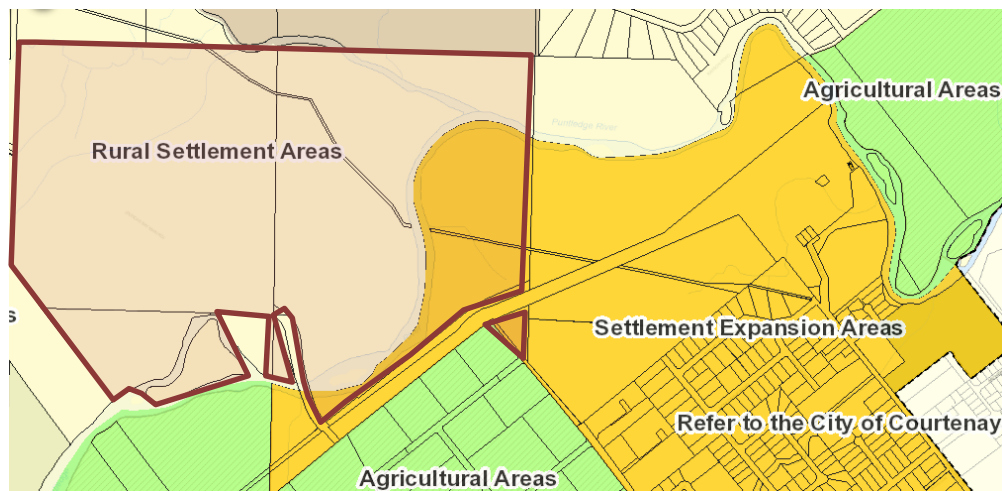


DATE: June 2, 2014**FILE:** 6410-20 / CV RGS Amendment**TO:** Vice Chair and Members
Committee of the Whole**FROM:** Ann MacDonald, MCIP, RPP
General Manager of Planning and Development Services Branch**RE:** Regional growth strategy amendment initiation – 3L Developments Inc.
PID 000-866-814, SW ¼ Section 15, TWP 9, Comox District, Plan 552G
PID 028-915-194, Lot A, Section 10 & 15, Comox District, Plan EPP23059
PID 000-866-792, NW ¼ west of the Puntledge River, Section 10, Township 9,
Comox District, Plan 552G

Purpose

For the regional board to consider whether or not to initiate an amendment to the regional growth strategy (RGS), as per an application by 3L Developments for the Riverwood proposal.

Figure 1: Subject lands Shown as outlined in Red



Policy analysis

Section 854 of the *Local Government Act* (LGA) identifies the process for the preparation of an RGS including the requirement for a resolution of the board to initiate that preparation.

Section 857.1 clarifies that consultation, facilitation, and acceptance of an amendment to an RGS shall be undertaken in the same manner as the preparation of an RGS. Further, this section identifies the ability of, and the requirements for, a board to proceed with a proposed amendment to a regional growth strategy as a minor amendment.

Section 869 establishes a requirement for a regional district to establish a monitoring program through which to consider the success of its implementation efforts and to annually report on

implementation and progress relative to the objectives of its RGS. Further, this section states that at least once every five years consideration must be given to whether a review of the RGS is required. Public input on that decision point is required.

Bylaw No. 274 CVRD Regional Growth Strategy Fees and Charges Bylaw details the process and costs associated with processing an amendment to the regional growth strategy.

Executive summary

This is the first step in the process, as outlined in Bylaw 274, whereby the board is being asked to initiate an amendment. If the board does not initiate this amendment, the application is denied and re-application is not be permitted for 12 months, per Section 5(1) & schedule 2 of Bylaw 274.

If the board decides that it is in the public interest to initiate the amendment, the matter will return to the board in due course for it to consider two further decisions: to determine if the amendment is a minor or standard amendment, and to approve a consultation plan that will establish the estimate of fees and guide the consultation process.

The proposal, known and advertised locally as the Riverwood project, includes 741 residential lots, 10,000m² of commercial development and approximately 74 hectares of park/open space including approximately nine kilometres of trails. Pursuing an amendment to the regional growth strategy to enable this development will essentially lead to either the creation of a new settlement node or the extension of an existing settlement expansion area.

An amendment to enable this development is not recommended because:

1. Existing settlement nodes have been identified in the RGS managing growth (MG) policies 1A-1 to 1E-6 as areas that are intended to accommodate compact forms of development and areas that are not contiguous to municipalities. (Page 87, RGS) These three settlement nodes at Mt. Washington, Saratoga Beach and Union Bay have significant development capacity well into the planning phase. A portion of the area included within this application is in an existing settlement expansion area and is therefore contiguous to the City of Courtenay.
2. Existing settlement expansion areas are intended to be developed with publicly owned water and sewer services, per MG policies 1A-1 – MG policy 1E-5, in an orderly manner that does not detract from compact growth options within municipal areas, with a four hectare minimum lot size. This proposal includes privately owned services with residential lot sizes that are well below four hectares.
3. The review of the rural Comox Valley OCP is currently underway, including preparation of two settlement node local area plans and a transportation road network plan. That planning exercise has identified significant existing capacity in the rural settlement areas and existing settlement nodes for which master development agreements are already in place.
4. Findings of the most recent RGS annual report do not indicate a need for additional expansion of settlement nodes or settlement expansion areas.

Recommendation from the general manager of planning and development services branch:

THAT the board not initiate an amendment to Bylaw No. 120, being the “Comox Valley Regional District Regional Growth Strategy Bylaw No. 120, 2010” to enable the development of the Riverwood development, attached as Appendix 1 and for lands legally described as:

1. Southwest $\frac{1}{4}$ of section 15, TWP 9, Plan 552G, except Plan 79 R/W and VIP 70188;
2. Fractional Northwest $\frac{1}{4}$, West of the Puntledge River, Section 10, TWP 9, Plan 552G, except Plan 70188; and
3. Lot A, Sections 10 and 15, TWP 9, Plan EPP 23059.

Respectfully:

A. MacDonald

Ann MacDonald, MCIP, RPP
General Manager of Planning and
Development Services Branch

History/background factors

On March 12th, 2013, the owner of the subject lands made a presentation to the committee of the whole (in camera) and presented an offer to the regional board to purchase lands within the area known as the Puntledge Triangle (e.g. Stotan Falls for \$9 million, subject to a series of conditions (including development approval)). The board considered the offer, but declined through resolution stating that notwithstanding the public benefit associated with acquisition of the specific parkland, the proposed development was inconsistent with the RGS.

