Yes	Off	**Yes**	Arbutus	*Arbutus menziesii*	~32		8	4.8	Poor	Fair/poor	Fair/poor	Suitable	Weighted to east, newly exposed to south, 3.5m south of pl, high crown, branch failure, low live crown ratio		**Retain**
OS9	Yes	Off	**Yes**	Douglas fir	*Pseudotsuga menziesii*	40		6	6.0	Poor	Fair	Fair	Suitable	0.5m south of pl, asymmetrical crown, high narrow crown		**Retain**
OS10	Yes	Off	**Yes**	Douglas fir	*Pseudotsuga menziesii*	85		13	12.8	Poor	Good/fair	Fair	Suitable	~2.5m south of pl, large surface roots, deadwood, extended limbs		**Retain**
620	Yes	On	**Yes**	Bigleaf maple	*Acer macrophyllum*	23, 19, 1	29.8	8	3.6	Moderate	Fair	Fair/poor	Suitable	Growing from stump		**Retain**
621	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	47		5	7.1	Poor	Fair	Poor	Suitable	Historical failure, asymmetrical narrow crown		**Retain**
622	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	10		3	1.5	Poor	Fair/poor	Fair/poor	Conditional	Cavity at base, twig dieback	Arborist supervision while excavating within CRZ	**TBD**
623	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	13		3	2.0	Poor	Fair	Poor	Unsuitable	Sprouting from old stump		**Remove**
624	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	25, 16	29.7	7	4.5	Poor	Fair/poor	Fair/poor	Unsuitable	Codom from base, cavity at base, twig dieback, branch failures		**Remove**

625	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	21, 4	21.4	5	3.2	Poor	Fair	Poor	Conditional	Large cavity, tearout injury,	Monitor health	**TBD**
626	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	20, 8	21.5	6	3.2	Poor	Fair	Fair/poor	Conditional	Third stem (decayed),		**TBD**
627	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	8		1	1.2	Poor	Fair/poor	Fair/poor	Suitable	Substantial decay at base (has holding wood good for size), stressed, low live crown ratio		**Retain**
628	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	20		5	3.0	Poor	Fair	Fair/poor	Conditional	Some twig dies back, basal decay		**TBD**
629	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	15		6	2.3	Poor	Fair	Fair/poor	Suitable	Browning, twig dieback, cavity at base		**Retain**
630	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	18		4	2.7	Poor	Fair	Fair	Suitable	Twig dieback, codom, rooted beside stump, little bit of decay at base		**Retain**
631	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	38		8	5.7	Poor	Fair	Fair	Unsuitable	High narrow asymmetrical crown (due to presence of large trees historically), epicormics in trunk (stressed),		**Remove**
632	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	25, 22, 14, 12	38.1	7	5.7	Poor	Fair	Fair/poor	Unsuitable	Some decay at base, twig dieback		**Remove**
633	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	12		3	1.8	Poor	Fair/poor	Fair/poor	Unsuitable	Cavity at base, twig dieback		**Remove**
634	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	21, 18	27.7	6	4.1	Poor	Fair	Fair/poor	Unsuitable	Codom at base, small foliage, twig dieback, leaning to the east, cavity at base		**Remove**
635	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	23		4	3.5	Poor	Fair	Fair	Unsuitable	Small cavity at base, twig dieback, deflected leader (past leader failure), small lower trunk wound (compartmentalizing)		**Remove**
636	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	27		7	4.1	Poor	Fair	Fair/poor	Unsuitable	~3m long wound with decay in lower trunk (starting to seal), twig dieback in lower canopy		**Remove**

637	Yes	On	**Yes**	Western red cedar	*Thuja plicata*	100		11	15.0	Poor	Fair	Poor	Unsuitable	Measured below unions, multiple leaders emerging from ~2m, cavity with decay near base, active inclusions in most unions, west side stem failure (35cm),		**Remove**
638	Yes	On	**Yes**	Western red cedar	*Thuja plicata*	44		8	6.6	Poor	Good	Good/fair	Unsuitable	Codom tops (small),		**Remove**
639	Yes	On	**Yes**	Bigleaf maple	*Acer macrophyllum*	55		13	6.6	Moderate	Good/fair	Fair/poor	Unsuitable	Past stem failure (now cavity at base extensive decay no fruiting bodies), tri dominant leaders active seam, some deadwood, exposed roots on top side of slope		**Remove**
640	Yes	On	**Yes**	Grand fir	*Abies grandis*	42			6.3	Poor	Dead	Dead	Unsuitable	Fine twigs remaining	Unlikely to hit targets	**Remove**
641	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	17, 4	17.5	6	2.6	Poor	Fair	Fair/poor	Conditional	Decay at base larger stem historically removed, rooted on mound		**TBD**
642	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	63		12	9.5	Poor	Good	Good/fair	Unsuitable	Asymmetrical crown,		**Remove**
643	Yes	On	**Yes**	Grand fir	*Abies grandis*	33		5	5.0	Poor	Fair	Poor	Unsuitable	Highly irregular taper, lower trunk wounds, codom, deflected leader		**Remove**
644	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	70		10	10.5	Poor	Good/fair	Good/fair	Unsuitable	Asymmetrical high crown, some deadwood, epicormic growth on trunk		**Remove**
645	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	55, 60, 24	84.9	8	12.7	Poor	Good	Good/fair	Unsuitable	Larger stem has some deadwood		**Remove**
646	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	60, 24	64.6	8	9.7	Poor	Good	Good/fair	Unsuitable			**Remove**
647	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	9		2	1.4	Poor	Poor	Poor	Conditional	Growing on decayed stump		**TBD**

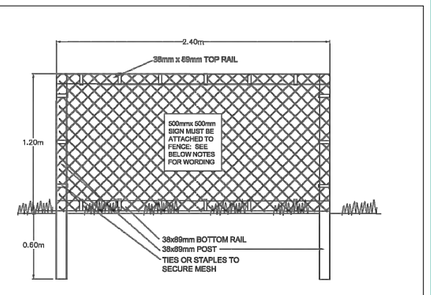
648	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	47		10	7.1	Poor	Fair	Fair/poor	Suitable	Surface roots, growing on rock, twig dieback, hangers, deadwood,		**Retain**
649	Yes	On	**Yes**	Douglas fir	*Pseudotsuga menziesii*	45		8	6.8	Poor	Good/fair	Good/fair	Suitable	Slight lean corrected,		**Retain**
NT1	Yes	On	**Yes**	Arbutus	*Arbutus menziesii*	~39		7	5.9	Poor	Fair/poor	Fair/poor	Unsuitable	Large tearouts on western stem, epicormic growth, browning, formerly OS11		**Remove**
OS12	No	Off	**Yes**	Bigleaf maple	*Acer macrophyllum*	~35, ~25, ~22, ~14	50.3	11	6.0	Moderate	Fair/poor	Fair/poor	Conditional	Surface roots, large failures, deadwood, epicormic growth, ~2.5m north of fence		**TBD**

APPENDIX B - TREE MANAGEMENT PLAN



LEGEND

- CRITICAL ROOT ZONE OF TREE TO BE REMOVED
- CRITICAL ROOT ZONE OF TREE TO BE RETAINED
- DRIPLINE OF TREE
- TREE TO BE REMOVED
- TREE TO BE RETAINED
- TREE RETENTION STATUS TO BE DETERMINED
- TREE PROTECTION FENCING



TREE PROTECTION FENCING

1. FENCE WILL BE CONSTRUCTED USING 38 mm X 89mm WOOD FRAME: TOP, BOTTOM AND POSTS * USE ORANGE SNOW-FENCING MESH AND SECURE THE WOOD FRAME WITH"ZIP" TIES OR GALVANIZED STAPLES.
2. ATTACH A 600mm X 500mm SIGN WITH THE FOLLOWING WORDING: PROTECTED ROOT ZONE - NO ENTRY. THIS SIGN MUST BE AFFIXED ON EVERY FENCE OR AT LEAST EVERY 10 LINEAR METERS.

* IN ROCKY AREAS, METAL POSTS (T-BAR OR REBAR) DRILLED INTO ROCK WILL BE ACCEPTED

TREE PROTECTION NOTES

Tree protection barrier: The areas, surrounding the trees to be retained, should be isolated from the construction activity by erecting protective barrier fencing. Where possible, the fencing should be erected at the perimeter of the critical root zone. The barrier fencing to be erected must be a minimum of 1200mm in height, of solid frame construction that is attached to wooden or metal posts. A solid board or rail must run between the posts at the top and the bottom of the fencing. This solid frame can then be covered with flexible snow fencing. The fencing must be erected prior to the start of any construction activity on site (i.e. demolition, excavation, construction), and remain in place through completion of the project. Signs should be posted around the protection zone to declare it off limits to all construction related activity. The project arborist must be consulted before this fencing is removed or moved for any purpose.

Arborist supervision: All excavation occurring within the critical root zones of protected trees must be completed under the supervision of the project arborist. Any severed or severely damaged roots must be pruned back to sound tissue to reduce wound surface area and encourage rapid compartmentalization of the wound.

Demolition: The demolition of the existing houses, driveways, and any services that must be removed or abandoned must take the critical root zone of the trees to be retained into account. If any excavation or machine access is required within the critical root zones of trees to be retained, it must be completed under the supervision of the project arborist. If temporarily removed for demolition, barrier fencing must be erected immediately after the supervised demolition.

Methods to avoid soil compation: In areas where construction traffic must encroach into the critical root zones of trees to be retained, efforts must be made to reduce soil compaction where possible by displacing the weight of machinery and foot traffic. This can be achieved by one of the following methods:

- Installing a layer of hog fuel or coarse wood chips at least 20cm in depth and maintaining it in good condition until construction is complete.
- Placing medium weight geotextile cloth over the area to be used and installing a layer of crushed rock to a depth of 15cm over top.
- Placing two layers of 19mm plywood.
- Placing steel plates.

Mulching: Mulching can be an important proactive step in maintaining the health or trees and mitigating construction related impacts and overall stress. Mulch should be made from a natural material such as wood chips or bark pieces and be 5-8cm deep. No mulch should be touching the trunk of the tree. See "methods to avoid soil compaction" if the area is to have heavy traffic.

Pruning: We recommend that any pruning of bylaw-protected trees be performed to ANSI A300 standards and Best Management Practices.

Paved surfaces above tree roots: Where paved areas cannot avoid encroachment within critical root zones of trees to be retained, construction techniques, such as floating permeable paving, may be required. The "paved surfaces above tree roots" detail above offers a compromise to full depth excavation (which could impact the health or structural stability of the tree). The objective is to avoid root loss and to instead raise the paved surface above the existing grade (the amount depending on how close roots are to the surface and the depth of the paving material and base layers). Final grading plans should take this potential change into account. This may also result in soils which are high in organic content being left intact below the paved area. To allow water to drain into the root systems below, we also recommend that the surface be made of a permeable material (instead of conventional asphalt or concrete) such as permeable asphalt, paving stones, or other porous paving materials and designs such as those utilitzed by Grasspave, Gravelpave, Grasscrete and open-grid systems.

Blasting and rock removal:Care must be taken to ensure that the area of blasting does not extend beyond the necessary footprints and into the critical root zones of surrounding trees. The use of small low-concussion charges and multiple small charges designed to pre-shear the rock face will reduce fracturing, ground vibrations and overall impact to the surrounding environment. Only explosives of low phytotoxicity and techniques that minimize tree damage should be used. Provisions must be made to ensure that blasted rock and debris are stored away from the critical root zones of trees.

Scaffolding:This assessment has not included impacts from potential scaffolding including canopy clearance pruning requirements. If scaffolding is necessary and this will require clearance pruning of retained trees, the project arborist should be consulted. Depending on the extent of pruning required, the project arborist may recommend that alternatives to full scaffolding be considered such as hydraulic lifts, ladders or platforms. Methods to avoid soil compaction may also be recommended (see "Minimizing Soil Compaction" section).

Landscaping and irrigation systems: The planting of new trees and shrubs should not damage the roots of retained trees. The installation of any in-ground irrigation system must take into account the critical root zones of the trees to be retained. Prior to installation, we recommend the irrigation technical consult with the project arborist about the most suitable locations for the irrigation lines and how best to mitigate the impacts on the trees to be retained. This may require the project arborist supervise the excavations associated with installing the irrigation system. Excessive frequent irrigation and irrigation which wets the trunks of trees can have a detrimental impact on the tree health and can lead to root and trunk decay.

Arborists role: It is the responsibility of the client or his/her representative to contact the project arborist for the purpose of:

- Locating the barrier fencing.
- Reviewing the report with the project foreman or site supervisor.
- Locating work zones and machine access corridors where required.
- Supervising excavation for any areas within the critical root zones of trees to be retained including any proposed retaining wall footings and review any proposed fill areas near trees to be retained.

TREE MANAGEMENT PLAN
3494 Wishart Road
Colwood, BC
September 19 2023
Prepared for: Lunn Projects
Scale: 1:700 @ 11" X 17"
Drawn By: GW
Reference Drawings: Concept Plan (Walking Stick Drafting, August 7 2023), Site Survey (Powell Associates, March 13 2023)

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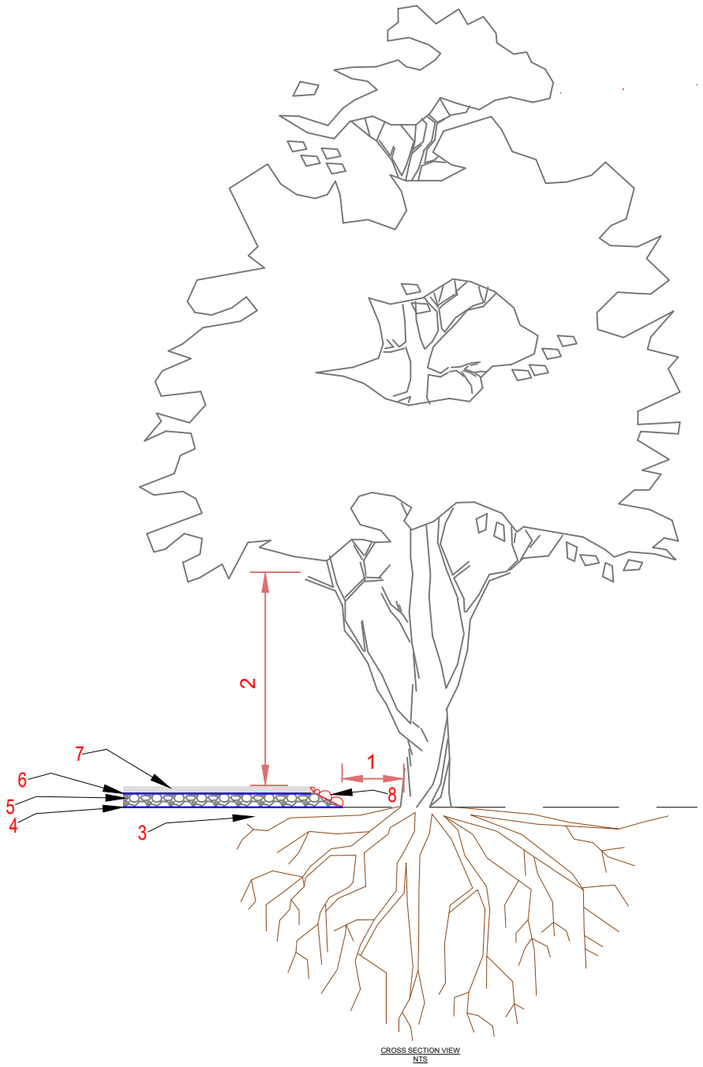
APPENDIX C – PAVED SURFACES ABOVE TREE ROOTS DIAGRAM

HARD SURFACE ABOVE TREE ROOTS DETAIL



CROSS SECTION VIEW
NTS

HARD SURFACE ABOVE TREE ROOTS NOTES

1. Maintain as large a setback between the fill encroachment and the root collar of the tree as possible.
2. Review any canopy clearance pruning requirements to accommodate vehicle or pedestrian clearances (Pruning to be performed to ANSI A300 standards).
3. Excavate the new footprint of the driveway or sidewalk under the supervision of the project arborist. Excavation will be limited to the removal of the existing sod layer. Excavation around root structures must be performed by hand, airspade, or hydroexcavation.
4. Install a two-dimensional (such as Combigrid $\frac{30}{30}$) or Three-dimensional geogrid reinforcement.
5. Install a 150mm depth layer of clear crushed gravel (no fines) using 20mm and/or 75mm diameter material or approved equivalent. *Note - the depth may be less than 150mm in some situations (dependant on grading constraints).
6. Install meduim weight geotextile fabric (such as Nilex 4535 or similar) over the clear crushed gravel layer to prevent fine particles of sand from infiltrating this layer.
7. The bedding or base layer and new driveway or sidewalk surface can be installed directly on top of the felted filter fabric.
8. Fill slopes - where possible install loose stacked boulders to reduce the footprint of the fill slopes that encroach within the critical root zone. Fill slope materials must be permeable to air and water. Do not pile fill material directly against the trunk of a tree.

