

Applicant's Name

Guadalupe Font

Green Building Checklist

Completed checklists form part of the application package reviewed by staff and ultimately, Council. New buildings and developments have impacts that last well beyond the construction period. Reducing the consumption of natural resources and increasing resilience to a changing climate are part of the challenge of building more sustainably. This checklist will help you identify and present how your project will help the Township meet its goals of becoming carbon neutral by 2050.

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Site Address		820 Esquimalt Rd, 833/837 Old Esq. Rd	MAY 3 0 2022 CORP. OF TOWNSHIP OF ESQUIMALT		
1.0 (Certification		ELOPMENT SE	check	
1.1	Step Code (Ple	ase indicate level) 1 ✓ 2 3 4 5	The same and control of the		
1.2	EnerGuide rating				
1.3	LEED				
1.4	Passive House				
1.6	Living building				
1.7	Other (Built Green BC, R-2000, Green Shores etc.)				
2.0 8	Siting				
2.1	New buildings > 10 m ² are located > 20 m from the high water mark (HWM) of the Gorge Waterway.		Required		
2.2	New buildings >10 m ² are located at least 10 m from the HWM from the outer coastline.		Required		
2.3	Flood Construction Level has been established using sea level rise projections for the life of the building.				
2.4	Habitats of threatened and endangered species have been protected from impacts of development.				
2.5	Buildings are located within disturbed or developed areas.			✓	
3.0 8	Shoreline Prot	ection Measures		拉斯 克。	
3.1	Landscaping within 10 m of the high water mark consists primarily of native plant and tree species.		ative plant and tree	Required	
3.2	A conservation covenant has been signed to protect sensitive ecosystems within 10 m of the shoreline.				
3.3	At least one native tree capable of (now or in the future) supporting the nest of a Bald Eagle, Osprey etc. has been retained or is planted within 30 m of the high water mark (HWM).				
3.4	Removal of at least 30% of hardened shoreline and replacement with erosion control measures designed to improve the habitat of the shoreline.				
3.5	Light from building and landscaping does not cast over water.			✓	
3.6	\Mildlife habitat	has been incorporated into seawall design			

4.0 \$	Stormwater Absorption and Treatment	Please Check			
4.1	An on-site stormwater retention system has been designed to retain at least the first 3 cm of rainfall from each rain event.				
4.2	Stormwater will be treated for pollutants prior to release to the stormdrain system or to a surface water source.				
4.3	The project features a green roof.				
4.4	The total amount of impervious surface is not greater than 20%.				
5.0 V	Vater Conservation				
5.1	The irrigation system has been designed to reduce potable water use by 50% compared to conventional systems. ✓				
5.2	Waterless urinals will be used.				
5.3	Water features use re-circulating water systems.				
5.4	Rainwater will be collected for irrigation purposes.				
5.5	Toilet and kitchen sink drains are separate from other drains to the point of exit.				
5.6	An approved greywater reuse system will be installed.				
6.0 T	rees/Landscaping				
5.1	The project is designed to protect as many native and significant trees as possible.	✓			
5.2	There will be no net loss of trees.				
5.3	Trees will be planted in soil volumes calculated to support the full grown size of the tree.				
5.4	At least 25% of replacement trees are large canopy trees.				
5.5	Topsoil will be protected from compaction, or stockpiled and reused.				
3.6	Erosion control measures have been designed and installed to prevent erosion of topsoil.				
7.0 E	liodiversity				
7.1	New landscaping is predominantly native plant and tree species.				
7.2	Invasive species will be removed from landscaped areas.				
7.3	At least two biodiversity features have been incorporated into the new or existing landscaping (see section 18.5.3 of the OCP for ideas).	/			
3.0 E	nergy Conservation	美国社			
3.1	The building is pre-plumbed for solar hot water.	Required			
3.2	Install a greywater heat recovery unit.				
3.3	Passive cooling is supported through flow-through ventilation design, low E windows, solar shades, shade trees etc.				
.4	Passive heating is supported via building orientation, window design and thermal mass.				
.5	The building will have necessary structural support and conduit for Solar PV.				
.6	Obtain minimum of 20% of building energy consumption through community based or on-site renewables, such as district energy, waste heat recovery, geothermal, solar PV, solar hot water.				
.7	Heating uses a low carbon heating source, such as air source heat pump.				