On May 22nd, 2013, the owner of the subject lands submitted a letter requesting that an amendment to the RGS be initiated to accommodate a residential development as follows. Details of this amendment and proposal are attached as Appendix A.

- Approximately 741 residential dwelling units (single detached dwellings and “patio homes”);
- Approximately 10,000m² commercial development; and
- Approximately 74 hectares of park/open space including approximately 9km of trail development.

The regional board approved the following motion on August 20, 2013:

THAT prior to initiating any minor or standard amendment process, a regional growth strategy fees and charges bylaw be adopted.

THAT the staff report regarding the application by 3L Developments Inc. (dated August 7, 2013) to amend the regional growth strategy be referred to a subsequent committee of the whole meeting following adoption of the regional growth strategy fees and charges bylaw.

In December 2013, the applicant submitted an application to rezone the subject lands in accordance with the rural settlement area and settlement expansion area policies of the RGS, to permit eventual subdivision of approximately 36 lots (approximately four hectares each). In a meeting with planning and development services staff on May 20th, 2014, the owner advised that the application for zoning amendment will be withdrawn. Staff await written confirmation of this.

On March 18, 2014, the regional board adopted Bylaw No. 274, the Comox Valley Regional District Regional Growth Strategy Fees and Charges Bylaw, 2014. Bylaw No. 274 establishes the application

requirements, procedures and costs for processing an amendment to the RGS. Briefly, the initial procedure involves:

- preliminary review of proposal by staff with proponent;
- initiation of amendment preparation by board resolution;
- technical advisory committee review and steering committee review;
- board resolution regarding nature of amendment (i.e. standard or minor) following steering committee recommendation to board; and
- approval of consultation plan by board resolution in accordance with procedural requirements of LGA.

At this time, the board is being asked to initiate an amendment to the RGS. Given the density associated with this proposal, the amendment, if initiated and approved, will effectively create a new core settlement area. The details of the amendment (i.e. standard or minor amendment) as well as the details of the proposed land use (e.g. servicing, park dedication, environmental protection, etc.) would be fleshed out following a decision of the board to initiate. It is only after the board determines that it is in the public interest to initiate an amendment that a complete application to amend the RGS including any additional information as described in Bylaw No. 274 would be obtained (as well as fees).

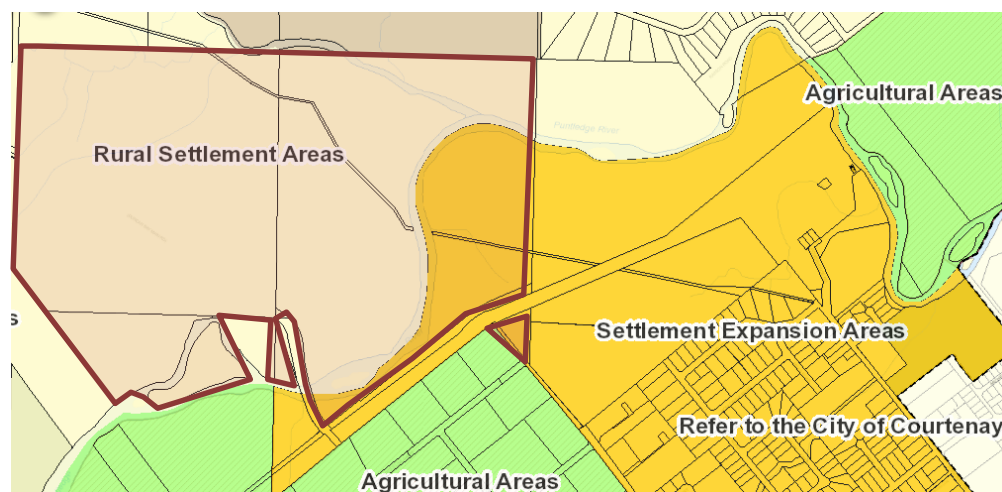
At this time, the board is being asked to decide on whether or not it is in the public interest to initiate this amendment, and detailed consideration of the proposal will require a later review by the board, in the event that the amendment is initiated.

Planning analysis

Regional growth strategy

The subject lands are primarily designated rural settlement area (RSA) within the RGS, with a small portion included within an area designated as settlement expansion area (SEA).

Figure 2: RGS designations



The RSA designation is one of two *rural areas* designations and comprises all lands outside of the core settlement areas except for agricultural, resource, and park lands. New development within the RSA designation is not to be “urban or suburban in form”, but rather should accommodate housing, employment and commercial needs in a manner that is respectful (i.e. in scale and form) of the surrounding rural and agricultural context. To address the principles of growth management

articulated by the RGS, a minimum lot area for subdivision ranging between four and 20 hectares has been established. Note that consideration for implementing this range is being refined through the ongoing official community plan (OCP) review.

The SEA designation is included within the definition of core settlement areas. SEA lands are located on the fringes of the municipal areas and are envisioned, over the long term, to serve the needs of the municipal areas to expand as needed based on population growth. The lands have been identified as expansion areas because either:

1. they contain existing residential settlements that are serviced with private sewer and/or on-site water that will eventually require full public servicing in order to address health and environmental issues before they arise; or
2. they have the long-term potential to accommodate future growth subject to boundary extensions and the provision of publicly-owned water and sewer services.

The RGS directs that development of the SEA lands should occur at such time as existing municipal areas have been intensified (e.g. through intensification of existing neighbourhoods and greenfield development). Further, subdivision within lands designated SEA is limited to a four hectare minimum until such time as the lands have been incorporated into a municipal area and provided with publicly owned water and sewer services. Within the 20-year planning horizon of the RGS, a minimum of 90 per cent of residential growth is to be directed to the core settlement areas in order to promote the efficient use of land and public infrastructure.

Official community plan

The subject lands are designated “rural” in the OCP. The rural OCP review is ongoing and is expected to be completed by fall 2014. Should the board initiate an amendment to the RGS to permit designation of the lands as a new core settlement area, an OCP amendment will be required in order for the lands to develop at a residential density that is greater than the present four to 20 hectare minimum lot size as directed by the regional growth strategy. Amendment to the official community plan (be it municipal or rural) would be undertaken following amendment of the RGS.