TALMACK
URBAN FORESTRY
Consultants Limited

CONSULTING ARBORISTS
BOX 48153
VICTORIA, BC, V8Z 7H2
TEL: 250-479-8733
EMAIL: tmtreehelp@gmail.com
www.treehelp.ca

TRANSPORTATION PLANNERS AND ENGINEERS

bunt &associates

September 19th, 2023
04-23-0110

David Lunn
Walking Stick Developments Inc

VIA E-MAIL: david@lunnprojects.ca

Dear David:

Re: 3494 Wishart Road
Transportation Impact Assessment

As requested, Bunt & Associates Engineering Ltd has conducted a Transportation Impact Assessment for Walking Stick Developments Inc' proposed residential townhouse development located at 3494 Wishart Road in Colwood, BC. This letter reviews the proposed development, existing transportation network, estimated site vehicle trip generation and site design as agreed with the City of Colwood per their TIA guidelines. As per the City's comments, received 17 July 2023, it was requested that updates to the previous memorandum was required.

We trust this will assist with the rezoning stage of the development's application process. Please do not hesitate to reach out should you have any questions or comments.

Yours truly,

Bunt & Associates

Hugo Johnston, B.Sc
Transportation Plar---

Tyler Thomson, MCIP RPP PTP
Associate | Senior Transportation Planner

Reviewed by: Ch
Pri

1. INTRODUCTION

Walking Stick Developments Inc (the proponent) seeks to develop 50 Townhouse units across 1lot at 3494 Wishart Road, in Colwood, BC. The existing site is occupied by a rural single-family home on a steep lot sloping downward from west to east towards Wishart Road. Bunt & Associates Engineering Ltd. (Bunt) has been retained to provide transportation engineering and planning services in support of the proposed development.

This Transportation Impact Assessment (TIA) is provided in support of the rezoning application for the proposed development and was developed in line with the agreed terms reached with the City of Colwood (CoC) based on the City's TIA guidelines. Given the proposed development of 50 townhouse units is expected to generate approximately 25 two-way vehicle trips within the peak hour periods, and therefore, should be subject to a Level 1 TIA per the CoC TIA guidelines. Note this report provides an update based on some modifications to the site plan and taking into consideration comments received from the City's transportation consultant on their review of the original TIA report on the 17th of July 2023.

The site is located on the west side of Wishart Road, north of Windthrop Road in Colwood, BC, as shown in **Exhibit 1.1**.

The remainder of this TIA is organized as follows:

- Section 2 introduces the proposed development content;
- Section 3 describes the existing transportation network in the vicinity of the site, as well as existing traffic volumes at the intersection of Windthrop Road and Wishart Road for context;
- Section 4 reviews estimated site vehicle trip generation for the proposed development;
- Section 5 outlines the development plan review (site design and parking requirements); and,
- Section 6 provides the preliminary conclusions and recommendations.

M:\Operations\Dept BC\Projects\2023\04-23-0110 3494 Wishart\4.0 Analysis & Design\3. GIS

Exhibit 1.1

Site Location

3494 Wishart
April 2023

04-23-0110

bunt & associates

2. PROPOSED DEVELOPMENT

The development is proposed to consist of up to 50 townhouse units across a total of 17 buildings. All townhouses are proposed to be 3-bedroom + Den units. 41 of the units (in 14 buildings), will be accessible by an internal strata road via an all-movements access from Wishart Road at the east end of the site. The remaining 9 townhouses (in 3 buildings) will be accessible from Delora Drive (a public road), which will be extended northward into the site via Windthrop Road and will eventually extend to connect to the existing Delora Drive connection to the north. The site plan is shown below in **Exhibit 2.1**.

The units on Delora Drive will be accessed via Windthrop Road to the south of the site. The extension of Delora Drive has been proposed by the CoC and will continue the road north with future development to connect with Gurunank Lane

As part of the development, a total of 100 off-street parking spaces will be provided with each residential unit having access to its own private single-car garage and vehicle driveway with 1 parking space, for a total of two-spaces. In addition, 9 visitor parking spaces (including two accessible spaces) will be provided within internal strata road, accessible from Wishart Road, and an additional 4 on-street parking spaces for visitors provided for the units accessed from Delora Drive. This supply meets the City of Colwood Off-Street Parking Regulations Bylaw (Bylaw No. 1909) requirement of 2 spaces per unit (100 spaces) and 0.1 spaces per unit (5 spaces) for visitor parking (described in more detail in Section 5).

The internal strata road and Delora Drive will be connected via a small public pedestrian footway on the west of the site, but there will be no vehicle access between them. In addition, a small public play area will be provided as part of the development proposal, this will be open to residents. The internal strata road will extend west from the intersection with Wishart Road, and it will wind west through the site on a steep grade, culminating in turnaround areas with visitor parking at the end of each drive aisle.

O:\Dept BC\Projects\2023\04-23-0110 3494 Wishart\4.0 Analysis & Design\2. AutoTurn\04-23-0110_AT_V01-9.dwg
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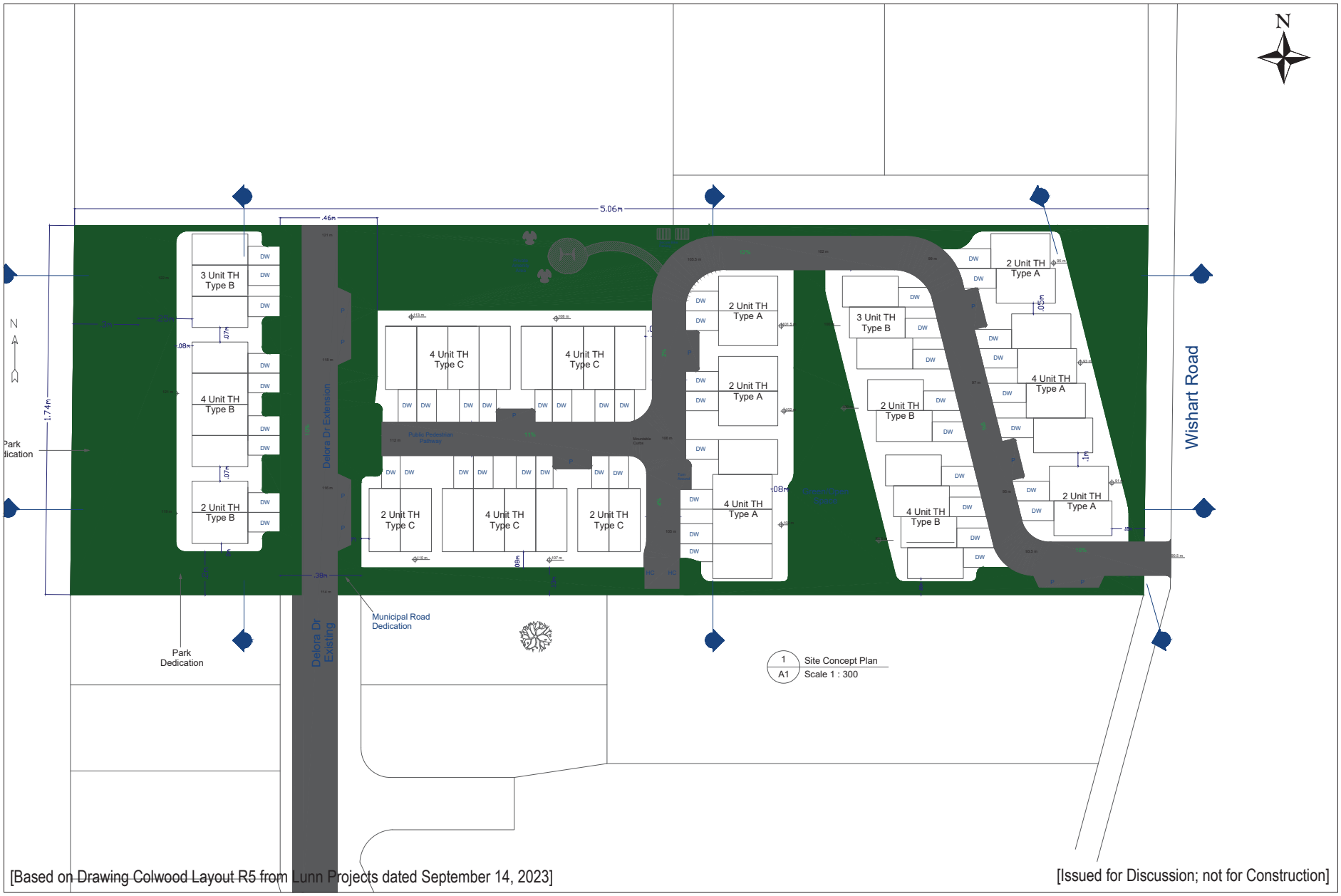


[Based on ~~Drawing Colwood Layout R5 from Lunn Projects dated September 14, 2023~~]

[Issued for Discussion; not for Construction]

Exhibit 2.1
Site Plan

04-23-0110 September 2023 Scale 1:1 000 on Letter 3494 Wishart Prepared by HJ

bunt & associates

3. EXISTING TRANSPORTATION NETWORK

3.1 Road Network

The project site is bound to the east by Wishart Road, which spans along the eastern boundary of the site in a north-south direction. Wishart Road is a collector road and connects to Latoria Road in the south and Metchosin Road to the north of the site. As previously mentioned, Delora Drive will be extended into the site connecting from Windthrop Road, this is a local residential street and will eventually connect with additional residential roads to the north of the site as development occurs.

Table 3.1 summarizes the existing street characteristics and **Exhibit 3.1** presents the existing road network within the surrounding area.

Table 3.1: Existing Street Characteristics

STREET	CLASSIFICATION	NUMBER OF TRAVEL LANES	POSTED SPEED	PARKING FACILITIES	CYCLING FACILITIES
Wishart Road	Collector	1 NB 1 SB	50 km/hr	No parking	Intermittent painted bike lane
Delora Drive	Local	1 NB 1 SB	N/A*	Intermittent parking bays on street	No facilities

*It is assumed that as a local road, the posted speed restriction would be 30 km / hr.

3.1.1 Traffic Counts

In response to City consultant comments on the original TIA, a traffic count was conducted to understand the existing traffic conditions on Wishart Road, within the vicinity of the site. The PM peak hour (16:00-17:00) traffic movements (peak confirmed with previous traffic studies nearby) were observed at the intersection of Wishart Road / Windthrop Road on Thursday September 14th, 2023. **Table 3.2** summarizes the peak hour directional flows at the intersection. *Note that traffic volumes on Wishart Road may be higher than normal given the continued road works and detour with the construction of the roundabout at Latoria Road and Veterans Memorial Parkway upstream.*

Table 3.2: Existing PM Peak Hour Traffic Count Results

ROADWAY LINK	VEHICLE FLOW
Wishart Road (Northbound)	110
Wishart Road (Southbound)	195
Windthrop Road (Eastbound)	10
Windthrop Road (Westbound)	8

As shown, traffic volumes are modest but steady on Wishart Road, and are potentially higher than normal given the detour at Latoria Road and Veterans Memorial Parkway to the west, while volumes on Windthrop Road are very low at 1 vehicle every 3 – 4 minutes in either direction. These volumes

were analyzed in Synchro (Version 11) and resulted in v/c ratios below 0.15 on all approaches, with no delays (LOS A) on Wishart Road, and minimal delays (LOS B) on Windthrop Road (see results attached at the end of this letter). Note that no delays were observed for vehicles exiting Windthrop Road in spite of the Synchro results.

3.2 Transit Network

Several transit routes offer public transportation options within the site's surrounding area. Bus stops serving routes 52, 59 & 60 are located just in front of the site on Wishart Road. Bus stops for routes 54 and 55 are situated close to the intersection of Wishart Road and Latoria Road, these routes are within a 10-minute walk of the site (i.e., an 800m radius).

Routes 52,59 & 60 all travel along Wishart Road, with 52 being a limited bi-directional service (only 3-4 services a day), and 59 and 60 routes providing service in one direction only. The 59 service is northbound only within the vicinity of the site and the 60 is southbound only. Similarly, 54 and 55 travel along Latoria Road to the east and west respectively.

Existing bus stops and service frequencies within the surrounding area are presented below in **Tables 3.2 and Table 3.3,** correspondingly**.** Currently, these transit services are local serving and are somewhat infrequent, however BC Transit has identified Latoria Road as a future Frequent Transit Network (FTN) corridor.

Table 3.2: Transit Stops within 800m Walking Distance of Site

STOP LOCATION	DIRECTION	STOP #	AMENITY	ROUTES SERVICED	WALKING DISTANCE
Wishart 3480 Block	North-South	104091 101496	Stop Pole	52,59 & 60	<50 m
Latoria at Wishart	East-West	101511 101533	Stop Pole & Bench Stop Pole	54 & 55	~650 m

Table 3.3: Existing Transit Service Frequency

ROUTE		STOP	WEEKDAY SERVICE SPAN		HEADWAY (MIN.)				
#	DIRECTION		START	END	AM	MID-DAY	PM	EVENING	WEEKEND
52*	North-South	104091 101496	08:40	15:54	-	-	-	-	-
54	East	101511	05:57	20:52	120	120	120	120	120
55	West	101533	7:10	18:50	120	120	120	-	-
59	North	104091	07:14	20:49	60	120	60	120	120
60	South	101496	06:54	22:09	60	120	60	120-180	120

*One additional service occurs at a 20min headway in the PM, 2:32 PM on Friday only and 3:30 PM on Monday-Thursday, as there is no consistent headway, none has been reported.

Exhibit 3.2 shows the multi-modal network near the site including the transit network and the cycling and pedestrian networks.

