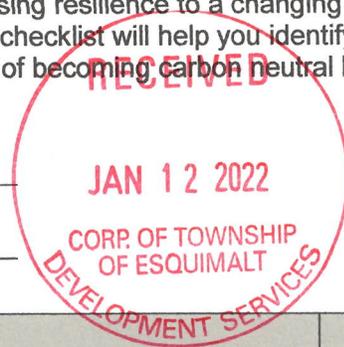


Completed checklists form part of the application package reviewed by staff and ultimately, Council. New buildings and developments have impacts that last well beyond the construction period. Reducing the consumption of natural resources and increasing resilience to a changing climate are part of the 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.

Applicant's Name Lapis Homes (Ryan Jabs)

Site Address 812 Craigflower Rd.



1.0 Certification		Please check
1.1	Step Code (Please indicate level) <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5	
1.2	EnerGuide rating	Step 3
1.3	LEED	<input type="checkbox"/>
1.4	Passive House	<input type="checkbox"/>
1.6	Living building	<input type="checkbox"/>
1.7	Other (Built Green BC, R-2000, Green Shores etc.)	<input type="checkbox"/>
2.0 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.	<input type="checkbox"/>
2.4	Habitats of threatened and endangered species have been protected from impacts of development.	<input type="checkbox"/>
2.5	Buildings are located within disturbed or developed areas.	<input type="checkbox"/>
3.0 Shoreline Protection Measures		
3.1	Landscaping within 10 m of the high water mark consists primarily of native plant and tree species.	Required
3.2	A conservation covenant has been signed to protect sensitive ecosystems within 10 m of the shoreline.	<input type="checkbox"/>
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).	<input type="checkbox"/>
3.4	Removal of at least 30% of hardened shoreline and replacement with erosion control measures designed to improve the habitat of the shoreline.	<input type="checkbox"/>
3.5	Light from building and landscaping does not cast over water.	<input type="checkbox"/>
3.6	Wildlife habitat has been incorporated into seawall design.	<input type="checkbox"/>

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. <i>TBC</i>	<input type="checkbox"/>
4.2	Stormwater will be treated for pollutants prior to release to the stormdrain system or to a surface water source.	<input type="checkbox"/>
4.3	The project features a green roof.	<input type="checkbox"/>
4.4	The total amount of impervious surface is not greater than 20%. <i>~16% pervious</i>	<input type="checkbox"/>
5.0 Water Conservation		
5.1	The irrigation system has been designed to reduce potable water use by 50% compared to conventional systems.	<input type="checkbox"/>
5.2	Waterless urinals will be used.	<input type="checkbox"/>
5.3	Water features use re-circulating water systems.	<input type="checkbox"/>
5.4	Rainwater will be collected for irrigation purposes.	<input type="checkbox"/>
5.5	Toilet and kitchen sink drains are separate from other drains to the point of exit.	<input type="checkbox"/>
5.6	An approved greywater reuse system will be installed.	<input type="checkbox"/>
6.0 Trees/Landscaping		
6.1	The project is designed to protect as many native and significant trees as possible.	<input checked="" type="checkbox"/>
6.2	There will be no net loss of trees.	<input checked="" type="checkbox"/>
6.3	Trees will be planted in soil volumes calculated to support the full grown size of the tree.	<input checked="" type="checkbox"/>
6.4	At least 25% of replacement trees are large canopy trees. <i>All medium canopy</i>	<input type="checkbox"/>
6.5	Topsoil will be protected from compaction, or stockpiled and reused.	<input checked="" type="checkbox"/>
6.6	Erosion control measures have been designed and installed to prevent erosion of topsoil.	<input type="checkbox"/>
7.0 Biodiversity		
7.1	New landscaping is predominantly native plant and tree species. <i>Mix of Native + Non</i>	<input type="checkbox"/>
7.2	Invasive species will be removed from landscaped areas.	<input checked="" type="checkbox"/>
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).	<input checked="" type="checkbox"/>
8.0 Energy Conservation		
8.1	The building is pre-plumbed for solar hot water.	Required
8.2	Install a greywater heat recovery unit.	<input type="checkbox"/>
8.3	Passive cooling is supported through flow-through ventilation design, low E windows, solar shades, shade trees etc.	<input checked="" type="checkbox"/>
8.4	Passive heating is supported via building orientation, window design and thermal mass.	<input checked="" type="checkbox"/>
8.5	The building will have necessary structural support and conduit for Solar PV.	<input checked="" type="checkbox"/>
8.6	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.	<input type="checkbox"/>
8.7	Heating uses a low carbon heating source, such as air source heat pump.	<input checked="" type="checkbox"/>