Zoning bylaw

The subject properties are predominately zoned rural 20 (RU-20). A small portion of the northeast corner of the subject property is zoned upland resource 40 (UR-40). Should the board initiate an amendment to the RGS to designate the subject lands as a new core settlement area, an amendment to the zoning will need to be considered in order for the lands to develop at a greater density and different mix of uses than contemplated by the RU-20 and UR-40 zones.

It is at the time of rezoning a property that a local government can obtain community benefits, such as parkland. This process, that generally includes voluntary offers by the developer, is typically referred to as “community amenity contributions”. These community benefits are intended to offset the impact of increased density. Though not required by law, development proponents will often offer such amenities as part of a development proposal particularly when the supporting infrastructure and existing community amenities may not be designed or have optimal capacity to host the proposed new density.

As the development of the subject lands is proposed to be at a density greater than what is provided for in the existing land use designations, at a minimum, a zoning bylaw amendment will be required, as well as an OCP amendment and an RGS amendment.

Options

1. The board could initiate an amendment to the RGS to create a new core settlement area as proposed in Appendix A.
2. The board could decide not to initiate an amendment to the RGS.

Staff recommends option 2 as the initiation of an amendment to the RGS is not considered to be in the public interest. Specifically, staff recommends option 2 on the basis of the following:

- Significant opportunities for intensification and greenfield development remain in the municipal areas and settlement nodes (i.e. RGS managing growth policy 1.2);
- No public servicing infrastructure is required or planned in the area at this time (i.e. RGS policies 5A-2, 5A-5, 5D-1, managing growth policies 1E-3 and 1E-4);
- The review of the rural Comox Valley OCP is underway, including preparation of settlement node plans wherein land uses, development criteria and identification of additional growth opportunities will be identified, as well as a regional transportation plan;
- Findings of the most recent RGS annual report do not indicate a need for additional core settlement areas nor expansion of existing settlement expansion areas.

Financial factors

The request of the land owner to the regional board to initiate an amendment to the RGS was made on May 22nd, 2013 prior to the adoption of Bylaw No. 274. As a result, the non-refundable processing fee of \$1,000 provided for in Bylaw No. 274 has been waived.

In the event that the board decides to initiate an amendment, staff will return to the board within due course with a full report and recommendations from the steering committee on the type of amendment (i.e. standard or minor), and a consultation plan. Following those two decisions by the board, the applicant will be provided with an estimate of fees in accordance with Bylaw 274, and the application fee of \$9000.00 will be collected.

Legal factors

The information contained within this report is presented in accordance with the LGA and specifically, part 25 of the regional growth strategy.

Sustainability implications

There are no sustainability implications directly pertaining to the board's contemplation of RGS amendment initiation. There will be significant sustainability implications in the event that the board decides to initiate the amendment and a future staff report will identify those sustainability implications.

Intergovernmental factors

There are no intergovernmental factors at this time. In the event that the board decides to initiate an amendment, and the amendment is deemed to be a standard amendment at a future meeting, the CVRD will be required to establish an intergovernmental advisory committee as part of the required consultation process, and the technical advisory committee and steering committee involving staff from member municipalities will be convened.

Interdepartmental involvement

This report has been prepared by planning services staff. If the board decides to initiate an amendment to the RGS, interdepartmental consultation will be required.

Citizen/public relations

This report is provided for information. Should the board initiate an amendment to the RGS, public consultation will be conducted in accordance with the LGA and specifically in accordance with a board approved consultation plan as per Bylaw No. 274. Significant public consultation will be an important component of any RGS amendment.

Prepared by:

A. Mullaly

Alana Mullaly, M.Pl, MCIP, RPP
Manager of Planning Services

Attachments: Appendix A – “3L Development Inc.’s amendment request and development concept”

Comox Valley Regional District

RECEIVED

File: 6410-01

MAY 22 2013

To: V9V 1N7 D. Oakman

cc:

3L DEVELOPMENTS INC.

#34 – 6245 BLUEBACK ROAD, NANAIMO, BC.

MAY 22, 2013

Comox Valley Regional District
600 Comox Road
Courtenay, B.C.
V9N 3P6

Attention: Ms. Deb Oakman, Chief Administrative Officer

Dear Ms. Oakman:

Re: 3L Developments Inc. Properties

As per the letter dated March 27, 2013 from Edwin Grieve, in which three options were outlined for the development of our property and the email received from Kevin Lorette, dated May 14, 2013, 3L Developments Inc., hereby wishes to initiate an application for a Regional Growth Strategy Amendment.

The intent of the application would be to allow 3L to proceed with the development of its Riverwood project, which if successful, would result in the donation of 50% of the property as parkland. This parkland would include the important recreational and culturally significant areas along the Puntledge and Browns Rivers.

In Mr. Lorette's email, he stated that the RD wished to know what the development would consist of, in terms of location, density, types of uses, site access and services. In this regard, 3L provides the following for the RD's consideration.

RIVERWOOD VISION

TO DEVELOP A NEIGHBOURHOOD COMMUNITY THAT ENCOURAGES HEALTHY LIVING THROUGH THE USE OF THE BEST AVAILABLE DESIGNS, APPROACHES, AND SYSTEMS

WE STRIVE TO CREATE A UNIQUE COMMUNITY THAT RESPECTS AND CELEBRATES THE LAND WHILE PROVIDING NEW AND AFFORDABLE LIVING OPPORTUNITIES FOR A DIVERSE POPULATION

DEVELOPMENT QUICK FACTS

- Master Planned Mixed Use Community (residential, commercial, and recreational)
- 10 to 15 year build out
- Built upon the social, economic, and environmental elements of sustainability
- Will significantly contribute to the economy of the region through \$1.3 million in taxes annually, \$360 million in direct and indirect expenditures, and 2600 man years of employment
- No infrastructure cost to the Regional District as project is totally self-sufficient in terms of water and sewer
- LEED targeted
- Total Site Area of 370 acres
- 185 acres of public parkland dedication
- 9 kilometers of trails
- Provision of public access to the Browns and Puntledge Rivers with adequate parking and facility improvements such as washroom/change rooms
- 741 lots residential units (single family and patio homes)
- Dedication of currently private road into the public hand to ensure access to public amenities

PROJECT LOCATION

The Riverwood project is located within the Puntledge-Black Creek Electoral Area (Area C) of the Comox Valley Regional District. It is located to the northwest of the City of Courtenay on the confluence of the Browns and Puntledge Rivers. The site is ideally located upon the threshold of Forbidden Plateau and Mt. Washington, which serves and builds upon the unique recreational attributes of the development.