3.3 Cycling & Pedestrian Networks

3.3.1 Cycling Network

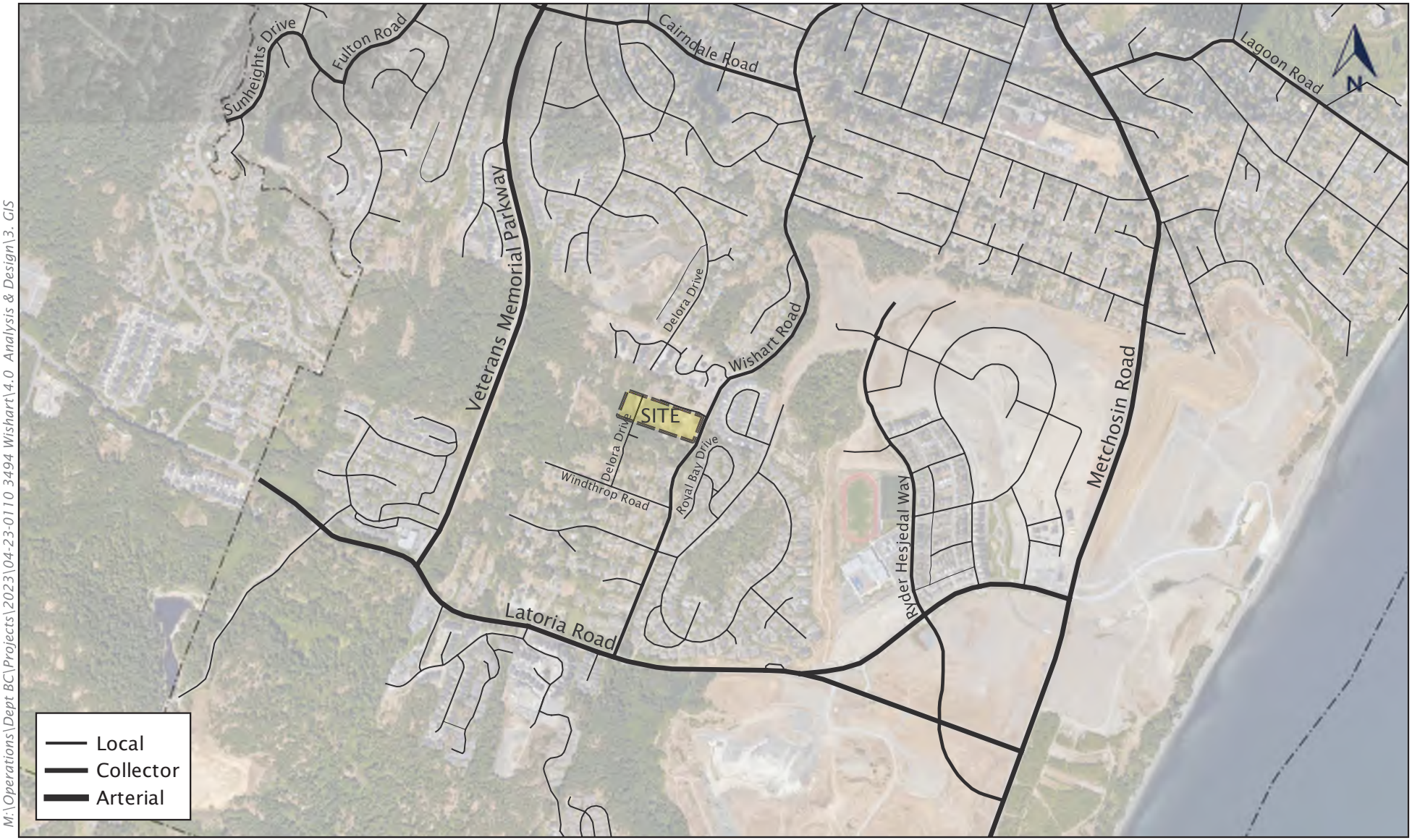
The surrounding cycling network is currently comprised of intermittent/discontinuous painted bike lanes on Wishart Road, and painted bike lanes along Veterans Memorial Parkway as well as off-street multi-use pathways located to the east of the site off Promenade Crescent. However, painted buffered bike lanes are planned along Wishart Road as a proposed priority cycling route in the City's Draft Active Transportation Network Plan. This proposed route will link into the proposed protected bike lanes along Latoria Road in the south and on Metchosin Road to the north, which will also have protected bike lanes. Further to the north, a multi-use trail travels parallel to Dressler Road, which connects to the multi-use paths running adjacent to Ryder Hesjedal Way.

Windthrop Road to the south is identified by the City as a future neighbourhood bikeway connection via a proposed multi-use path to Veterans Memorial Parkway. Other local connections are also planned nearby to help provide direct connections to the City's proposed protected bike lane network.

3.3.2 Pedestrian Network

Pedestrian facilities are provided along the eastern side of Wishart Road with a sidewalk that extends north-south within the vicinity of the site. The sidewalk connects south to Latoria Road which also has intermittent sidewalks and provides connections to the City's trail network at Latoria Creek Park. Approximately 300m to the north of the site the sidewalk ends.

Adjacent to the site entrance is a short multi-use path that connects to Regency Place and beyond to pedestrian facilities in Royal Bay. Delora Drive has a sidewalk on the west side of the road extending towards the site from Windthrop Road, and this is planned to extend through the site. Both Wishart Road and Windthrop Road are identified as priority pedestrian routes in the City's long term pedestrian network based on the City's Draft Active Transportation Network Plan. These future connections will help ensure the site is well connected to the surrounding neighbourhoods and key destinations and amenities.



M:\Operations\Dept BC\Projects\2023\04-23-0110 3494 Wishart\4.0 Analysis & Design\3. GIS

Exhibit 3.1

Existing Road Network

3494 Wishart
April 2023

04-23-0110

bunt & associates

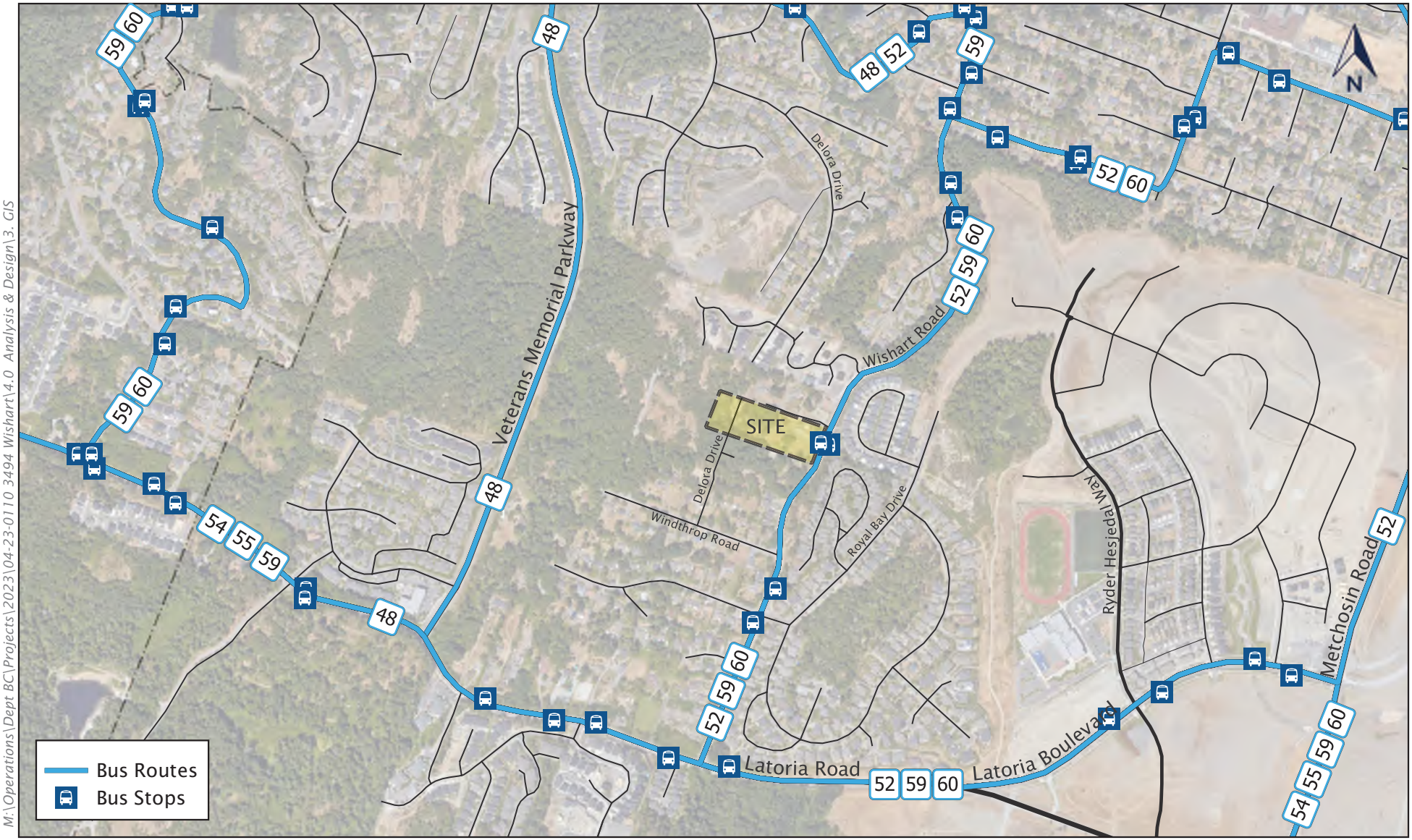


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Exhibit 3.2

Transit Routes & Stops

3494 Wishart
April 2023

04-23-0110

bunt & associates

4. SITE TRIP GENERATION

This section presents the estimated site vehicle trip generation for the weekday AM and PM peak hours based on trip rates listed in the Institute of Transportation Engineers' (ITE) Trip Generation Manual (11th Edition).

4.1 Trip Generation

Table 4.1 below summarizes the ITE vehicle trip generation rates for the proposed land use.

Table 4.1: ITE Vehicle Trip Rates

LAND USE	INDEPENDENT VARIABLE	LAND USE CODE	VEHICLE TRIP RATES					
			AM PEAK HOUR			PM PEAK HOUR		
			IN	OUT	RATE	IN	OUT	RATE
Multifamily Housing (Low-Rise – Including Townhouses)	Dwelling Units	220	24%	76%	0.40	63%	37%	0.51

Based on the above rates, the estimated vehicle trip generation for each of the three buildings is presented in **Table 4.2** below.

Table 4.2: Estimated Site Vehicle Trip Generation

LAND USE	QUANTITY	VEHICLE TRIPS					
		AM PEAK HOUR			PM PEAK HOUR		
		IN	OUT	TOTAL	IN	OUT	TOTAL
Attached Housing - Townhouse	50	5	15	20	16	9	26

The proposed development is estimated to generate approximately 20 to 26 total trips during the weekday AM and PM peak hours. This equates to less than one vehicle every 2 to 3 minutes per minute during peak traffic periods. This level of traffic is not expected to have a noticeable effect on the surrounding road network, and, in light of the modest traffic volumes at the nearby intersection of Windthrop Road and Wishart Road.

As previously discussed, this is on the threshold of a Level 1 / 2 TIA study based on the City's guidelines. Given the site is now anticipated to generate 1 more two-way vehicle trip than is defined for a level 1 study, and taking into account the modest existing traffic volumes during the PM peak hour, it has been deemed unnecessary at this stage to conduct a Level 2 study and therefore, a level 1 study is maintained with the addition of existing traffic volume data in support of this. The AM peak hour trip generation is still below the threshold set for a Level 2 study.

5. SITE DESIGN REVIEW

5.1 Site Access & On-Site Vehicle Circulation

Vehicle access is to be provided from both Wishart Road and Delora Drive. AutoTURN analysis has been conducted to review the two-way passenger vehicle access and circulation for the new access proposed from Wishart Road. In addition, a review of visitor spaces has been included. The P-TAC design vehicle was used to assess all the passenger vehicle movements.

Swept path exhibits demonstrating the design vehicle manoeuvres are provided in **Appendix A**.

5.2 Parking Requirements

City of Colwood Off-Street Parking Regulations Bylaw (Bylaw 1909) were released in 2022 setting out the off-street parking requirements for new developments. **Table 5.1** shows the parking requirements from this bylaw and the required number of spaces for the proposed development. The site is located outside of an urban centre as defined in the bylaw.

Table 5.1: Vehicle Parking Supply Requirements and Proposed Supply

PARKING TYPE	RATE	SPACES REQUIRED	PROVISION	DIFFERENCE
Resident – Duplex, Townhouse, Triplex or Rowhouse	2 per dwelling unit	100	100	-
Visitor	0.1 spaces per dwelling unit in addition to the minimum parking requirement	5	9	+4
Accessible	0 – 10 spaces 0 spaces 11 – 50 spaces 1 space 51 – 100 spaces 2 spaces 101 – 150 spaces 3 spaces	2	2	0

As can be seen, the residential parking will be provided in line with the bylaw requirements. Visitor parking will be provided above the required bylaw allocation, with an additional 4 spaces. The accessible parking will be provided within the primary parcel, off the main access road. The two spaces will be located on the southern perimeter of the site, as demonstrated within the site plan (Exhibit 2.1).

There is no loading bylaw requirements for townhouse land uses. Therefore, residents will be encouraged to use their driveways to accommodate any loading facilities.

5.3 Bicycle parking

Table 5 of Bylaw 1909 sets out the bicycle parking requirements for attached residential developments, for both long- and short-term use. The bicycle parking requirements are therefore set out within **Table 5.2.**

Table 5.2: Bicycle Parking Supply Requirements and Proposed Supply

PARKING TYPE	RATE		SPACES REQUIRED		PROVISION		DIFFERENCE	
	Long-Term	Short-Term	Long-Term	Short-Term	Long-Term	Short-Term	Long-Term	Short-Term
Resident – Townhouse, Triplex or Rowhouse	1 per dwelling unit	6 spaces per building	49 spaces	42 spaces	49 spaces within the garages	12 spaces	0	-30 spaces

As per the bylaw, each unit will be provided a space in their private off-street garage in which they will be able to store their bicycles. As part of short-term facilities, 2 short term racks will be provided to the north of the site, within the centre, close to the private amenity space. Further, given the nature of townhouse developments with multiple buildings, the bylaw requirement for short-term bicycle parking is deemed to be excessive, and short-term bicycle parking will be accommodated similarly within private garages and supported by the proposed bicycle racks in the amenity area for the use of visitors to the site.

5.4 Fire Truck Access

At the request of the local fire department, swept path analysis has been undertaken to demonstrate a Tower 57 Colwood Fire Department firetruck, seen to be a worst-case scenario seeing as these are not frequently operated by Colwood Fire Department. As can be seen in **Appendix A**, the fire truck is able to manoeuvre through the site, with rollover curbs provide where necessary for the fire truck to access the northern most point of the site. For the egress, a turn around point is located adjacent to the T-intersection and a 4-point turn is required.

Delora Drive extension will be accessed via the intersection with Windthrop Road. Until such time that Delora Drive is extended north, and the fire truck can continue straight on, the truck will be required to reverse down Delora Drive to Windthrop Road in the meantime.

5.5 Transportation Demand Management (TDM)

While the development is meeting the City of Colwood's bylaw requirements for parking, it is recognized that sustainable and active modes are an important means of access to/from the development. Some TDM measures being provided by the development are described below.

As part of the development proposal several pedestrian facilities will be provided.. This will encourage walkability around the site as well as through the site. To the west of the site, a sidewalk will be provided on the western side of Delora Drive, this sidewalk will extend north-south through the site, connecting to Windthrop Road to the south and eventually to Gurunank Lane to the north with future development to the north.

The primary parcel will connect to Delora Drive via a public pedestrian pathway, this public pathway will be available to residents and members of the public.

As part of the development a private amenity area, this will be provided to residents and promote physical activity.

To ensure cycling is encouraged to tenants, secure bike parking facilities will be provided within the private garages.

6. CONCLUSIONS

Walking Stick Developments Inc is proposing to develop 50 residential townhouse units distributed across 17 buildings on a site located in south Colwood off Wishart Road in Colwood, BC. This Level 1 TIA was prepared to highlight the development plan, existing and proposed multi-modal networks, expected vehicle trip generation, and site design. A level 2 was requested by the City within their July 2023 comments; however, it was felt to be onerous considering the development only just falls into that Level 2 bracket.

Multi modal transportation networks in the surrounding area were reviewed for existing and proposed future connections for transit, cycling, and pedestrian facilities. Transit routes 52, 59 & 60 are accessible within 50m of the development, while routes 54, and 55 are accessed from Latoria Road which is identified as a future Frequent Transit Network corridor. Existing cycling facilities include Veterans Memorial Parkway and Metchosin Road with proposed bicycle routes set to be located on Wishart Road, which is identified as a proposed priority route. Wishart Road and Windthrop Road are identified as priority pedestrian routes, with existing sidewalks provided on the eastern side of Wishart Road.