9.0 T	ransportation	Please Check
9.1	Building will have a car share or bus pass program for residents.	1
9.2	Enhanced facilities for bicyclists such as showers, lockers, storage etc.	✓
9.3	Charging infrastructure for E-bikes will be provided.	✓
9.4	EV charging conduit supplied to 100% of residential parking units.	✓
9.5	30% of residential parking spaces include an electrical outlet or EV charging equipment.	
9.6	Adequate space in the electrical system to provide EV charging for 100% of parking stalls.	✓
9.7	For commercial buildings, Level 2 or Level 3 EV charging provided for employees and/or visitors.	
10.0	Materials/Waste	
10.1	Employs at least 3 advanced framing techniques described in the CHBA builder's manual to reduce unnecessary lumber and sheathing.	√
10.2	Uses at least two materials which are certified for recycled content.	✓
10.3	Uses engineered structural material for two major applications (>10% of floor area).	✓
10.4	5 major building elements made from >50% recycled content.	
10.5	Use foundation, floor and >50% of walls from existing building.	
10.6	Deconstruct at least 50% of existing building for material salvage.	
10.7	Use at least five major materials or systems produced in BC.	✓
10.8	Use certified sustainably harvested wood for one major structural or finishing application (eg framing, plywood, floors)	
10.9	Eliminate use of wood from threatened trees.	
10.10	Recycling area provided within residential suites.	
10.11	Recycling collection area for multi-family buildings.	√
10.12	Pickup of compostables provided in multi-family units.	1
10.13	Construction waste management practices used to reduce and separate waste and divert at least 50% from the landfill.	

Please include a brief description of how this project contributes to a reduction in greenhouse gas emissions and moves the municipality closer to its ultimate target of becoming carbon neutral by 2050 (use next page if needed).

Please refer to enclosed Green Building Features Letter.					



May 27, 2022

Township of Esquimalt | Development Services 1229 Esquimalt Road Esquimalt, BC V9A 3P1

Attention:

Mr. Alex Tang, Planner, Development Services

RE: Green Building Features

Purpose Built Market Rental Residential Apartment Building 820 Esquimalt Road, 833 & 837 Old Esquimalt Road, Esquimalt, BC

Dear Mr. Tang:

The purpose of this letter is to summarize the green building features that will be incorporated into the design of the above referenced project.

ENERGY EFFICIENCY

- 1. The building will be built to comply with the BC Energy Step Code (Step 2) as the target performance level. The benefits will be a reduction in energy requirements and greenhouse gas emissions, and improved comfort within the units.
- 2. The high-performance building envelope will reduce heat transfer and air leakage between the interior and exterior of the building. An energy model will guide the selection of insulation values, and door and window performance criteria.
- 3. Energy efficient lighting and appliances will reduce the energy consumed by the building.

WATER EFFICIENCY

- 1. Conserving potable water will be achieved with low-flow water fixtures (toilets, faucets, shower heads) in all apartments.
- 2. Native and/or drought tolerant plant species will be specified for the development to reduce the amount of water required to maintain plant health.

INDOOR ENVIRONMENT

1. All apartments will have operable windows and doors so residents can modify the indoor environment.

TRANSPORTATION

- 1. The property is located along Esquimalt Road, identified as a Frequent Transit Corridor.
- 2. Bike parking and a wash station will be provided. A percentage of non-standard bicycle parking will be included (for cargo bikes, bikes with trailers, etc.)
- 3. Modo membership will be available to the tenants for the first year of the buildings' operation to encourage sustainable travel through the use of the two Modo vehicles that are currently available within walking distance.
- 4. Electric vehicle charging infrastructure will be provided for each parking stall.
- 5. Based on the Parking Study by Watt Consulting Group, a reduced number of parking stalls at a ratio of 1.0 space per unit (higher than the Watt report, but lower than the Parking Bylaw requirement) will be provided.

MATERIALS | WASTE MANAGEMENT

- 1. The majority of the building will be constructed with dimensional lumber, a locally sourced and renewable resource. Wood has also a lower carbon footprint than steel or concrete, and its light weight can help reduce foundation sizes.
- 2. Where feasible, sustainable materials with certified recycled content will be incorporated into the design, including architectural panel cladding and durable interior finish materials.
- 3. Efficient design will facilitate reduced material waste during construction.

MAINTENANCE

1. The building will be managed by a professional property manager to ensure the efficient operation and function of the building's mechanical and electrical systems.

URBAN | SITE DESIGN

- 1. The property is underutilized and suitable for urban infill. Densification in this location makes effective use of proximity to the surrounding neighbourhood amenities, which supports the objective of building a complete community.
- 2. The building steps down from 6 to 4 storeys to minimize shadow projections over Old Esquimalt Road.
- 3. The underground parking garage covers 80% of the site, allowing permeable landscaped areas to occur around the building, including tree-planted areas, patios, and raised gardens, which will mitigate rainwater runoff.



We trust that you will find this submission satisfactory. Please contact us should you require additional information or would like to discuss this submission further.

Respectfully submitted,

Denciti Development Corp. acting on behalf of Denciti Esquimalt LP

David A. Fawley

Principal

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Development Manager

Copies: Steve Watt; Integra Architecture

Chris Windjack; LADR