Riverwood is built upon 5 minute walking distances with an integrated transit loop, all serviced by self sufficient and cost effect sewer and water systems that will not burden the regional systems.

With 185 acres of land being placed within the public hand, including the popular Stotan Falls recreation area and the creation of 9 kilometers of public trails, Riverwood will significantly contribute to the broader community and the Comox Valley.

ECONOMIC DEVELOPMENT OPPORTUNITIES

Each OCP in the Comox Valley supports the economic development of the region through tourism and recreational opportunities. The RGS has policies that build upon the year-round tourism opportunities offer by the region's natural beauty, outdoor recreational opportunities, and that reflect the region's embracement of the emerging tourism market.

The stated objectives of the OCPs are to diversify the regional economy through expanding the tourism market and promotion of the area's natural amenities. Stotan Falls is one of the most popular local swimming attractions in the Comox Valley; it is minutes from the urban centres; easily accessed; attracts a wide variety of users; and is also privately owned.

Through Riverwood, the dedication of Stotan Falls, along with 185 acres and 9 kilometers of trails is a crucial part of the larger puzzle to achieving regional objectives. Riverwood would allow Stotan Falls and the linkages of recreational opportunities to be properly promoted by the RD through the Comox Valley Economic Development Society as part of the Regional destination recreation corridor.

Public tax payers cannot afford to purchase this popular regional recreational area in order to have it in the placed in the common hand. Developing the site in accordance with LEED targets and the best development practices will allow for 185 acres of this regional destination to be put into the public hand.

SUSTAINABILITY STRATEGY

The most important approach to the Riverwood development proposal, despite all of the public and regional benefits, is that of 3L's development approach and philosophy. 3L has imposed strict environmental, economic, and social standards for itself to achieve in order to create a responsible development. Riverwood brings enhanced ecosystem values, high efficiency, and new standard for development in the Comox Valley.

To keep 3L on track of achieving its sustainability goals, it has created a complete set of sustainability guidelines through a Sustainability Matrix (copy attached). This matrix outlines the core targets of sustainability including a full scope of sustainability issues and Riverwood's approach to meeting those strict targets. It is understood that sustainability is not a final destination but rather a continuous journey that we will take together in order to build better and memorable places.

As part of Riverwood's own strict sustainability strategy, independent and cost-effective servicing will bring a new level of self-sufficiency to the project while not burdening Regional government systems. For example, the Provincial Government will require that a utility company run the sewer, water, and stormwater systems perpetually in the future, which will remove the risk or the need for any local government to financially contribute or run the systems.

WATER AND SEWER SYSTEMS

The Region has its water and sewer strategies. Riverwood does not wish to add an additional burden on these systems as a result of its proposal. Technological advances allow Riverwood to service its property on site, allowing it to be more environmentally responsible.

Riverwood is pursuing servicing options that will not burden existing systems nor create systems that will cost tax payers money by:

- Integrating “off the grid” servicing in order to be self sufficient and responsible
- Utilizing water re-use programs to reduce the amount of potable requirements (options that would not be available under regional systems)
- Augmenting the natural environment and habitat with high-quality reclaimed water and
- Arranging a long-term servicing provision with a utility to which the user will pay a monthly utility fee (such as one does for natural gas or hydro)

3L believes that in order to be truly sustainable and start moving towards a better way of building communities, creative servicing alternatives must be included and expected as part of new developments.

REGIONAL PLANNING

In order for the Riverwood development proposal proceed, it needs as a first step, an amendment to the Regional Growth Strategy.

The Riverwood site has been classified within the Rural Settlement Area category of the RGS. The rural settlement areas encompass lands within the electoral areas that are not designated agricultural or resource areas, provincial parks, or settlement nodes. The RGS strategy is to ensure that the rural character of these places are maintained and should not be urban or suburban in form or character.

Riverwood is consistent with rural area category as it:

- Is in keeping with sustainability practices and reduces the footprint of the development compared to traditional subdivision development
- Maximizes the return of a regionally significant recreational area to the public hand
- Provides a small neighbourhood commercial center upon a future transit loop
- Will not burden municipal infrastructure in the future
- Is not located upon lands within the ALR or within resource areas

Furthermore, the various OCP's in the Comox Valley all support: economic development, responsible and sustainable growth, acquiring significant and important public amenities, avoidance of sprawl and associated costly infrastructure, preservation of resource, forest and agricultural lands, and preservation of heritage and environmental values.

Riverwood is consistent with goals of the OCP in the Comox Valley because it:

- Promotes a sustainable future by clustering development, promoting alternative transportation modes, preserves green space and will significantly contribute to the economy
- Preserves resource, forest, and agricultural lands
- Provides a healthy lifestyle by incorporating multi-user trails, recreational areas, community gardens and integrated stormwater management practices
- Approaches development in an environmentally and socially responsible manner by creating a broader public benefit rather than creating sprawling unsustainable growth
- Places Stotan Falls and 50% of the total site area within the public hand for all to enjoy

SUMMARY

Riverwood will:

- Place 185 acres of highly valued recreational land within the public hand
- Place Stotan Falls within the public hand and meet Regional park planning goals
- Create 9 kilometers of recreational trails for residents and visitors
- Bring \$360 million in direct and indirect investment dollars to the Comox Valley, while providing 2600 man years of employment
- Generate \$1.3 million in taxes per year
- Provide a variety of home ownership options with a range of market prices
- Protect the heritage values along the Browns and Puntledge Rivers
- Remove servicing costs and burdens to the Regional District by providing innovative and environmentally friendly solutions to sewer and water supply, water reclamation and reuse, and stormwater management
- Introduce a small local commercial village center to provide some services to both Riverwood and surrounding residents but not to compete with the downtown commercial centers within the Comox Valley
- Utilize a high level of innovation for servicing which will enable Riverwood to be more environmentally responsible and sustainable. Independent sewer and water systems and storm water management will not burden municipal infrastructure and tax payers
- Create a model for master community planning, providing limited neighbourhood commercial services, provide a transit loop and bike lanes to promote alternative modes of transportation and foster sustainability and create a sense of place.
- Do this all over a 10 to 15 year build out period.

It is trusted that the Board will consider our vision for the property and the benefits that can accrue to the Regional District and see fit to advance it through the amendment process.