The proposed development is expected to generate a maximum of 20 & 26 two-way vehicle trips within the AM & PM peak period, respectively and as such is not expected to have a noticeable impact on the surrounding road network. A synchro model for the intersection of Windthrop Road / Wishart Road in the existing conditions resulted in v/c ratios below 0.15 on all approaches, with no delays (LOS A) on Wishart Road, and minimal delays (LOS B) on Windthrop Road.

Site accessibility, on-site vehicle circulation and visitor parking accessibility were reviewed using AutoTURN. Swept Path exhibits demonstrate everything has been designed to accommodate P-TAC vehicles. The developer proposes to meet the parking bylaw requirement by providing 100 vehicle parking spaces. 50% of the regular spaces will be provided within private garages. Additionally, 11 visitor parking spaces and two accessible spaces will be provided, 6 more visitor spaces than the 5 required.

APPENDIX A
Synchro Analysis

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	7	3	3	110	196	5
Future Volume (Veh/h)	7	3	3	110	196	5
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	3	3	120	213	5
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	342	216	218			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	342	216	218			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	100	100			
cM capacity (veh/h)	653	824	1352			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	11	123	218
Volume Left	8	3	0
Volume Right	3	0	5
cSH	692	1352	1700
Volume to Capacity	0.02	0.00	0.13
Queue Length 95th (m)	0.4	0.1	0.0
Control Delay (s)	10.3	0.2	0.0
Lane LOS	B	A	
Approach Delay (s)	10.3	0.2	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	20.6%	ICU Level of Service	A
Analysis Period (min)	15		

APPENDIX B
Swept Path Analysis

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2023/09/18 14:27, Plotted by Allan Conopio

Exhibit 1

Site Two-way Circulation

04-23-0110 September 2023 Scale 1:750 on Letter 3494 Wishart Prepared by HJ

bunt & associates

1 / A1 Site Concept Plan
Scale 1 : 300

Colwood Tower57

	meters
Width	: 2.60
Track	: 2.16
Lock to Lock Time	: 6.0
Steering Angle	: 40.0

[Issued for Discussion; not for Construction]
[Based on Drawing Floor Site Plan - CAD File from Lunn Projects dated September 14, 2023]

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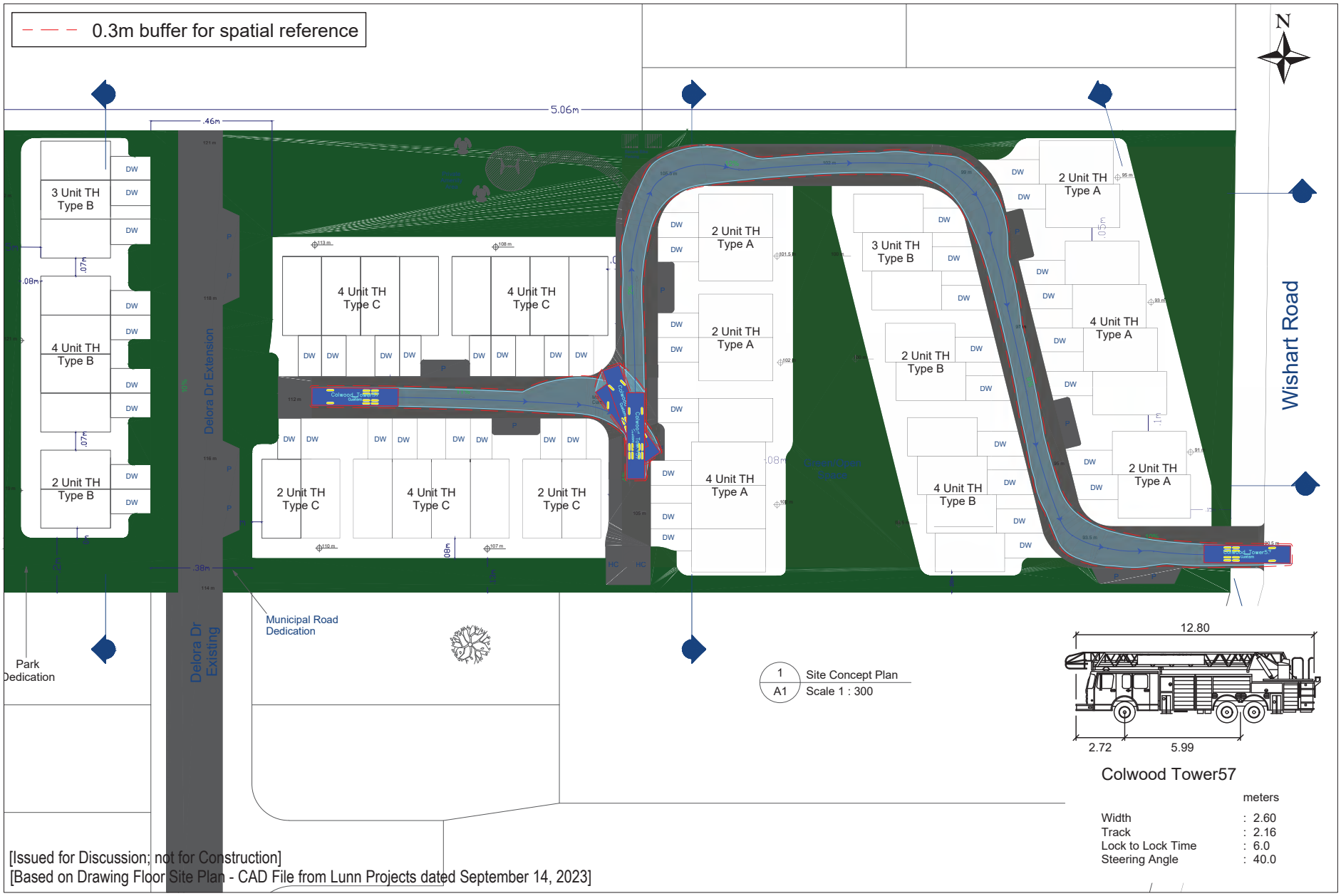
2023/09/18 14:27, Plotted by Allan Conopio

Exhibit 2

Fire Truck Access - Inbound

04-23-0110 September 2023 Scale 1:800 on Letter 3494 Wishart Prepared by HJ

bunt & associates



1 / A1 Site Concept Plan
Scale 1 : 300

Colwood Tower57

	meters
Width	: 2.60
Track	: 2.16
Lock to Lock Time	: 6.0
Steering Angle	: 40.0

[Issued for Discussion; not for Construction]
[Based on Drawing Floor Site Plan - CAD File from Lunn Projects dated September 14, 2023]

Exhibit 3

Fire Truck Access - Outbound

04-23-0110 September 2023 Scale 1:800 on Letter 3494 Wishart Prepared by HJ

bunt & associates

BC LAND SURVEYORS SITE PLAN OF:

Civic: 3494 Wishart Road

Legal – Lot 3, Section 62
Esquimalt District, Plan 10219

Parcel Identifier: 005–210–089 in the City of Colwood

Setbacks are derived from field survey.

Parcel dimensions shown hereon are derived from Land Title Office records.

This document shows the relative location of the surveyed features and shall not be used to define property boundaries.

Appendix 8

LEGEND

Elevations are geodetic and referenced to the CVD28BC datum.

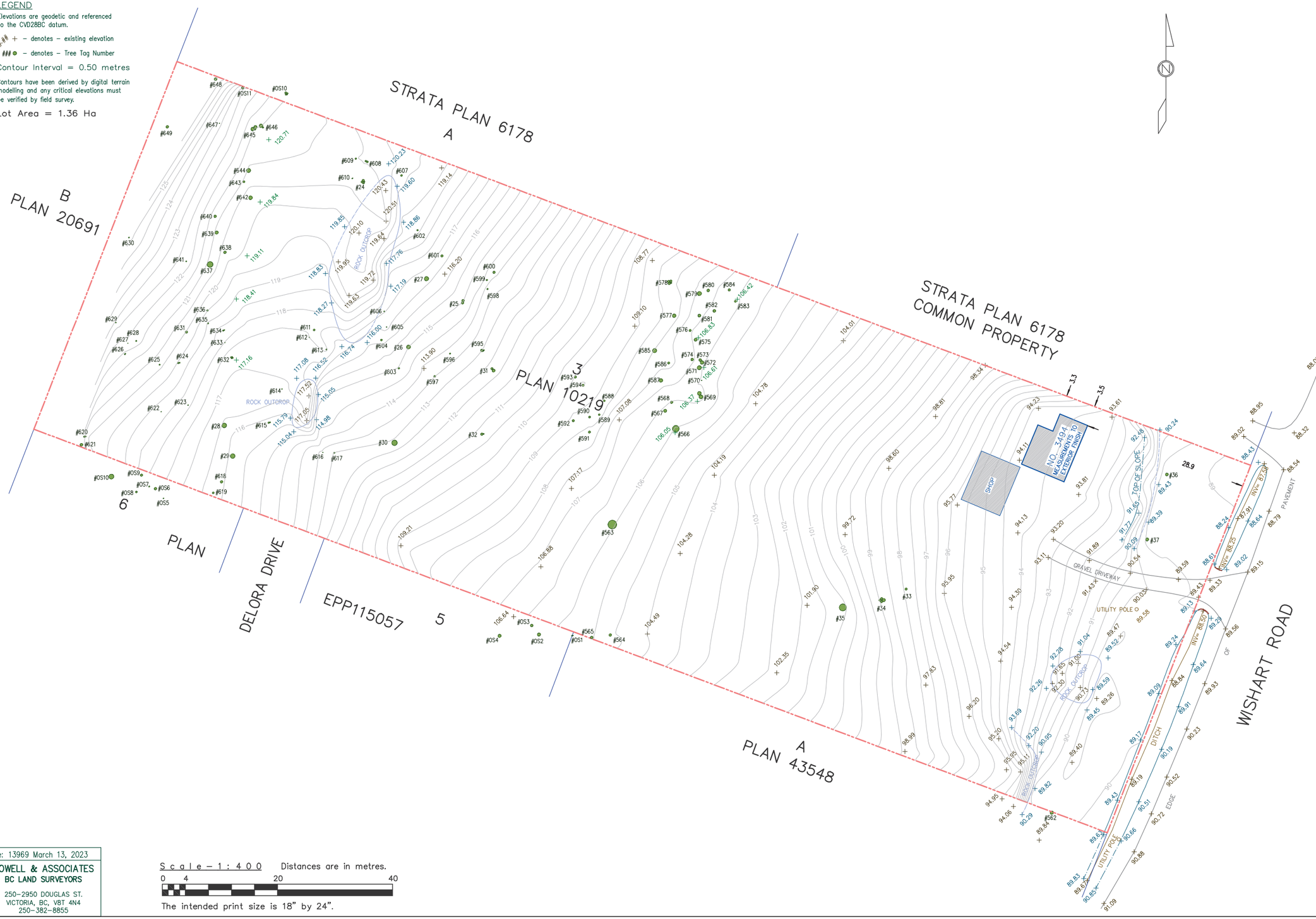
+ – denotes – existing elevation

● – denotes – Tree Tag Number

Contour Interval = 0.50 metres

Contours have been derived by digital terrain modelling and any critical elevations must be verified by field survey.

Lot Area = 1.36 Ha



File: 13969 March 13, 2023

POWELL & ASSOCIATES
BC LAND SURVEYORS
250–2950 DOUGLAS ST.
VICTORIA, BC, V8T 4N4
250–382–8855

Scale – 1 : 400 Distances are in metres.

0 4 20 40

The intended print size is 18" by 24".

Appendix 9

September 16, 2023

City of Colwood
3300 Wishart Rd
Colwood BC, V9C 1R1

Colwood Planning Department,

Re: Open House Summary for 3494 Wishart Road (File RZ-23-006)

Walking Stick Developments Inc. held two opens houses on August 31st and September 7th 2023, at the Colwood Holiday Inn Hotel for the rezoning application for 3494 Wishart Road. All properties within 75 metres of the subject lands were notified (See attachment #1 – Public Notice).

Approximately ten residents attended the two open houses to share their thoughts regarding the project. Overall, the response to the proposed development was reasonably positive with some concerns around specific topics. There were concerns about traffic and construction nuisances, however there was a strong consensus that townhouses are a much more appropriate form of housing for this area than multi-story apartment or condominium buildings which are also listed in the OCP for this area.

Resident Comments

A summary of the comments and questions we heard, are as follows:

- Townhouses are a much more appropriate form of housing for the neighborhood compared to 4-6 story apartment and condominium buildings.
- Will the development have sufficient parking?
- Will there be sidewalks built along Delora Drive and Wishart Road?
- Is there sufficient water pressure to serve the development?
- How many trees will be removed?
- How long will the construction of the development take?
- Will the development have natural gas?
- Will there be any single level units?
- Can no parking signs be added along Wishart Road?

Hosting the open houses was a positive and productive experience, the neighbours provided helpful and constructive feedback that will be incorporated into the proposal to ensure the needs of all stakeholders are taken into consideration and addressed.

Sincerely,

Gary Lunn

Attachments enclosed:

Attachment #1 - Open House Notice
Attachment #2 - Open House Display Boards
Attachment #3 - Sign Up Sheet

August 23, 2023

Dear Neighbour,

We are writing to inform you that Walking Stick Developments has applied to rezone 3494 Wishart Rd from its current zoning to a fifty unit townhouse comprehensive development zone in accordance with the Colwood Official Community Plan (OCP) for the area. We will be hosting two open houses for the community to learn more about the project and provide their feedback.

Please join us on either one or both evenings.

- **Location**: HOLIDAY INN EXPRESS Boardroom - 318 Wale Rd, Colwood, BC V9B 2W3
- **Date**: Thursday August 31st and September 7th, 2023
- **Time**: 6:30 pm – 8:00 pm

The OCP for this area (neighbourhood hillside) provides a range of housing options from townhouses to four and six storey multifamily buildings. Considering the surrounding neighbourhood, townhouses were selected as the most appropriate fit for the community.

A traffic study has been completed to ensure nearby streets are not negatively affected. Frontage improvements including sidewalks and streetlights will be provided along both Wishart Rd and Delora Dr. Additional information about the project is available on the City of Colwood's website (https://www.colwood.ca/city-services/development-services/development-activity).

Please contact us at david@lunnprojects.ca if you have any additional questions or comments, we appreciate your interest in the project and look forward to seeing you.

Sincerely,

Gary Lunn

Rezoning Application
Submitted May 2023

Figure 1. Satellite view of 3494 Wishart Rd

Colwood Rezoning Process

Walking Stick Developments Inc.

