

Sustainability Checklist – Best Practices and Examples

Development Cost Charges Reductions Bylaw





Audrey Tanguay October 20th, 2015



About Penticton

- The population of Penticton is approximately 31,909
- Our climate makes the area a popular place to retire. This contributes to a median age of the population which is higher than the provincial median age
- Retail Trade, Health Care & Social Assistance and Manufacturing are the top employment sector
- The area is becoming known for its high quality vineyards



Background

- In 2010, Council approved the Economic Investment Zone Bylaw and the DCC Reductions Bylaw. The main goal was to stimulate development and construction activity in the City of Penticton.
- The first proposal presented followed a Leed rating systems. Then the City agreed to prepare a checklist that scored the project from an environmental point of view.
- The checklist needs to be filled in by a Registered professional (mainly architects) for the project and be submitted under their signature and sealed. The checklist must to indicate a score of 40 or higher and has to be submitted prior to issuance of a building permit.



Background

- The Development Cost Charges reductions bylaw provides an Environments Impact ratings form that outlines a range of criteria that need to be met to ensure a development qualifies for the 50% DCC reduction.
- Criteria's relates to sustainable site design practices, green building technologies, water conservation and indoor environment

- The requirements are generally targeted towards industrial and commercial development
- Points are included targeting the creation of local employment during the construction of the development and also for creation of direct employment.
- Points are also included for innovative sustainable technologies that have been incorporated into the building design



- The City's has not kept the checklist up-to-date. It was enacted in 2010 and the checklist has not be amended since
- The City's checklist was created by one of the local architect
- It has been used as a tool to stimulate economic growth rather than negotiating more sustainable buildings.
- A lot of points were targeting the redevelopment of contaminated site redevelopment and to provide an incentive for owners to redevelop their properties

Challenges







Industrial/Commercial Types







De-Contaminated site







Commercial development and Retirement Centre







| Site Design On-Site Storm Water Treatment (min. 75% Total Suspended Solids Removal and use of oil grit separators) Permeable surfaces - Minimum 25% of site area permeable - Minimum 50% of site area permeable 3 On-Site Storm Water Retention - Material Site Re-Development - Iocate development within 800m of bus transit stop - Bicycle / Shower / Changing facilities - Retention of trees and vegetation on-site Waste Management - Construction materials - Building recycling facilities - Office/Dwelling unit recycling facilities Development located within 800m of a public park or trail (Industrial areas of the development is provided. | SUSTAINABILITY CRITERIA | Possible Points | Y | N |
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| | Development located within 800 of a public park or trail | 2 | | |
| | | 3 | | |

Site Design

Remove on-site storm water retention as this is a standard for all development in the City

If retention of trees and vegetation is increased, (more trees and shrubs) then 3 points

Most development are within 800 metres of either the walkways, KVR, Channel, park or trail in downtown Penticton



Building Technology

| Building Technology | |
|---------------------------------|------|
| Green Roof (Vegetated) | |
| - 50% of roof area OR | 3 or |
| - 75% of roof area | 5 |
| High Reflectance 'Cool Roof' | 3 |
| Solar Thermal Air Preheat | 3 |
| Energy Use - 10% -25% < MN B OR | 3 or |
| - 25% < MNECB | 5 |
| Solar Hot Water - Space Heating | 3 |
| Solar Hot Water - Domestic Use | 3 |
| Solar Shading Devices | 2 |
| Passive Solar Ventilation | 3 |
| Displacement Ventilation | 3 |
| Photovoltaics | 40 |
| Geoexchange System | 3 |

Increase the % for Energy Use

Providing a chase for future or increased solar, wind or alternative power generation

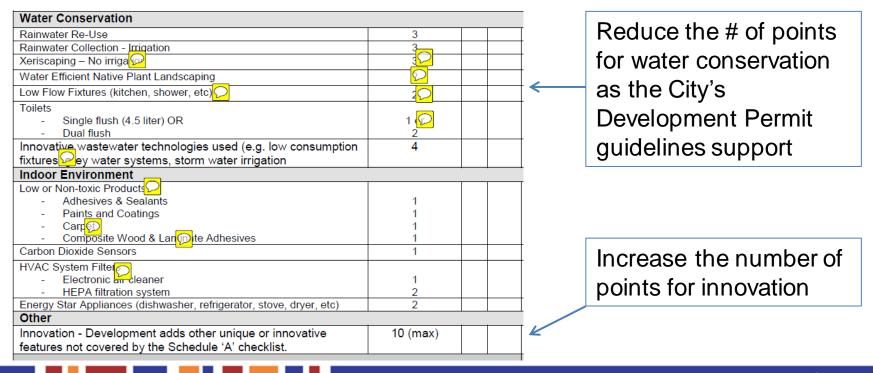


Building Technology

| Wind Turbines | 3 | |
|---|------|-----------------|
| Warranty Level on Roof | | |
| - 25 years OR | 1 or | Remove Warranty |
| - 30+ years | 3 | Level on Roof |
| Dust Coptrol – Bag house utilization | 5 | |
| Off peak ectricity has been considered in the design | 3 💭 | |
| Significant environmental features are maintained and /or | 3 | |
| enhanced | | |
| Economic Development | | |
| Permane ocal employment is created during construction. | 6 🔘 | |
| Direct employment to be created after construction. | 6 | |
| | | |



Water Conservation, Indoor Environment and Other





Moving forward

- The planning department with the assistance of the Climate Action Advisory Committee will be revising the checklist this fall.
- The main goals are:
 - ☐ Encouraging sustainable design and innovation
 - □ Reduce the points for achieving water conservation and on site-water conservation
 - ☐ Increase the points for innovation
 - ☐Remove criteria's that are mandatory in the BCBC



THANKS