If you require any more information or need clarification of any point contained herein, please do not hesitate to contact me. To this end, it should be know that we have completed traffic

studies, an archaeological overview, environmental studies, servicing analysis, and an economic impact analysis.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'Kabel Atwall', written in a cursive style.

Kabel Atwall
3L Developments Inc.

RIVERWOOD



COMOX VALLEY



Sustainability Matrix

Sustainability Issue	Aim	Sustainability Pillar			Proposed Measures	Reference Source
		Social	Economic	Environmental		
Social Certified Green Building	Utilize green building practices for the design and construction of buildings	Demonstrates commitment to green buildings and educates people on green building practices	Certified buildings provide higher building value	Certified buildings have third party review and certification processes that act as a quality control system that instils a rigour to the design and construction process	Design guidelines will cite LEED green building rating system measures for design and construction	Regional Growth Strategy, Smart Growth BC, LEED-ND GIB Prereq 1
Social Community Input	Include the views of all stakeholders in the plans for the development	The development should reflect the views of all stakeholders. Participation is a key aspect of sustainability and provides educational value as well.	Reduced risks of delays in planning procedures	Project will reflect environmental concerns of the community	Meet with local groups and host a open community meeting to solicit and document input and one open house and a web site with dedicated email	Regional Growth Strategy, Smart Growth BC, LEED-ND NPD 12
Social Equity	Enable citizens from a wide range of economic levels, household sizes, and age groups to live within the community	Creates socially equitable and socially engaging communities	Families of varying incomes can live in the community	No direct environmental factors.	Include a sufficient variety of housing sizes and types and include a proportion of rental and/or for-sale dwelling units. Development will also provide a percentage of carriage houses	Regional Growth Strategy, Smart Growth BC, LEED-ND NPD 4
Social Population Growth	To accommodate population growth in a sustainable framework	The development will aim to provide suitable housing for the full cross section of the community.	A wide range of housing will stimulate the local economy.	Minimize the amount of future renovations to accommodate a changing demographic	Variety of housing types to accommodate different demographics	Regional Growth Strategy, Smart Growth BC, LEED-ND NPD 4
Transportation Walkable Streets	Promote walking and bicycling by providing safe, appealing, and comfortable street environments	Provides safe, appealing, and comfortable street environments	Encourages physical activity that reduces risk of obesity, heart disease, and hypertension, reducing the strain on public health systems	Walkable streets promote transportation efficiency and reduce pollution and GHG emissions	Design streets such that: a) each building has a principal functional entry b) continuous sidewalks in 90% of streets c) multi-use paths throughout	LEED-ND NPD Prereq 1
Ecology Conservation	Conserve local flora and fauna and protect imperilled species and ecological communities.	Maintains local flora and fauna for future generations Educational value	Maintains desirable amenity areas and increases land values	Protects unique and endangered ecological resources	Provide a habitat conservation plan from a qualified biological scientist Permanently protect ecologically sensitive areas and integrate them into the layout	Regional Growth Strategy, Smart Growth BC, LEED-ND SLL Prereq 2

Sustainability Issue	Aim	Sustainability Pillar			Proposed Measures	Reference Source
		Social	Economic	Environmental		
Ecology Restoration	Provide habitat and promote biodiversity	Maintains local flora and fauna for future generations Educational value	Native plantings often require less maintenance than non-native plantings	Re-introducing native plants to the area enhances habitat area and biodiversity	Work with an ecologist/biologist to restore 10% of the development footprint to pre-development native habitat	LEED-ND SLLc8
Ecology Erosion	Protect unstable slopes from erosion Minimize construction impacts	Maintains and protects surroundings and also maintains the aesthetic value of the area.	Avoids costs of remediation	Minimizing erosion protects habitat and reduces stress on natural water systems	Erosion and sedimentation control measures for construction	LEED-NC SS Prereq 1
Ecology Natural Areas	Maintain the quality of the existing natural vistas in the area that provide habitat and promote biodiversity	Natural areas provide pleasant surroundings for building users	Preserving topsoil, plants and trees on the site can reduce landscaping costs and likely increases property values	Limiting the extent of construction activities to certain areas of the site minimizes ecological site damage resulting in preservation of wildlife corridors and habitat	Limit site disturbance including earthwork and clearing of vegetation to 12 meters beyond building perimeter, 1.5 meters beyond primary roads, walkways and main utility branch trenches	Regional Growth Strategy, Smart Growth BC, LEED-NC v2
Ecology Natural Wetlands and Surface Water	Protect and enhance surface water bodies (watersheds, wetlands, and riparian areas)	Avoiding development in sensitive ecological areas can encourage public support for a project as well as educate the public	Avoid remediation work and enhance property values	Protects and enhances water quality, and plant and animal habitat	Limit impacts to wetlands, water bodies, and buffer zones to less than 20% of those areas and implement storm water management	Regional Growth Strategy, LEED-ND Prereq 3
Ecology Open Space	Provide a variety of open spaces to encourage walking, physical activity and time spent outdoors	Open spaces provide appealing spaces for social networking, civic engagement, personal recreation and other activities that create social bonds between individuals and groups	Low cost maintenance for multiple community benefits	Vegetated open spaces provide habitat and other ecological services	Locate and/or design project so that a park or plaza at least 1/2 acre in area, lies within a ¼ mile walk distance of 90% of planned and existing dwelling units and business entrances.	Regional Growth Strategy, LEED-ND NPD 9
Economy Local Material	Use locally sourced materials as much as possible	Pride in local materials, increased connection with nearby communities and adds educational value	Increased activity in local businesses and services, reduced environmental footprint	Reduced transport and associated emissions	Source products and materials as much as possible from within the Comox Regional District At least 20% by cost from within 800km by road	LEED-NC MR5