3494 Wishart Road, Colwood

Waling Stick Developments Inc. email: gl@garylunn.com

7401 Veyaness Road, Saanichton, BC V8M 1V9

Official Community Plan

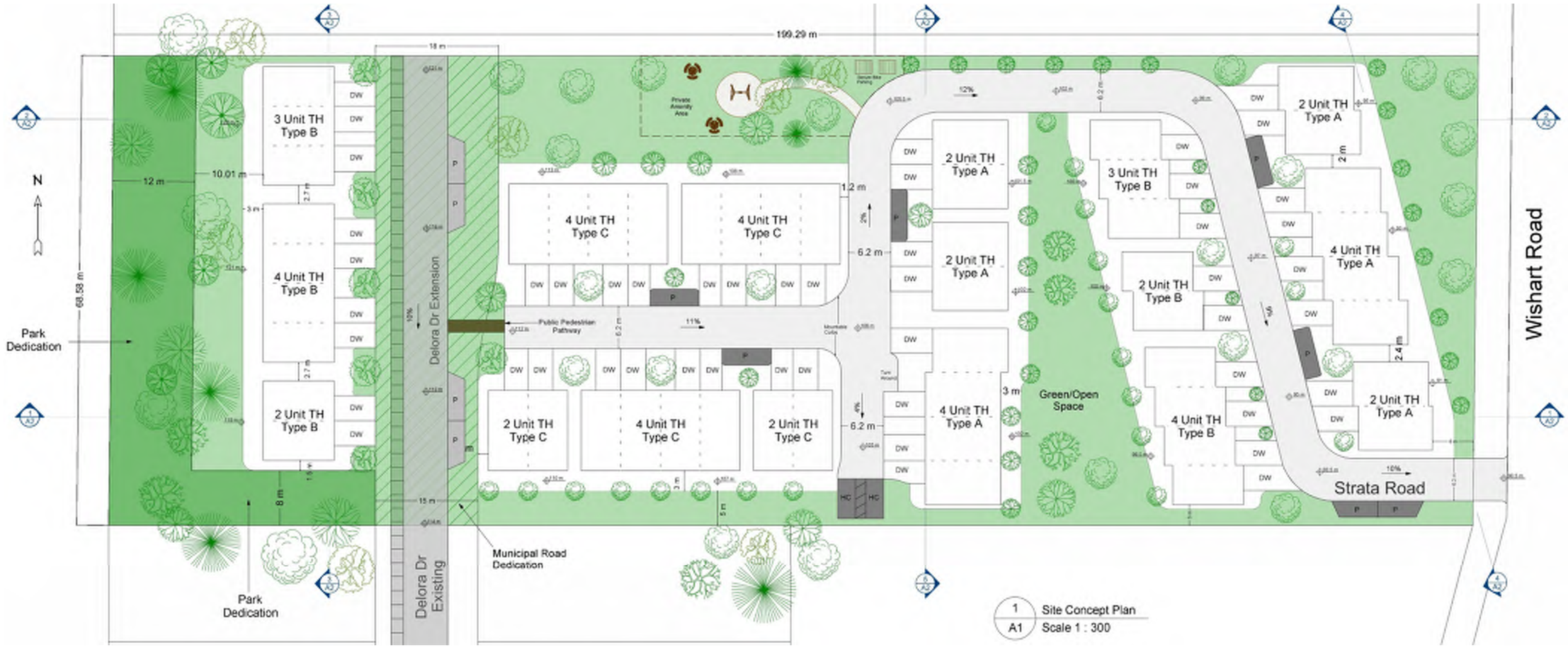
Figure 2. OCP Neighbourhood Hillside Concept

- The Colwood OCP identities three story town homes as suitable for Neighbourhood Hillsides areas
- The site design was crafted through the rigorous application of Site Adaptive Planning principals
- Natural buffers have been incorporated on the West, South and a large portion of the North property boundary to minimize disturbances to neighbouring properties
- Townhouses are identified as requiring significant growth in the Colwood Housing Needs Assessment

Waling Stick Developments Inc. email: gl@garylunn.com

7401 Veyaness Road, Saanichton, BC V8M 1V9

Preliminary Site Plan



Walking Stick Developments Inc.

3494 Wishart Road, Colwood

Waling Stick Developments Inc. email: gl@garylunn.com

7401 Veyaness Road, Saanichton, BC V8M 1V9

Landscape Plan

Walking Stick Developments Inc.

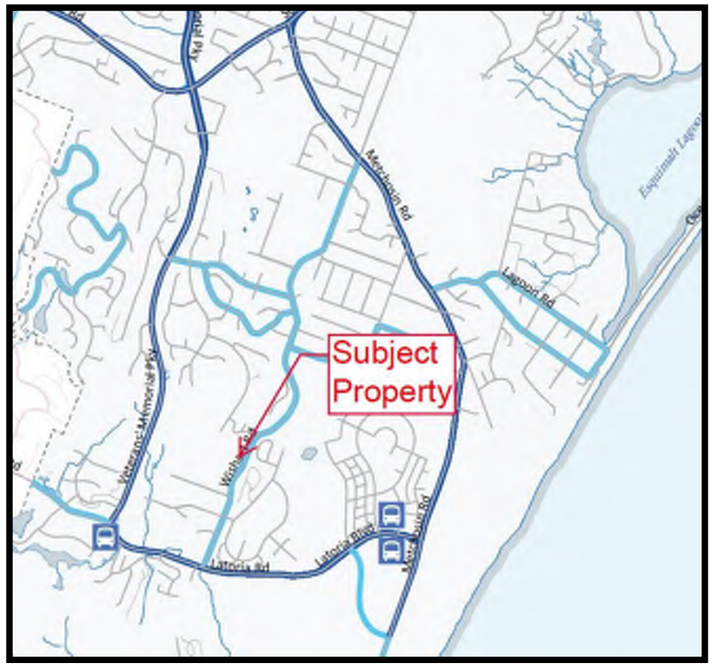
3494 Wishart Road, Colwood

Waling Stick Developments Inc. email: gl@garylunn.com

7401 Veyaness Road, Saanichton, BC V8M 1V9

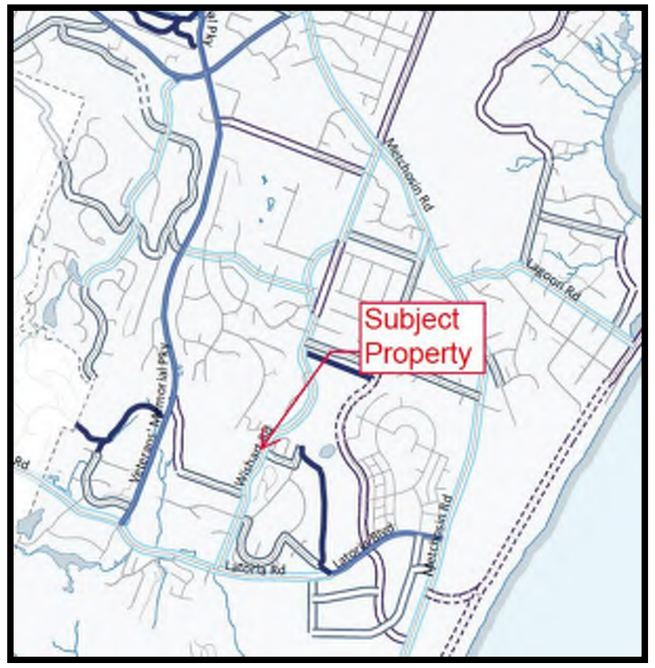
OCP – Transportation Network

Figure 3. Colwood Transit Map



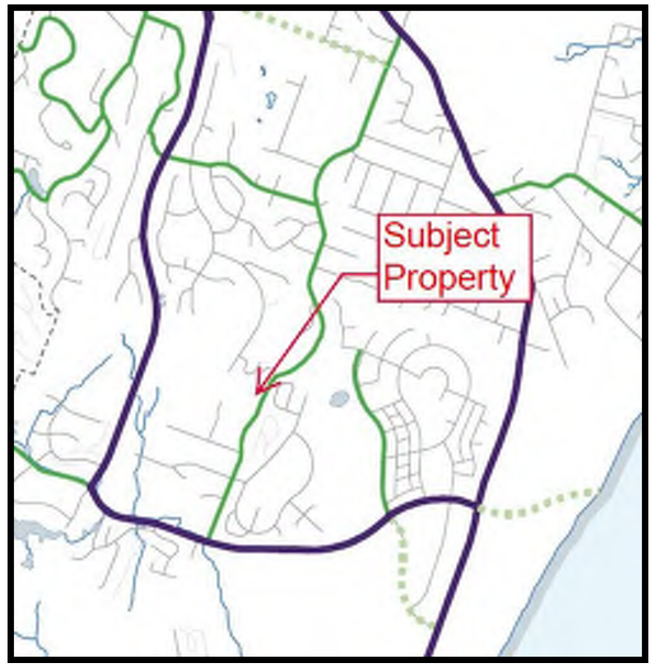
- Property is on local transit network
- Property is just 500 m from frequent transit network

Figure 4. Cycling Network



- There is a proposed buffered bicycle lane along Wishart Rd
- Proposed multi-use pathways adjacent to the property

Figure 5. Roadway Network



- Subject site is on an existing collector road (Wishart Road)
- Multiple access points (Delora Drive) improve traffic distribution
- Traffic study noted no adverse effects on nearby roads or intersections

Walking Stick Developments Inc.

3494 Wishart Road, Colwood

Waling Stick Developments Inc. email: gl@garylunn.com

7401 Veyaness Road, Saanichton, BC V8M 1V9

Proposed Rezoning – Comprehensive Development Zone

Minimum Parcel Size	13,664 Sq M (3.3 acres)
Maximum Lot Coverage	30 %
Maximum Building Height	11.0 m
Building Setbacks	
Front Yard	6.0 m
Rear Yard	6.0 m
Side Yard (South)	3.0 m
Side Yard (North)	1.5 m
Side Yard (Interior)	2.0 m
Number of Buildings	17
Number of Units	50
Gross Floor Area	8,365 Sq M
Maximum Floor Area Ratio (FAR)	0.7
Delora Drive Dedication	1,140 Sq M
Park Dedication	1,038 Sq M
Parking Spaces	100

Comprehensive development zone is based on the official community plan for the neighbourhood hillside classification.

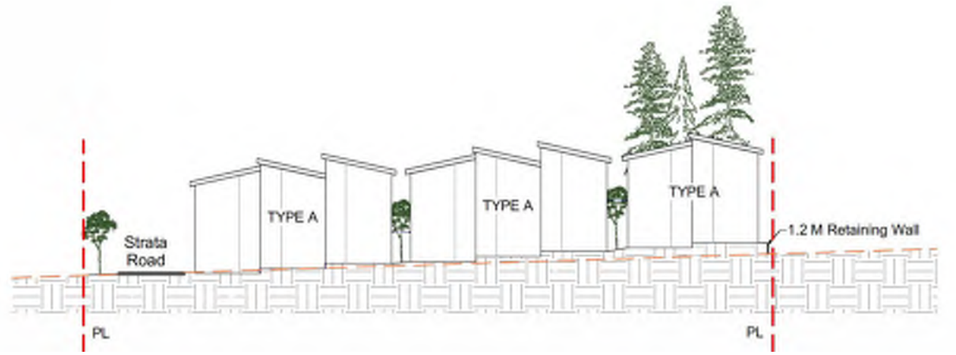


Figure 6. West Section View

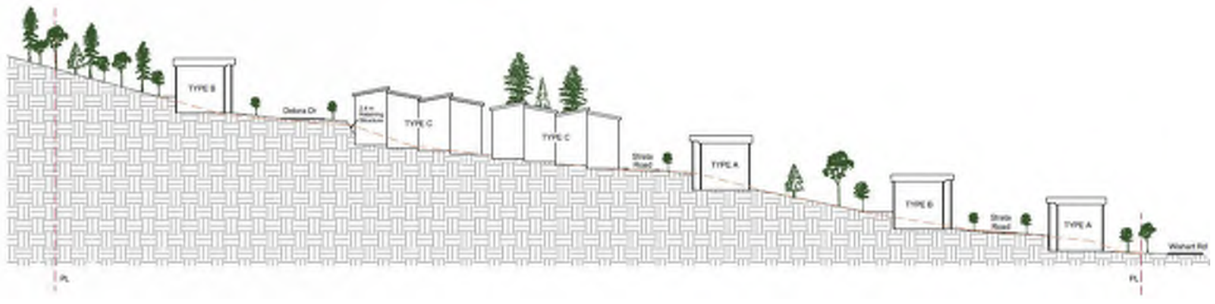


Figure 7. North Section View

Walking Stick Developments Inc.

3494 Wishart Road, Colwood

Waling Stick Developments Inc. email: gl@garylunn.com

7401 Veyaness Road, Saanichton, BC V8M 1V9

Walking Stick Developments Inc.

Sign-in Sheet

Date: August 31, 2023
Project: 3494 Wishart Road

	Name	Address	Phone Number	Email Address
1	Bruce McKay	28-486 Royal St	250-580-9370	
2	& Pamela			RIVERDANCEBARGE@GMAIL.COM
3	Tim & Lisa Rutland	3508 Wishart Rd	250.588.8845	TZILLA1006@yahoo.com
4	Mariah Powell	3500 wishart Rd	2506864075	mariahmariemac@gmail.com
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September 11, 2023

City of Colwood
3300 Wishart Rd
Colwood BC, V9C 1R1

Colwood Planning Department,

RE: Site Adaptive Planning Design Rational – 3494 Wishart Road

The Developer (Walking Stick Developments) engaged Corvidae Environmental Consulting to conduct an Environmental Assessment and Talmack Urban Forestry to conduct a Tree Impact Assessment for the proposed development at 3494 Wishart Road. These assessments were used in planning the development to ensure the principles of site adaptive planning were appropriately applied. This letter has been prepared collaboratively by Corvidae Environmental and Talmack Urban Forestry. The purpose of this letter is to outline how the proposed development incorporates the principles of site adaptive planning, the requirements of the Colwood Hillside Development Permit area and the recommendation of the consultants.

Formative Systems and Significant Features

During the initial assessment of the property, formative systems and significant features, including biophysical features and constraints, were identified. The majority of the 3.34 acre property has been cleared by previous residents over the past several decades. The western extent of the property remains as disturbed second-growth forest.

The majority of the site has been cleared of mature vegetation although there are many mature trees remaining, particularly on the western portion of the property. As shown in the Tree Impact Assessment, the development has been clustered and a natural buffer has been incorporated on the western section of the property. There are numerous mature trees being retained on the western section of the property and near the north and south property boundary (approximately halfway up the hill). The quantity, size and species are available in the Tree Impact Assessment in Appendix E. Retaining these trees along the property boundary creates a windfirm buffer as per OCP policy 11.2.2.3.C.

There are a number of rock outcrops throughout the property as can be seen on the survey in Appendix G. Two of the rock outcrops are located in the area designated for the Delora Drive extension. There is an additional rock outcrop in the northwest corner of the property that will be retained.

Wildlife Habitat, Corridors and Environmentally Sensitive Areas

The property was assessed for sharp-tailed snake habitat or presence. No sharp-tailed snakes were detected during the assessment. The potential for sharp-tailed snakes to occupy the property is considered low. Several key biophysical features of sharp-tailed snake habitat were observed on the site; however, due to the dense invasive species and lack of 3 dimensional features (talus slopes, fissures in rock outcrops and large decay logs/stumps), it is unlikely that sharp-tailed snakes occupy this site. Removal of the invasive species would improve habitat potential for the species. Please see the Environmental Assessment in Appendix C for additional details regarding the methodology for evaluating the possible habitats on the subject property.

The BC CDC iMap tool notes 2 species and 3 ecosystems at risk within a 2-kilometer radius of the property. None of these species or ecosystem occurences overlap the property and none of these species or ecosystems were observed on the property during the site assessment. The Environmental Assessment in Appendix C provides additional details and mapping.

Maintenance of habitat corridors for wildlife is an essential principle of site adaptive planning (Policy 11.2.2.1(c) & 19.1.q). There are no existing east to west wildlife habitat corridors on the property due to habitat fragmentation as a result of cleared areas on the property and adjacent roads. Maintaining a north/south corridor along the western section of the property would be beneficial due to the adjacent undeveloped and protected land to the south, west and north. This proposed corridor is shown on Appendix A in the area designated for the park dedication and connects the undeveloped area to protected areas in adjacent developments.

During the site assessment, there were no watercourses, waterbodies, or any associated riparian features identified on the property. Along the eastern edge of the property there is a shallow grassy ditch that flows into the municipal storm water management system and does not connect directly to fish bearing waters. Therefore, it does not require protection under the *Riparian Areas Protection Regulation*, B.C. Reg.