9.0 Transportation		Please Check
9.1	Building will have a car share or bus pass program for residents.	<input checked="" type="checkbox"/>
9.2	Enhanced facilities for bicyclists such as showers, lockers, storage etc.	<input checked="" type="checkbox"/>
9.3	Charging infrastructure for E-bikes will be provided.	<input checked="" type="checkbox"/>
9.4	EV charging conduit supplied to 100% of residential parking units.	<input checked="" type="checkbox"/>
9.5	30% of residential parking spaces include an electrical outlet or EV charging equipment.	<input checked="" type="checkbox"/>
9.6	Adequate space in the electrical system to provide EV charging for 100% of parking stalls.	<input checked="" type="checkbox"/>
9.7	For commercial buildings, Level 2 or Level 3 EV charging provided for employees and/or visitors.	<input type="checkbox"/>
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.	<input checked="" type="checkbox"/>
10.2	Uses at least two materials which are certified for recycled content.	<input checked="" type="checkbox"/>
10.3	Uses engineered structural material for two major applications (>10% of floor area).	<input checked="" type="checkbox"/>
10.4	5 major building elements made from >50% recycled content.	<input type="checkbox"/>
10.5	Use foundation, floor and >50% of walls from existing building.	<input type="checkbox"/>
10.6	Deconstruct at least 50% of existing building for material salvage.	<input type="checkbox"/>
10.7	Use at least five major materials or systems produced in BC.	<input type="checkbox"/>
10.8	Use certified sustainably harvested wood for one major structural or finishing application (eg framing, plywood, floors)	<input checked="" type="checkbox"/>
10.9	Eliminate use of wood from threatened trees.	<input checked="" type="checkbox"/>
10.10	Recycling area provided within residential suites.	<input type="checkbox"/>
10.11	Recycling collection area for multi-family buildings.	<input checked="" type="checkbox"/>
10.12	Pickup of compostables provided in multi-family units.	<input checked="" type="checkbox"/>
10.13	Construction waste management practices used to reduce and separate waste and divert at least 50% from the landfill.	<input checked="" type="checkbox"/>

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).

See supplement page.

January 11, 2022

Supplement sheet – 812 Craigflower rezoning application green checklist

The existing single-family home is a 1950s-built home that is inefficient to heat and to cool. It also has a wood-burning fireplace, which is one of the most emission-heavy heat sources available.

We are proposing to replace this house with 10 energy efficient homes that are built to at least step 3 (and likely step 4) of the step code in a three-storey, mostly wood-framed, building, with no fossil fuel heat source. This type of compact, stacked-unit construction is one of the most efficient building styles, as units share insulation, heat and energy through the floors, walls and ceilings.

We will use heat pumps as the building's primary heat/cooling and will also explore placing solar panels on the roof to power some of the common lighting and some of the electric vehicle chargers.

In addition, being a longer, thinner building, most units have two exterior walls, with well-placed windows) so the homes will benefit from natural cross breezes, which will limit the need for air conditioning during hot summer days.

Most importantly, this building will encourage car-lite living as it is close to jobs and schools and a growing list of local amenities. We will compliment this with a large, secure bike lock-up with plug-ins, which will include a space for a cargo bike, and we will provide car share memberships for each unit (four MODO cars will be within a 5-8 minute walk).

These strategies, on top of being on one of the most frequent bus routes in the city, will encourage residents to reduce or eliminate their car use, particularly as more amenities are brought into the neighbourhood with population growth.

Finally, we've designed most of the homes with a den space or a spacious desk nook to support people to work from home, reducing commuter traffic and doing a small part to reduce the need for more commercial space in the city.

Additional details from landscape architect:

4.4 Impermeability Ratio

- Permeable area – 121 square metres. 15.6%

7.1 5 Native Plants

Three out of 6 new trees are native, and our landscape architect has chosen a blend of native and non-native species, with many, including the non-native species, that support hummingbirds, bees and other pollinators.