Sustainability Issue	Aim	Sustainability Pillar			Proposed Measures	Reference Source
		Social	Economic	Environmental		
Economy Generation	Be able to generate economic opportunities	The development will provide opportunities for local employment and inclusion, helping keep communities together.	The development will stimulate the local economy, directly and indirectly.	Environmental issues will be considered throughout the plans for the development in the economic viability of the project	Local employment and economic opportunities such as job creation will be generated as a result of the project	Regional Growth Strategy, Smart Growth BC, LEED-ND SLL 5
Health and Wellness Indoor Air Quality	Ensure residential development conforms to public health guidelines	Maintain health and vitality of the community	Avoid costs associated with illness, absenteeism and treatment.	Reduces toxic materials in the local environment	Specify low VOC materials, no added formaldehyde and ventilation standards	LEED-NC IEQ
Health and Wellness Walkable Streets	Promote walking and bicycling by providing safe, appealing, and comfortable street environments	Provides safe, appealing, and comfortable street environments	Encourages physical activity that reduces risk of obesity, heart disease, and hypertension, reducing the strain on public health systems	Walkable streets promote transportation efficiency and reduce pollution and GHG emissions	Design streets such that: a) each building has a principal functional entry b) continuous sidewalks in 90% of streets c) multi-use paths throughout	Smart Growth BC, LEED-ND NPD Prereq 1
Infrastructure Centralized Development	Have a focused and centralized development pattern	Creates vibrant and financially sustainable communities rather than individual lots Social capital enhanced	Creates a core of businesses that support each other	Communal water, energy and wastewater systems can be implemented	Project to be designed to allow businesses and services to be close to each other in centralized area.	Regional Growth Strategy, Smart Growth BC, Best Practice
Infrastructure Technology	Use appropriate technologies to achieve the development sustainability objectives	Public education, knowledge and exposure to sustainable technologies	Minimizes long term costs to the community	Prevents environmental impacts	Conventional and innovative technologies will be considered to optimize performance and sustainability	Developer driven Best Practice
Infrastructure Dark Skies	Preservation of dark skies that contribute to the rural character of the Region and protect the nocturnal wildlife	A night sky filled with galaxies, stars and planets is a source of beauty and inspiration to people and also part of a 'good neighbour policy'	Carefully designed exterior lighting solutions can reduce infrastructure costs and energy use.	Stray light that enters the atmosphere needlessly consumes energy and adversely affects nocturnal wildlife environments	Design exterior lighting so that all site and building mounted luminaires produce a max initial luminance no greater than 1.1 horizontal and vertical lux at the site boundary	LEED-NC SSc8

Sustainability Issue	Aim	Sustainability Pillar			Proposed Measures	Reference Source
		Social	Economic	Environmental		
Waste and Recycling Waste Reduction Construction	Promote recycling, composting and other waste reduction practices	Encourages the innovative reuse of waste materials, raises environmental awareness	Encourages local recycling facilities	Reduction in volume going to landfill	Design guidelines will require contractors to implement a construction waste management plan and aim to divert at least 75% of construction waste from landfill	LEED-NC MR2
Carbon Emissions Minimum Building Energy Efficiency	Reduce air, water, and land pollution and environmental impacts from energy production and consumption	Need for community to minimize its global impacts Educational value	Reduces impact of future carbon taxes and operating costs	Carbon emissions reductions in buildings required to mitigate climate change	Design guidelines will cite that all non residential buildings must be 10% better than ASHRAE 90.1 -2007 (weighted average) and 90% of residential buildings must meet Energy Star or equivalent criteria	Regional Growth Strategy, LEED-ND GIB Prereq. 2
Carbon Emissions Energy Efficient Infrastructure	Desire for low carbon, low energy development	Need for neighbourhood community to minimize its global impacts	Reduce impact of future carbon taxes and operating costs	Carbon emissions reductions in buildings required to mitigate climate change	Energy efficient street lighting (such as LED / Solar / Battery system) and infrastructure	LEED-ND GIB13
Carbon Emissions Energy use in buildings	Desire for low carbon, low energy development	Need for neighbourhood community to minimize its global impacts	Reduce impact of future carbon taxes and operating costs	Carbon emissions reductions in buildings required to mitigate climate change	Design guidelines will cite that buildings exceed MNECB by 50% energy consumption for commercial buildings Energy consumption rating of 76 or better on Energuide for Homes (HERS)	LEED-NC EAc2 LEED for Homes credit EA1.1
Carbon Emissions Passive Energy	Maximize passive energy benefits	Need for neighbourhood community to minimize its global impacts	Reduce impact of future carbon taxes and operating costs	Carbon emissions reductions in buildings required to mitigate climate change	Passive Solar Layout	Regional Growth Strategy, Developer driven Best practises
Pollution Community Air Quality	Maintain air quality within the region	Maintains healthy, clean surroundings	Avoid costs associated with illness	Improved environmental air quality	Specify NOx, SOx and particulate emission limits for buildings	LEED specific limits to be confirmed
Water Efficient Landscaping	Impose no external demands on the community water supply	Water-efficient landscaping helps to conserve local potable water resources	Recycle water for irrigation and avoid paying utility rates for potable water. Also reduces maintenance	Native landscapes that have lower irrigation requirements tend to attract native wildlife	Use captured rain or recycled site water to eliminate potable water consumption for irrigation	LEED-NC v2

Sustainability Issue	Aim	Sustainability Pillar			Proposed Measures	Reference Source
		Social	Economic	Environmental		
Water Optimum Building Water Efficiency	Reduce the impact on natural water resources	Aquifer is conserved for future generations Educational value	Minimize long term costs to community for water and waste-water infrastructure	Minimizes the amount of water withdrawn from the aquifer	Mandate low flow fixtures use 30% less than LEED benchmark for non-residential, mixed use and multi-family residential buildings - 90% of residential buildings achieve all 3 points in LEED for Homes.	Regional Growth Strategy, LEED-ND GIB Prereq 3
Water Self sufficiency	Impose no external demands on community water supply	Affordable clean water is a right for everyone Educational value	Control of water consumption costs and lower cost of supply than Regional connection	Better awareness of the value of water	Integrated water management plan making the best of water conservation measures including high water use efficiencies, storm water and rainwater collection, and water re-use to achieve net zero impact	LEED-NC Achieve all water credits
Water Storm Water Management	Mitigate the impact of development on drainage patterns	Benefits the community through improved water quality Educational value	Storm water ponds can provide a source of water for fire protection for rainwater storage tanks during dry periods	Reduction and treatment of run-off volumes decrease or eliminate contaminants that pollute receiving water bodies	Infiltrate, re-use and evapotranspire 80-95% of rainfall from the development footprint through measures such as pervious pavers and rainwater collection	Regional Growth Strategy, LEED ND GIB 8
Water Wastewater	Impose no additional demands on the community wastewater infrastructure	Treating wastewater to re-use standards for non-potable water applications reduces the demand on local aquifers. Social awareness of wastewater management issues	Capital and operating costs	On-site wastewater management and water reuse minimizes potential for impact on surface and ground-water quality	Treat all wastewater onsite to reuse standards with nutrient removal	Best practices, Health Canada Guidelines CaGBC LEED-NC v2
Water Water use in buildings	Impose no external demands on the community water supply	Water aquifer is conserved for future generations	Reduction in water consumption can reduce capital costs of needed water supply and wastewater facilitates	Reducing potable water use reduces the amount of water withdrawn from rivers, streams, aquifers etc...	Reduce potable water use within buildings by at least 30% against LEED baseline	BC MSR CaGBC LEED-NC v2
Legacy On going sustainability	Ensure that the development continues to perform over time	Ensures quality surroundings for future community members	Maintains value of property and low running costs	Long term environmental performance	Requirements will be put in place to ensure that all of the sustainable design features are properly maintained and managed	Suggested by the project team