Unique Natural Features

The western section of the property is quite steep and approaches 30% grade at the property boundary. As previously noted, this area has the highest ecological value and most habitat potential on the property. The development plan includes a park dedication of approximately 40' along the length of the western property boundary with a 26' access off of the Delora Drive extension. Dedication of this area of mature forest will maintain existing ecological connection with the forested residential property to the west (560 Windthrop Rd), and would allow for potential future connection with Havenwood Park, should a portion of 560 Windthrop Road ever be dedicated as park land.

Blasting and Hillside Contouring

As shown on the section view (Site Plan - Appendix A) both the strata road and the Delora Drive extension are designed to follow the natural grades. There will be some minor grade alterations required to meet municipal engineering standards but there will be no retaining walls exceeding 1.2 metres. Avoiding major grade changes as seen on other developments in the area. The strata road was designed with a small switchback in order to follow the existing contours of the property with the townhouse buildings stepped up the hillside.

The development has been designed to minimize blasting. Reducing the amount of blasting required is critical to minimize the potential for damage to retained mature trees. Where rock removal is required near retained trees, the removal is to be done through hydraulic breaking. These areas are noted on the Tree Impact Assessment available in Appendix E. The amount of blasting for this development is anticipated to be minor as there is no underground parking, building foundations are shallow (no basements) and the utilities can be shallow as there is ample grade due to the hillside.

Mapped out Site Analysis & Framework Plan

Areas of Constraint

- Mature second-growth forest along western property boundary (including rock outcrop at northwest corner of property)
- Two rock outcrops approximately in line with Delora Drive
- Area near south property boundary adjacent to tree retention section of 484 Delora Drive

As the majority of the property has been historically disturbed and cleared over the years, there are relatively few areas of constraint. The second-growth forest along the western edge of the property, including a rock outcrop, contains the highest potential ecological value on the property. However, there are numerous invasive species present in this area which should be remediated as part of the development.

There are two large rock outcrops approximately in line with the southern section of Delora drive. As required by the Colwood Transportation plan, the Delora Drive extension will need to be constructed in this area. To avoid encroaching on the forested area on the western section of the property, the planned Delora Drive extension has been kept in line with the existing road to the south. On Point Project Engineers Ltd has prepared a preliminary road design to confirm that there is sufficient space for the two sections of Delora Drive to be aligned on 3486 Wishart Road. This will result in the removal or alteration of the two rocky outcrops; however, these habitat areas were thoroughly surveyed and no species or ecosystems at risk will be impacted.

Near the south property boundary adjacent to 484 Delora Drive, on the neighboring property there is a tree retention area with numerous mature trees close to the property boundary. Providing a 5 meter buffer from the property line avoiding blasting or any significant grade alterations will ensure this development does not negatively affect the tree retention area on 484 Delora Drive.

Planned for Development

The townhouse units have been clustered in areas of least constraint which will minimize clearing, landscape disruption and grade alteration. This approach ensures the development will not negatively affect the residences or habitat on neighbouring properties.

While the site is only partially treed, it is important to avoid clearing near the property boundary to maintain the wind buffer effect. The current design maintains the windfirm buffer along the western property boundary and components of it along the north and south boundary. The Delora Drive extension will require the removal of a number of trees at the north and south property boundaries. There are no significant trees near the eastern property line.

It is recommended that the developer register a statutory right of way on the strata road to grant pedestrian access between Delora Drive and Wishart Road. This pedestrian connection can facilitate access from the Royal Bay area west through the subject property and potentially into Havenwood Park if a future connection is established through 560 Windthrop Rd. This

pedestrian connection also allows residents on Delora Drive to access the transit and cycling infrastructure along Wishart Road.

The design of the development aims to strike a balance between retention of natural features, mature trees and areas with high habitat potential with development requirements such as the Delora Drive extension. The development has been planned to effectively minimize the residual impacts on the environment and retain natural features where possible by incorporating the principles of site adaptive planning, the hillside development permit guidelines, and the recommendations of the consultants.

Prepared By:

Nicole da Silva, BIT, B.Sc.,
Junior Biologist
Corvidae Environmental Consulting Inc.

COLLEGE OF APPLIED BIOLOGY
Jessica Harvey
R.P. Bio 2556
CAB

Jessica Harvey, M.Sc, R.P.Bio.,
Principal/Senior Biologist, Riparian QEP
Corvidae Environmental Consulting Inc.

Garrett Whelan, B.Sc.F.
ISA Certified Arborist ON-2772A
Tree Risk Assessment Qualified
Talmack Urban Forestry Consultants LTD

C2 BEACH TO MOUNTAIN TRAIL ROUTE NETWORK

Pursue development of a trail route network plan that links existing trail segments and parks to provide a continuous loop connecting the ocean up to the mountain and back.

BACKGROUND & RATIONALE:

- Analysis and community feedback highlighted both the significance of trails in Colwood's existing parks and recreation system, along with the need for integration and improvement.
- The majority of City-owned parks and recreation amenities are focused around natural areas and trails.
- There are existing gaps between individual parks and trails where opportunity for establishing linkages exist.
- The concentration of trails, green spaces, and developing lands between Royal Beach and Triangle Mountain presents an important opportunity to develop linking trail segments and create an integrated network loop from the beach to the mountain.
- Development proposals for Royal Bay, and Royal Beach have Parks Terms of Reference (TOR) that include provision of trails and connections.
- Future development proposals could present opportunities for continued improvement of trail network connections and establishing loop trail routes in the area.

COMMUNITY FEEDBACK HIGHLIGHTS:

- **TOP NEED: In Phase 1, "Connector Trails" and "Active Transportation Routes" were highlighted as the #1 and #3 top needs for additional facilities or upgrades for the City's parks and recreation system.**
- **STRONG SUPPORT: In Phase 2, the "Beach to Mountain Route Network" concept was presented and received +92% support from respondents (#6 most strongly supported item overall).**
- **PRIMARY USE: "Walking for Exercise" and "Hiking" are the top 2 uses and demands for Colwood's parks and recreation system.**

ROUTE NETWORK CONCEPT:

(For illustration, see **Figure 8: Route Network Concept Map** on the following page. Note that lines on the map are illustrative only. Siting of specific routes will require field analysis and design.) Future trail planning and development should site new trails and access points based on specific site conditions, integrating privacy buffers to existing properties, minimizing view impacts, protecting existing landscape features, and following Crime Prevention Through Environmental Design (CPTED) principles.

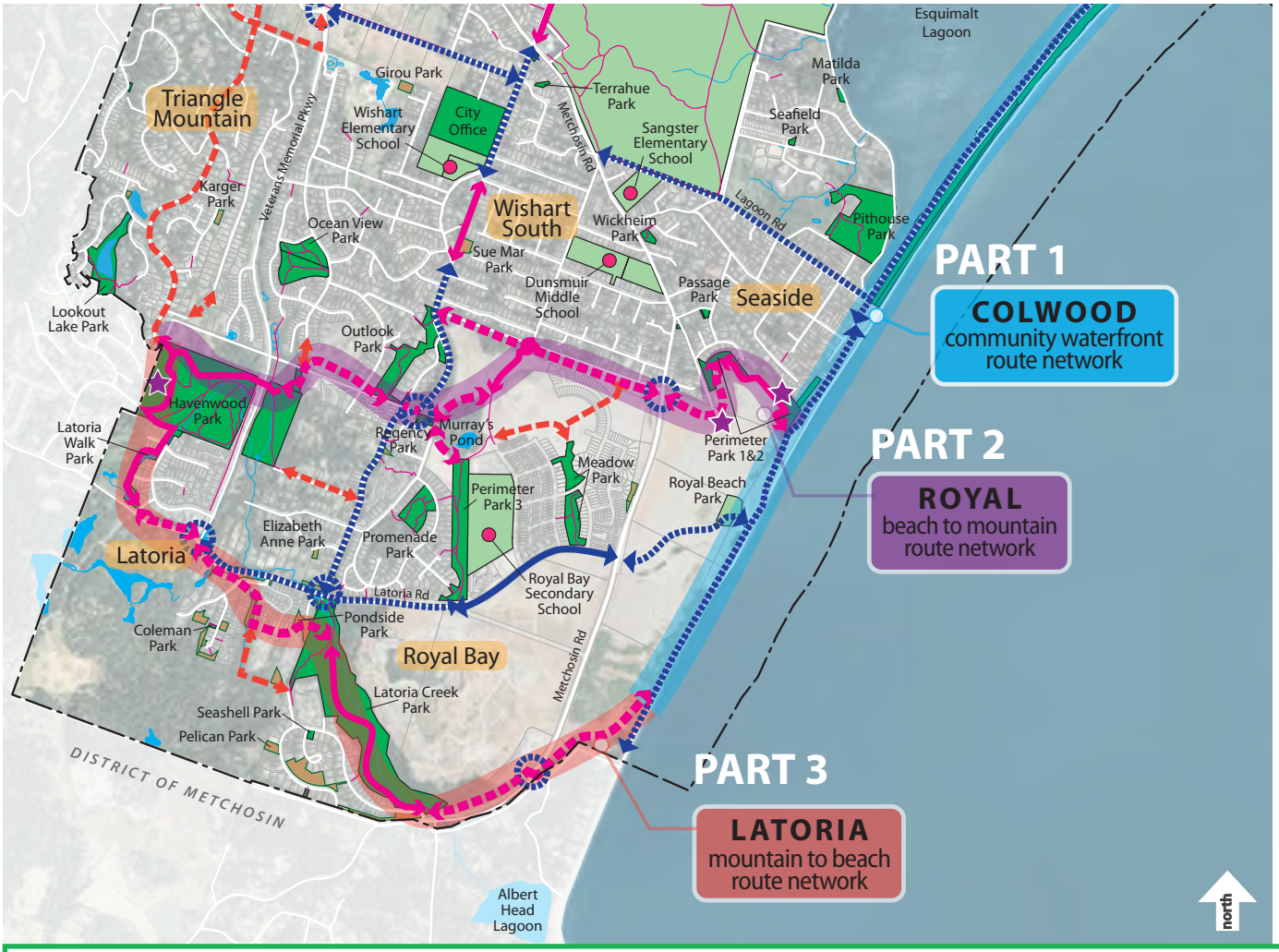
PART 1: Community Waterfront Route

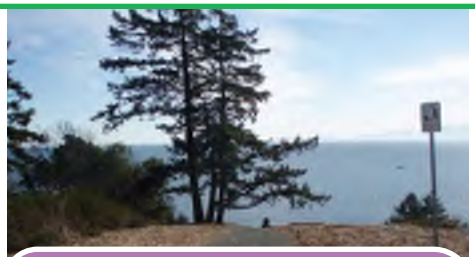
- This connection is a primary focus of the 'Colwood Waterfront Improvement Plan (WIP)' (see **C1** for details).
- In summary: this part will link the waterfront from the Lagoon, Peninsula, Ocean Boulevard, Perimeter Park 2, Royal Beach all the way to the southern City limit by Albert Head Lagoon in Metchosin.

PART 2: Royal Beach to Mountain Route

- This part of the network is focused on linking from the beach and ocean up through the neighbourhoods of Royal Beach, Royal Bay, and Latoria to the high point in Havenwood Park adjacent to Triangle Mountain neighbourhood.
- Existing trail segments anticipated to be included in this route are:
  - Perimeter Park 2
  - Perimeter Park 1
  - Painter's Trail
  - Regency Park
  - Havenwood Park North Trail
- Proposed new trail segments anticipated to be developed to achieve this route are:
  - Link from Waterfront up to Painter Trail
  - Link from Painter Trail around Murray's Pond to Regency Park
  - Link across Wishart Road to Outlook Park
  - Link from Outlook Park to Gurunank Lane and up to Havenwood Park

FIGURE 8: ROUTE NETWORK CONCEPT MAP





Inspiration: Linking the beach and waterfront, up through neighbourhoods and parks, to a view from Havenwood Park up on Triangle Mountain.

PART 3: Latoria Mountain to Beach Route

- This part of the network is focused on linking from the high point in Havenwood Park down through the Latoria neighbourhood and Latoria Creek Park back down to the ocean.
- Existing trail segments anticipated to be included in this route are:
  - » Havenwood Park (south west trails)
  - » Latoria Walk Park trail
  - » Latoria Creek Park Trail
- Proposed trail segments anticipated to be developed to achieve this route are:
  - » Link from Latoria Walk trail alongside the north side of Latoria Road
  - » Crossing at the Latoria Veteran Pkwy intersection to the south side of Latoria Road
  - » Link along undeveloped parks parcels in Latoria Heights along the ravine and out along Elevation Point Terrace
  - » Link through undeveloped Pondside Park to connect to existing Latoria Creek Park Trail
  - » Link Latoria Creek Park through undeveloped City land along Metchosin Road
  - » Link across Metchosin Road by transit stops just past Farhill Road down connecting back down to the ocean through Royal Beach

RECOMMENDED ACTIONS:

ACTIONS		TIMELINE	PARTIES	CAPITAL ESTIMATE
C2.1	Establish trail dedication as a requirement of future subdivision or rezoning on lands that would support trail linkages related to the beach to mountain trail network concept. Prioritize trail development that provides loop trails and includes supporting wayfinding signage (see **C17**). Priority development areas for trail and connections considerations include Royal Beach, Royal Bay, and Latoria Heights.	Immediate, Ongoing	Comm. Planning, Dev. Services	Staff Time
C2.2	Engage with local community groups with shared interests, such as the "Friends of Havenwood Park", to establish a working group. Confirm desired trail routing details to support the detailed planning and implementation of the trail route network.	Short, Ongoing	Comm. Planning, Operations, Community Groups	Staff Time
C2.3	Explore opportunities to achieve trail route segments through dedication, registration of right-of-way, lease, purchase, or land preservation agreements. Where desired segments are not possible, consider on-road connections.	Short, Ongoing	Comm. Planning, Dev. Services, Eng.	Staff Time
C2.4	As land or access agreements are secured, proceed with trail development including trail layout, trail construction, and supporting wayfinding signage. Cost varies depending on segment length, terrain, and trail materials or support structures given site specific conditions.	Ongoing	Eng. / Operations, Developers, Community Groups	TBD
C2.5	Seek funding opportunities to support trail route network development.	Short, Ongoing	Comm. Planning, Community Groups	Staff Time

KEY RELATED RECOMMENDATIONS:

- ***C1 Community Waterfront Improvement***
- ***C17 Signage & Wayfinding***
- ***C23 Latoria Creek Park***
- ***C24 Havenwood Park***
- ***P4 Partnerships***

CITY OF COLWOOD
BYLAW NO. 2005

A BYLAW TO AMEND BYLAW NO. 151 BEING THE "COLWOOD LAND USE BYLAW, 1989"

The Council of the City of Colwood, in open meeting assembled, enacts as follows:

1. CITATION

This bylaw may be cited as **"Colwood Land Use Bylaw No. 151, 1989, Amendment No. 207 (CD39 – 3494 Wishart Road), Bylaw No. 2005, 2023."**

2. AMENDMENT

Bylaw No. 151, the **"Colwood Land Use Bylaw, 1989"** is amended as follows:

a.) Amend Schedule "A" (Zoning Map) by deleting from the Rural 1 (A1) Zone and adding to the Comprehensive Development CD39 (CD39) Zone, the property shown in Schedule 1 attached to this bylaw and described as "LOT 3 SECTION 62 ESQUIMALT PLAN VIP10219".

b.) In Section 1.2 "DEFINITIONS", under the heading "COMPREHENSIVE DEVELOPMENT ZONES", insert "CD39".

c.) In Section 1.3.09 under the heading "SHORT FORM" insert "CD39" and under the heading "ZONE" insert "Comprehensive Development 39".

d.) Add Section 10.44 COMPREHENSIVE DEVELOPMENT 39 (CD39 – 3494 WISHART ROAD) as per Schedule 2 of this bylaw.