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COMOX VALLEY



Sustainability Matrix

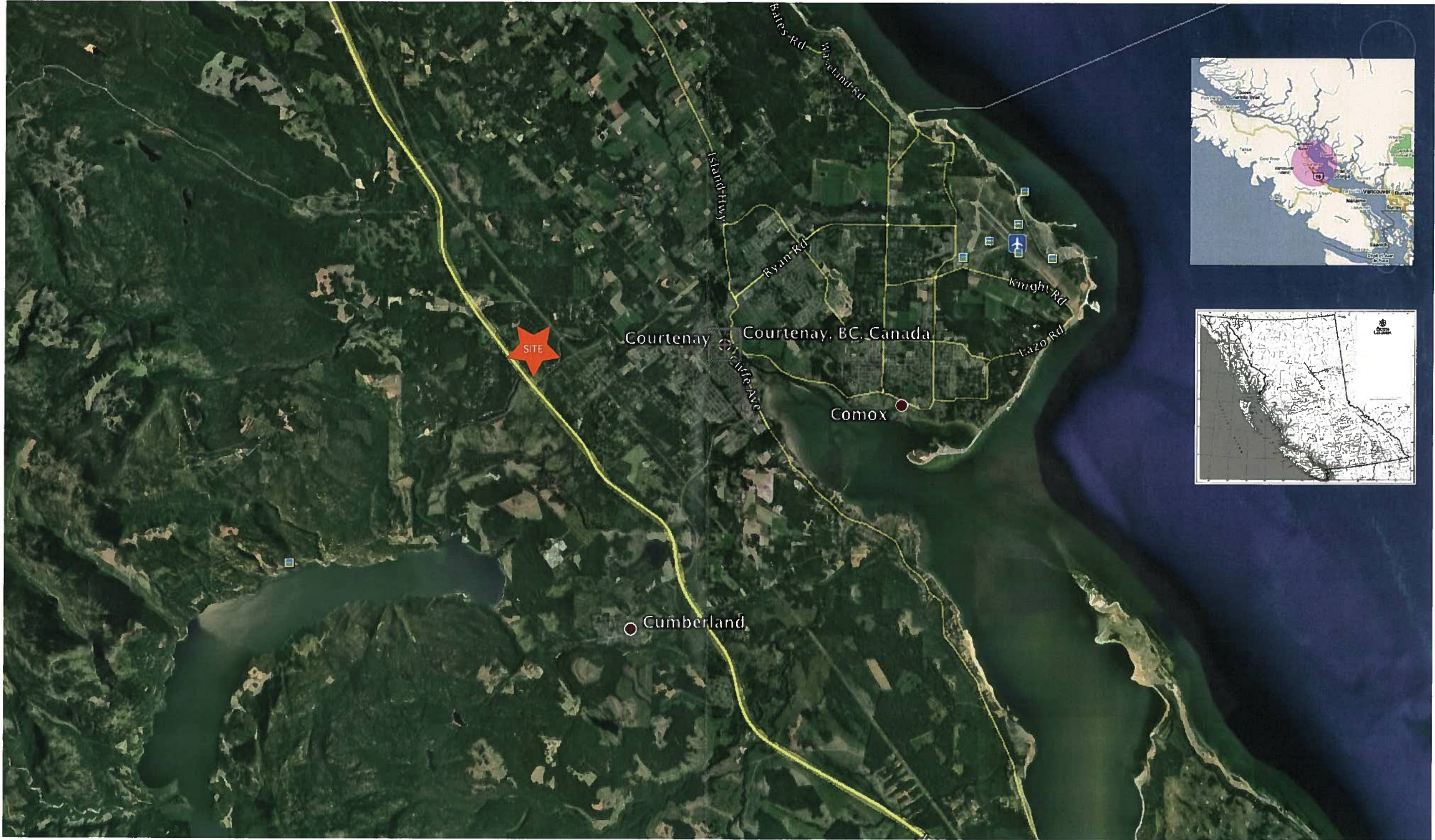
Sustainability Issue	Aim	Sustainability Pillar			Proposed Measures	Reference Source
		Social	Economic	Environmental		
Social Certified Green Building	Utilize green building practices for the design and construction of buildings	Demonstrates commitment to green buildings and educates people on green building practices	Certified buildings provide higher building value	Certified buildings have third party review and certification processes that act as a quality control system that instills a rigour to the design and construction process	Design guidelines will cite LEED green building rating system measures for design and construction	Regional Growth Strategy, Smart Growth BC, LEED-ND GIB Prereq 1
Social Community Input	Include the views of all stakeholders in the plans for the development	The development should reflect the views of all stakeholders. Participation is a key aspect of sustainability and provides educational value as well.	Reduced risks of delays in planning procedures	Project will reflect environmental concerns of the community	Meet with local groups and host a open community meeting to solicit and document input and one open house and a web site with dedicated email	Regional Growth Strategy, Smart Growth BC, LEED-ND NP 12
Social Equity	Enable citizens from a wide range of economic levels, household sizes, and age groups to live within the community	Creates socially equitable and socially engaging communities	Families of varying incomes can live in the community	No direct environmental factors.	Include a sufficient variety of housing sizes and types and include a proportion of rental and/or for-sale dwelling units. Development will also provide a percentage of carriage houses	Regional Growth Strategy, Smart Growth BC, LEED-ND NP 4
Social Population Growth	To accommodate population growth in a sustainable framework	The development will aim to provide suitable housing for the full cross section of the community.	A wide range of housing will stimulate the local economy.	Minimize the amount of future renovations to accommodate a changing demographic	Variety of housing types to accommodate different demographics	Regional Growth Strategy, Smart Growth BC, LEED-ND NP 4
Transportation Walkable Streets	Promote walking and bicycling by providing safe, appealing, and comfortable street environments	Provides safe, appealing, and comfortable street environments	Encourages physical activity that reduces risk of obesity, heart disease, and hypertension, reducing the strain on public health systems	Walkable streets promote transportation efficiency and reduce pollution and GHG emissions	Design streets such that: a) each building has a principal functional entry b) continuous sidewalks in 90% of streets c) multi-use paths throughout	LEED-ND NP 4 Prereq 1
Ecology Conservation	Conserve local flora and fauna and protect imperilled species and ecological communities.	Maintains local flora and fauna for future generations Educational value	Maintains desirable amenity areas and increases land values	Protects unique and endangered ecological resources	Provide a habitat conservation plan from a qualified biological scientist Permanently protect ecologically sensitive areas and integrate them into the layout	Regional Growth Strategy, Smart Growth BC, LEED-ND SLL Prereq 2