READ A FIRST TIME on the	8th	day of	January,	2023
READ A SECOND TIME on the	8th	day of	January,	2023
READ A THIRD TIME on the		day of		2024
ADOPTED on the		day of		2024

Mayor

Corporate Officer

SCHEDULE 1

Subject Property Map

COMPREHENSIVE DEVELOPMENT 39 (CD39 - 3494 Wishart Road) ZONE

SCHEDULE 2

SECTION 10.44 COMPREHENSIVE DEVELOPMENT 39 (CD39 – 3494 WISHART ROAD) ZONE

10.44.1 Purpose

The purpose of this zone is to provide for the orderly development of the lands located at 3494 Wishart Road in the City of Colwood.

10.44.2 Permitted Uses

1. In addition to the uses permitted by Section 2.1.10, the following uses and no others are permitted in the CD39 zone:

   a. Attached Housing
   b. Duplex
   c. Home Occupation – Office Use Only
   d. Show Homes
   e. Accessory Buildings and Structures

10.44.3 Permitted Base Development

1. In the CD39 Zone the number of dwelling units shall not exceed 1.

10.44.4 Comprehensive Development Conditions

1. Notwithstanding Section 10.44.3, the density of development in Section 10.44.5 is permitted in the CD39 Zone in accordance with Sections 10.44.4 through 10.44.7, if the Owner contributes:

   a. $7,500 per duplex and townhouse dwelling unit toward the Community Amenity Reserve Fund;
   b. $1,500 per duplex and townhouse and dwelling unit towards the Affordable Housing Reserve Fund;
   c. $583 to the Fire Hall Fund per duplex and townhouse dwelling unit.

2. Payment of the contributions in Section 10.44.4 shall be made at the time of issuance of a building permit.

3. All dollar amounts referred to in Section 10.44.4.1 shall be increased annually effective January 1 of each calendar year in which this bylaw is adopted by the amount of the Victoria Consumer Price Index (CPI).

10.44.5 Permitted Density

1. The total number of attached housing and duplex units shall not exceed 50.

10.44.6 Regulatory Conditions

1. Regulatory conditions for the CD39 Zone shall be as shown on the following table:

Regulation	General
Minimum lot area	12,524m^2
Maximum lot coverage	30%
Minimum lot frontage	68m
Maximum building height	11.0m
Maximum number of storeys	3 storeys
Maximum FAR	0.7
Minimum yard requirements for principal buildings	
Front	6.0m
Interior side (North)	1.5m
Interior side (South)	3.0m
Rear	6.0m

10.44.7 General

1. The relevant provisions of Divisions 1 and 2 shall apply. In the case of a conflict between provisions of Division 1 and 2 and the provisions of this Zone, the latter shall prevail.

2.

Rezoning Application No. RZ000005
3494 Wishart Road

Presented by Kelsea Fielden
Planner I
December 4th, 2023
Planning and Land Use Committee

Colwood

Site Context

- Lot size: 13,644m^2
- Current Zone: A1
- OCP Designation:
  - Neighbourhood - Hillside and Shoreline
- Development Permit Areas:
  - Environmental (Hillside)
  - Natural Hazard (Steeply Sloped)

Proposal

- 50 units
- 3-storey townhomes
- Amenity Area

- Floor Area Ratio of 0.7
- SRW with City staff and public access
- Delora Drive Extension

Colwood

OCP Review
Policies & Built Form

Neighbourhood – Hillside and Shoreline supports:

- Ground-oriented multi-unit townhouses up to 3 storeys.
- Floor Area Ratio up to 1.2.
- Protection of natural features and sensitive ecological areas.

Colwood

OCP Review
Site Adaptive Planning

- Natural Assets and Tree Inventory
  - Western edge forest
  - Rocky outcrops
  - Mature trees
- Road profile
  - Most impactful disturbance to the land

Colwood

Comprehensive Development CD39 Zone

1. In addition to the uses permitted by Section 2.1.10, the following uses and no others are permitted in the CD39 zone:

a. Attached Housing
b. Duplex
c. Home Occupation – Office Use Only
d. Show Homes
e. Accessory Buildings and Structures

Regulation	**General**
Minimum lot area	12,524m^2
Maximum lot coverage	30%
Minimum lot frontage	68m
Maximum building height	11.0m
Maximum number of storeys	3 storeys
Maximum FAR	0.7
Minimum yard requirements for principal buildings	
Front	6.0m
Interior side (North)	1.5m
Interior side (South)	3.0m
Rear	6.0m

Colwood

Communication and Timeline

- Planning and Land Use Committee
- Public Notice Requirements
- Council Decision and 1st & 2nd reading of amending bylaw
- 3rd reading of amending bylaw
  Date TBD
- Development Agreement Registered
  (conditions apart of staff recommendation)
- Amending Bylaw adopted
  Date TBD

Colwood

Staff Recommendation

Rezone the subject property to a new CD39 Zone.

Subject to the following conditions:

1. The applicant registers a Development Agreement on title;
2. A Section 219 conservation and restoration covenant registered for western edge with City staff and public access SRW;
3. The Delora Drive extension is dedicated to the City of Colwood as road.

Options and Alternatives

Option 1	Staff recommendation.
Option 2	Recommend that Council request staff to provide additional information.
Option 3	Recommend to Council that the application be denied.
Option 4	Recommend to Council another option.

Colwood

Thank you!

Colwood

3494 Wishart Road

3.

Proposal Summary

- Fifty Townhomes
- Development design crafted by Site Adaptive Planning principles
- All homes will have 3 bedrooms, and most will include an office/den
- Delora Drive extended as per the Colwood transportation plan
- Pedestrian access provided from Delora Drive to Wishart Road

Figure 1. Landscape Plan

Proposed Rezoning – Comprehensive Development Zone

Parcel Size	13,664 Sq M (3.3 acres)
Maximum Lot Coverage	30 %
Maximum Building Height	11.0 m
Building Setbacks	
Front Yard	6.0 m
Rear Yard	6.0 m
Side Yard (South)	3.0 m
Side Yard (North)	1.5 m
Side Yard (Interior)	2.0 m
Number of Buildings	17
Number of Units	50
Gross Floor Area	8,365 Sq M
Maximum Floor Area Ratio (FAR)	0.7
Delora Drive Dedication	1,140 Sq M
Park Dedication	1,038 Sq M
Parking Spaces	100

Proposed comprehensive development zone is based on the official community plan guidelines for the neighbourhood hillside classification.

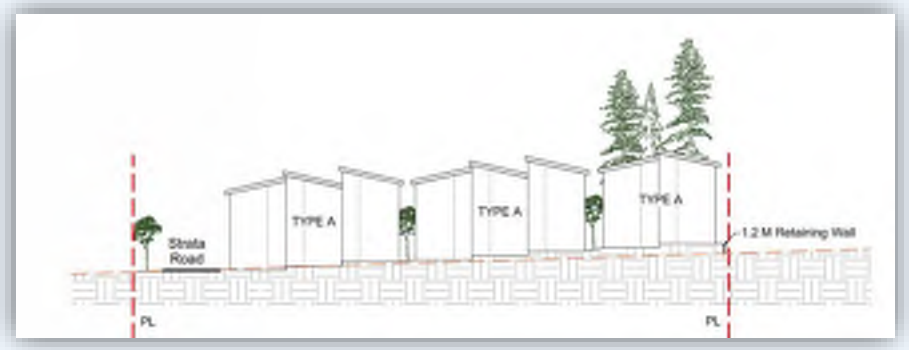


Figure 2. West Section View

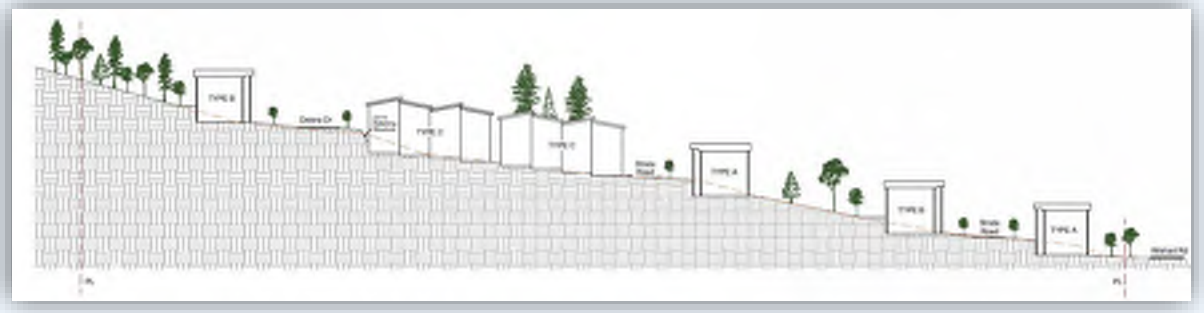


Figure 3. North Section View

Site Location

Figure 4. Satellite View of Neighbourhood

Street View as seen from Wishart Road

Figure 5. Street View as seen from Wishart Road

Official Community Plan

Figure 6. OCP Neighbourhood Hillside Concept Sketch

- Property is classified as Neighbourhood Hillside (bordering Neighbourhood classified properties)
- The site design was crafted through the thorough application of Site Adaptive Planning principals
- OCP identifies three story townhouses as suitable for Hillside Neighbourhoods
- Proposed FAR of 0.7 is well under the Hillside Neighbourhood limit of 1.2

Site Adaptive Planning

- Project Biologist and Arborist identified formative systems and features along with areas of least and most constraint to determine the areas suitable for development
- Park dedication proposed for Western section of property, identified as most ecologically valuable area by Biologist
- 35% of site is proposed as open and green space
- 8% of the property is required for the Delora Drive road dedication
- Pedestrian connections have been prioritized
- Road contours and building sittings have been designed to blend in with natural grades
- Natural buffers have been incorporated on the West, South and a large portion of the North property boundary to minimize disturbances to neighbouring properties

Environmental Assessment Findings

- The only area identified with a relatively valuable natural environment is on the western portion of the property
- No habitat or probable habitat for protected species was observed
- Previous property occupants have cleared and disturbed the majority of the property
- Development has been proposed for areas of the property that have been previously disturbed
- Invasive species are prevalent throughout the property and remediation would be beneficial

Figure 7. Formative Systems and Features

Hillside Site Design

- Due to the hillside nature of the property the townhomes blend into the natural grade to adhere with Site Adaptive Planning principles
- Private strata road incorporates a gentle switchback to minimize recontouring of the property
- Delora Drive extension follows the existing grade at approximately 4%
- Homes incorporate daylight basements and second floor walkouts to take advantage of the hillside

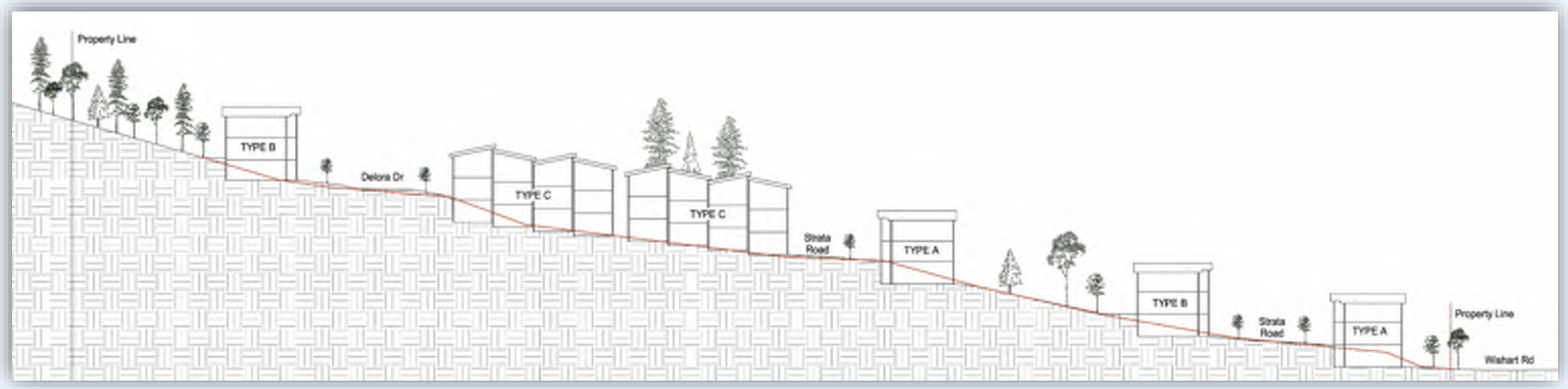


Figure 8. Expanded North Section View

Middle Income Housing Demand

- Colwood Housing Needs Assessment identified townhouses as requiring significant growth in the community
- A demand for townhouses was recently highlighted in the BC Government Housing target list for Colwood
- The proposed homes offer attainable family housing with 3 bedrooms and a home office/den
- “Colwood is home to family-friendly neighborhoods that provide housing choices” – Colwood OCP

Figure 9. OCP Neighbourhood Hillside Concept

Development Services & Park Dedication

- Park dedication is proposed at the Western section of the property
- The park dedication makes a future connection to Havenwood Park a possibility
- Covered transit stop will be built along Wishart Road
- 9 guest parking spaces proposed (5 are required)
- Retaining walls will be minimized by utilizing building foundations to retain slopes where required

Figure 10. Park Dedication

Family Amenity Area

- It is anticipated that a large portion of the residents will be families with children
- A private amenity space is proposed with a small playground incorporated into the natural forested environment for young children
- A development agreement will be registered on title to preclude the future removal of the playground
- Secured bike parking will be provided at the amenity area

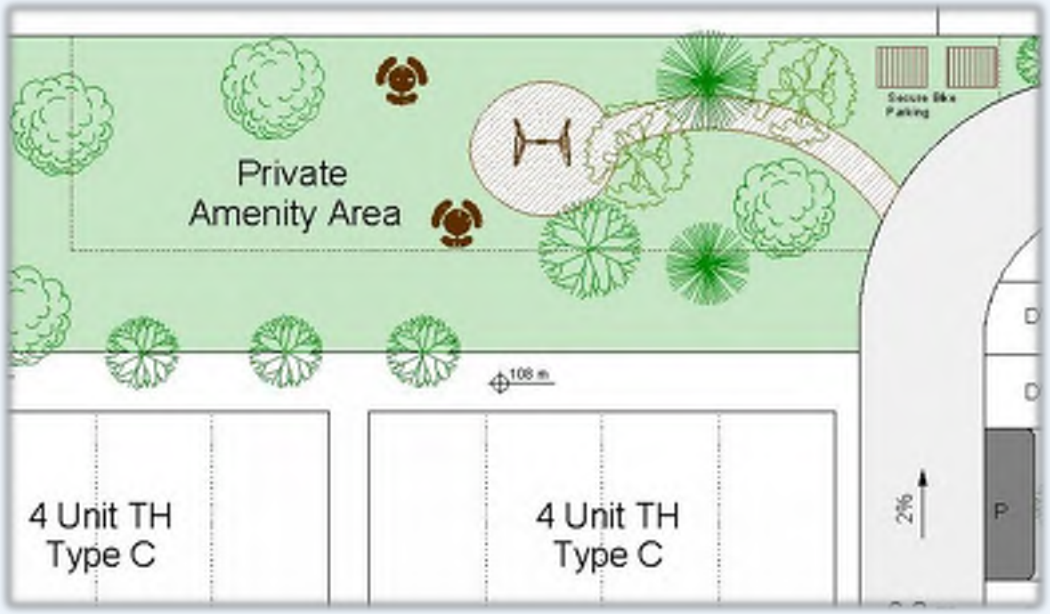


Figure 11. Amenity Area

Road Dedication

- Southern section of Delora Drive has a 15 m RoW and northern Delora Drive has an 18 m RoW
- A road dedication that transitions from 15 to 18 metres is proposed to minimize disturbances to the Western section of the property
- Road grade has been set to minimize large cut or fill volumes
- Delora Drive has been kept straight to minimize the disturbance to the hillside & park dedication on the Western section of the property