Sustainability Issue	Aim	Sustainability Pillar			Proposed Measures	Reference Source
		Social	Economic	Environmental		
Ecology Restoration	Provide habitat and promote biodiversity	Maintains local flora and fauna for future generations Educational value	Native plantings often require less maintenance than non-native plantings	Re-introducing native plants to the area enhances habitat area and biodiversity	Work with an ecologist/biologist to restore 10% of the development footprint to pre-development native habitat	LEED-ND SLLc8
Ecology Erosion	Protect unstable slopes from erosion Minimize construction impacts	Maintains and protects surroundings and also maintains the aesthetic value of the area.	Avoids costs of remediation	Minimizing erosion protects habitat and reduces stress on natural water systems	Erosion and sedimentation control measures for construction	LEED-NC SS Prereq 1
Ecology Natural Areas	Maintain the quality of the existing natural vistas in the area that provide habitat and promote biodiversity	Natural areas provide pleasant surroundings for building users	Preserving topsoil, plants and trees on the site can reduce landscaping costs and likely increases property values	Limiting the extent of construction activities to certain areas of the site minimizes ecological site damage resulting in preservation of wildlife corridors and habitat	Limit site disturbance including earthwork and clearing of vegetation to 12 meters beyond building perimeter, 1.5 meters beyond primary roads, walkways and main utility branch trenches	Regional Growth Strategy, Smart Growth BC, LEED-NC v2
Ecology Natural Wetlands and Surface Water	Protect and enhance surface water bodies (watersheds, wetlands, and riparian areas)	Avoiding development in sensitive ecological areas can encourage public support for a project as well as educate the public	Avoid remediation work and enhance property values	Protects and enhances water quality, and plant and animal habitat	Limit impacts to wetlands, water bodies, and buffer zones to less than 20% of those areas and implement storm water management	Regional Growth Strategy, LEED-ND Prereq 3
Ecology Open Space	Provide a variety of open spaces to encourage walking, physical activity and time spent outdoors	Open spaces provide appealing spaces for social networking, civic engagement, personal recreation and other activities that create social bonds between individuals and groups	Low cost maintenance for multiple community benefits	Vegetated open spaces provide habitat and other ecological services	Locate and/or design project so that a park or plaza at least 1/2 acre in area, lies within a ¼ mile walk distance of 90% of planned and existing dwelling units and business entrances.	Regional Growth Strategy, LEED-ND NPD 9
Economy Local Material	Use locally sourced materials as much as possible	Pride in local materials, increased connection with nearby communities and adds educational value	Increased activity in local businesses and services, reduced environmental footprint	Reduced transport and associated emissions	Source products and materials as much as possible from within the Comox Regional District At least 20% by cost from within 800km by road	LEED-NC MR5

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Economy Generation	Be able to generate economic opportunities	The development will provide opportunities for local employment and inclusion, helping keep communities together.	The development will stimulate the local economy, directly and indirectly.	Environmental issues will be considered throughout the plans for the development in the economic viability of the project	Local employment and economic opportunities such as job creation will be generated as a result of the project	Regional Growth Strategy, Smart Growth BC, LEED-ND SLL 5
Health and Wellness Indoor Air Quality	Ensure residential development conforms to public health guidelines	Maintain health and vitality of the community	Avoid costs associated with illness, absenteeism and treatment.	Reduces toxic materials in the local environment	Specify low VOC materials, no added formaldehyde and ventilation standards	LEED-NC IEQ
Health and Wellness Walkable Streets	Promote walking and bicycling by providing safe, appealing, and comfortable street environments	Provides safe, appealing, and comfortable street environments	Encourages physical activity that reduces risk of obesity, heart disease, and hypertension, reducing the strain on public health systems	Walkable streets promote transportation efficiency and reduce pollution and GHG emissions	Design streets such that: a) each building has a principal functional entry b) continuous sidewalks in 90% of streets c) multi-use paths throughout	Smart Growth BC, LEED-ND NPd Prereq 1
Infrastructure Centralized Development	Have a focused and centralized development pattern	Creates vibrant and financially sustainable communities rather than individual lots Social capital enhanced	Creates a core of businesses that support each other	Communal water, energy and wastewater systems can be implemented	Project to be designed to allow businesses and services to be close to each other in centralized area.	Regional Growth Strategy, Smart Growth BC, Best Practice
Infrastructure Technology	Use appropriate technologies to achieve the development sustainability objectives	Public education, knowledge and exposure to sustainable technologies	Minimizes long term costs to the community	Prevents environmental impacts	Conventional and innovative technologies will be considered to optimize performance and sustainability	Developer driven Best Practice
Infrastructure Dark Skies	Preservation of dark skies that contribute to the rural character of the Region and protect the nocturnal wildlife	A night sky filled with galaxies, stars and planets is a source of beauty and inspiration to people and also part of a 'good neighbour policy'	Carefully designed exterior lighting solutions can reduce infrastructure costs and energy use.	Stray light that enters the atmosphere needlessly consumes energy and adversely affects nocturnal wildlife environments	Design exterior lighting so that all site and building mounted luminaires produce a max initial luminance no greater than 1.1 horizontal and vertical lux at the site boundary	LEED-NC SSc8

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Site Area Context