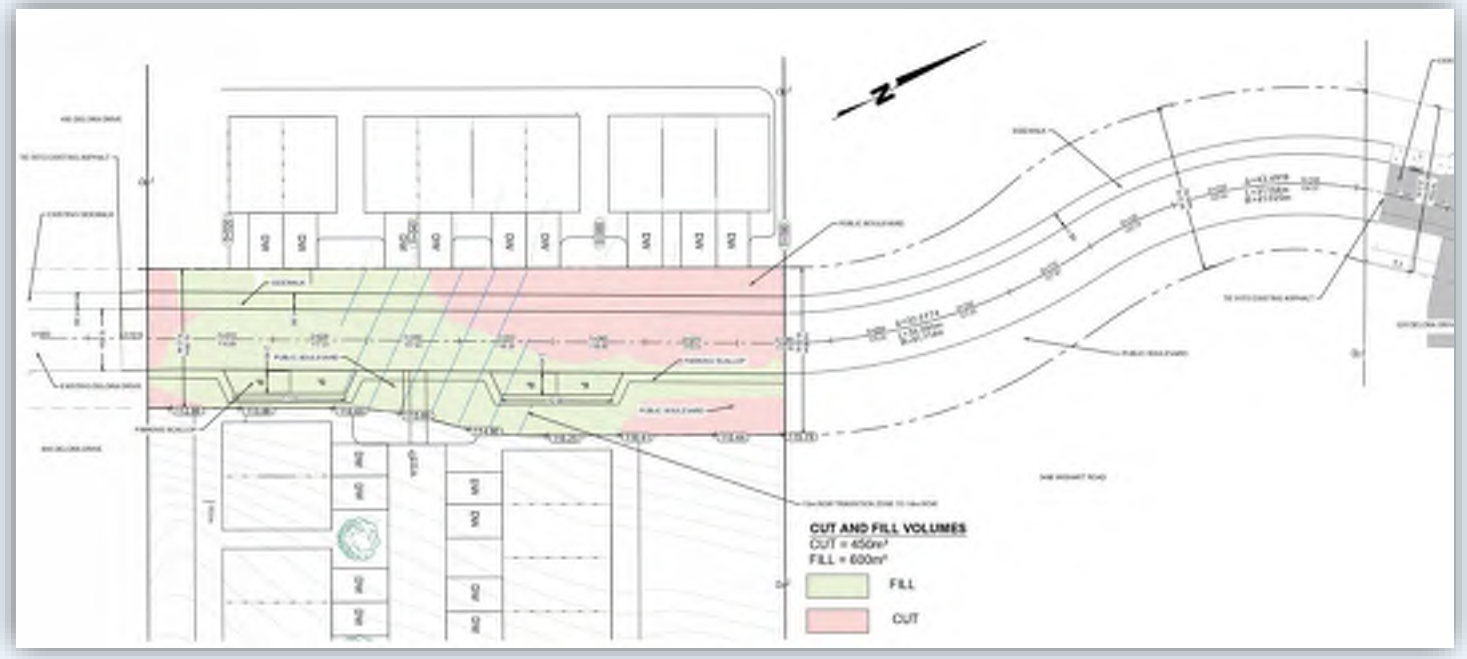


Figure 12. Delora Drive Extension

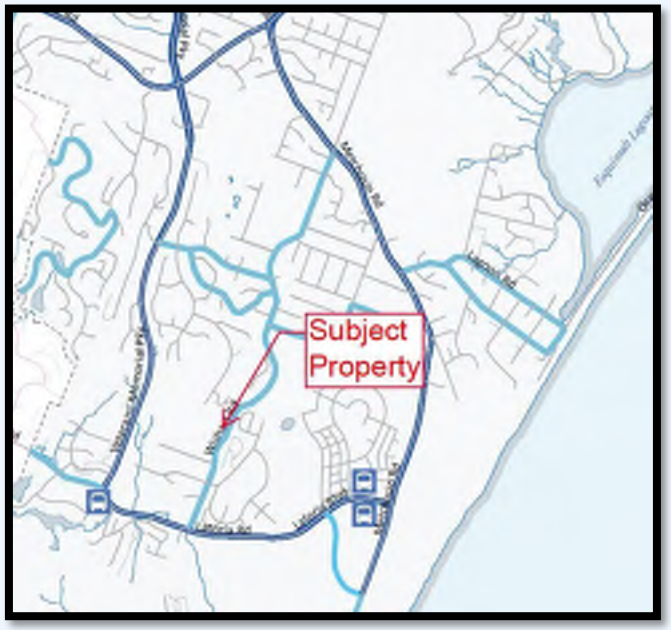
Neighbourhood Consultation

Questions, comments and feedback received during community consultation

- Townhouses are a much more appropriate form of housing for the neighbourhood compared to 4-6 story apartment and condominium buildings.
- Will the development have sufficient parking?
- Will there be sidewalks built along Delora Drive and Wishart Road?
- Is there sufficient water pressure to serve the development?
- How many trees will be removed?
- How long will the construction of the development take?
- Will the development have natural gas?
- Will there be any single level units?
- Can no parking signs be added along Wishart Road?

OCP – Transportation Network

Figure 13. Colwood Transit Map

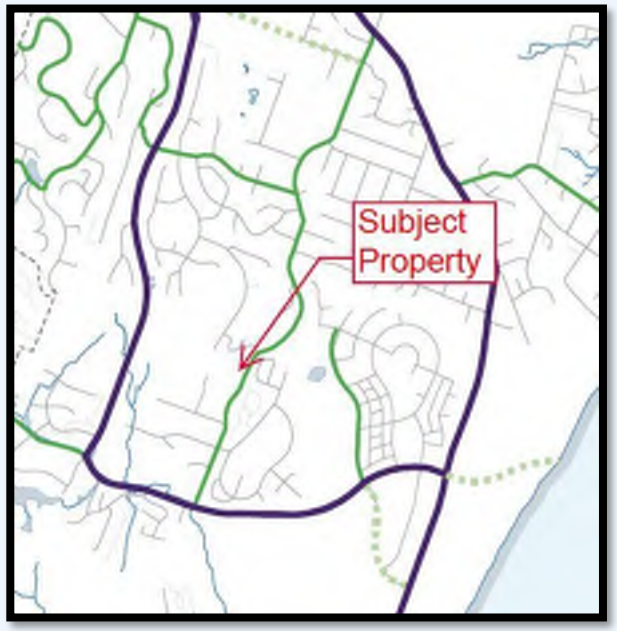


- Property is on local transit network
- Property is just 500 m from frequent transit network

Figure 14. Cycling Network

- There is a proposed buffered bicycle lane along Wishart Rd
- Proposed multi-use pathways adjacent to the property

Figure 15. Roadway Network



- Subject site is on an existing collector road (Wishart Road)
- Multiple access points (Delora Drive) improve traffic distribution
- Traffic study noted no adverse effects on nearby roads or intersections

Traffic Impact Assessment

- TIA concluded development is not expected to have a noticeable impact on the surrounding road network
- Two access roads aid in distributing the traffic
- Synchro analysis was conducted as part of the assessment

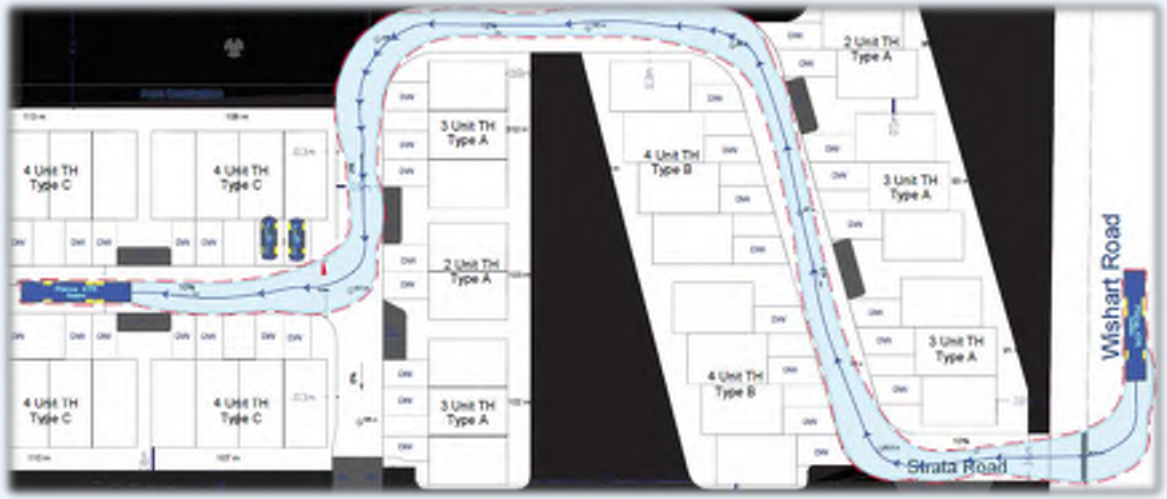


Figure 16. Fire Access Swept Path Analysis

- Electrified vehicle & bike parking is provided in each garage
- Short term secure bike parking will be provided at the private amenity space

Figure 17. Vehicle Access Swept Path Analysis

Thank you


199.29 m
N
Park Dedication
68.58 m
12 m
93.01 m
3 Unit TH Type B
4 Unit TH Type B
2 Unit TH Type B
Delora Dr Extension
Delora Dr Existing
Public Pedestrian Pathway
4 Unit TH Type C
4 Unit TH Type C
2 Unit TH Type C
4 Unit TH Type C
2 Unit TH Type C
1.2 m
6.2 m
6.2 m
2 Unit TH Type A
2 Unit TH Type A
4 Unit TH Type A
3 Unit TH Type B
2 Unit TH Type B
4 Unit TH Type B
2 Unit TH Type A
4 Unit TH Type A
2 Unit TH Type A
3 m
Green/Open Space
Strata Road
Wishart Road
Municipal Road Dedication
Park Dedication
1
A1
Site Concept Plan
Scale 1 : 300

4.

CITY OF COLWOOD
BYLAW NO. 2005

A BYLAW TO AMEND BYLAW NO. 151 BEING THE "COLWOOD LAND USE BYLAW, 1989"

The Council of the City of Colwood, in open meeting assembled, enacts as follows:

1. CITATION

This bylaw may be cited as **"Colwood Land Use Bylaw No. 151, 1989, Amendment No. 207 (CD39 – 3494 Wishart Road), Bylaw No. 2005, 2023."**

2. AMENDMENT

Bylaw No. 151, the **"Colwood Land Use Bylaw, 1989"** is amended as follows:

a.) Amend Schedule "A" (Zoning Map) by deleting from the Rural 1 (A1) Zone and adding to the Comprehensive Development CD39 (CD39) Zone, the property shown in Schedule 1 attached to this bylaw and described as "LOT 3 SECTION 62 ESQUIMALT PLAN VIP10219".

b.) In Section 1.2 "DEFINITIONS", under the heading "COMPREHENSIVE DEVELOPMENT ZONES", insert "CD39".

c.) In Section 1.3.09 under the heading "SHORT FORM" insert "CD39" and under the heading "ZONE" insert "Comprehensive Development 39".

d.) Add Section 10.44 COMPREHENSIVE DEVELOPMENT 39 (CD39 – 3494 WISHART ROAD) as per Schedule 2 of this bylaw.

READ A FIRST TIME on the	day of	2024
READ A SECOND TIME on the	day of	2024
READ A THIRD TIME on the	day of	2024
ADOPTED on the	day of	2024

Mayor

Corporate Officer

SCHEDULE 1

Subject Property Map

COMPREHENSIVE DEVELOPMENT 39 (CD39 - 3494 Wishart Road) ZONE

SCHEDULE 2

SECTION 10.44 COMPREHENSIVE DEVELOPMENT 39 (CD39 – 3494 WISHART ROAD) ZONE

10.44.1 Purpose

The purpose of this zone is to provide for the orderly development of the lands located at 3494 Wishart Road in the City of Colwood.

10.44.2 Permitted Uses

1. In addition to the uses permitted by Section 2.1.10, the following uses and no others are permitted in the CD39 zone:

   a. Attached Housing
   b. Duplex
   c. Home Occupation – Office Use Only
   d. Show Homes
   e. Accessory Buildings and Structures

10.44.3 Permitted Base Development

1. In the CD39 Zone the number of dwelling units shall not exceed 1.

10.44.4 Comprehensive Development Conditions

1. Notwithstanding Section 10.44.3, the density of development in Section 10.44.5 is permitted in the CD39 Zone in accordance with Sections 10.44.4 through 10.44.7, if the Owner contributes:

   a. $7,500 per duplex and townhouse dwelling unit toward the Community Amenity Reserve Fund;
   b. $1,500 per duplex and townhouse and dwelling unit towards the Affordable Housing Reserve Fund;
   c. $583 to the Fire Hall Fund per duplex and townhouse dwelling unit.

2. Payment of the contributions in Section 10.44.4 shall be made at the time of issuance of a building permit.

3. All dollar amounts referred to in Section 10.44.4.1 shall be increased annually effective January 1 of each calendar year in which this bylaw is adopted by the amount of the Victoria Consumer Price Index (CPI).

10.44.5 Permitted Density

1. The total number of attached housing and duplex units shall not exceed 50.

10.44.6 Regulatory Conditions

1. Regulatory conditions for the CD39 Zone shall be as shown on the following table:

Regulation	**General**
Minimum lot area	12,524m^2
Maximum lot coverage	30%
Minimum lot frontage	68m
Maximum building height	11.0m
Maximum number of storeys	3 storeys
Maximum FAR	0.7
Minimum yard requirements for principal buildings	
Front	6.0m
Interior side (North)	1.5m
Interior side (South)	3.0m
Rear	6.0m

10.44.7 General

1. The relevant provisions of Divisions 1 and 2 shall apply. In the case of a conflict between provisions of Division 1 and 2 and the provisions of this Zone, the latter shall prevail.

5.

NOTICE OF AMENDING BYLAW

Colwood Land Use Bylaw No. 151, 1989, Amendment No. 207 (CD39 – 3494 Wishart Road), Bylaw No. 2005, 2023

MEETING:	**Regular Meeting of Council**
DATE and TIME:	**Monday, January 8, 2024, 6:30 pm**
PLACE:	**Council Chambers, 3300 Wishart Road, Colwood BC**

NOTICE IS GIVEN that Council of the City of Colwood will consider First and Second Reading at the Regular Meeting of Council on Monday, January 8, 2024, at 6:30 pm in relation to the proposed **"Colwood Land Use Bylaw No. 151, 1989, Amendment No. 207 (CD39 – 3494 Wishart Road), Bylaw No. 2005, 2023".**

PURPOSE: To amend the current Colwood Land Use Bylaw No. 151, 1989 to enable the development of 50 townhomes.

SUBJECT PROPERTY: This Bylaw applies to the lands legally described as "LOT 3 SECTION 62 ESQUIMALT PLAN VIP10219" (3494 Wishart Road).

INSPECTION OF MATERIALS: A copy of the bylaw and related materials can be viewed at www.colwood.ca/city-hall/public-notices.

We want to hear from you!

WRITE TO US

The deadline for written submissions is 12:00 pm on the day of the meeting and must include your name and civic address.

- Email corporateservices@colwood.ca
- Mail/Drop-off: City of Colwood, 3300 Wishart Road, Colwood, BC V9C 1R1

SPEAK TO COUNCIL

In Person: The public is welcome to provide comments in person during the public participation portion of the meeting.

Electronically: To pre-register to speak please contact corporateservices@colwood.ca up until noon on the day of the meeting.

NEED MORE INFORMATION? Contact Development Services at (250) 478-5053 ext. 139 or planning@colwood.ca.

Marcy Lalande, CMC
Corporate Officer

Colwood