



Sustainability Checklist – Best Practices and Examples

Development Cost Charges Reductions Bylaw



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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





SUSTAINABILITY CRITERIA	Possible Points	Y	N
Site Design			
On-Site Storm Water Treatment (min. 75% Total Suspended Solids Removal and use of oil grit separators)	5		
Permeable surfaces			
- Minimum 25% of site area permeable	2		
- Minimum 50% of site area permeable	3		
On-Site Storm Water Retention 	3		
Contaminated Site Re-Development	20		
Alternative Transportation			
- locate development within 800m of bus transit stop	3		
- Bicycle / Shower / Changing facilities	4		
Designated carpool parking  provided.	3		
Vegetation 			
- Retention of trees and vegetation on-site	2		
Waste Management			
- Construction materials 	3		
- Building recycling facilities	2		
- Office/Dwelling unit recycling facilities	2		
Development located within 800  of a public park or trail	2		
(Industrial areas  only) Landscaped areas that have drought resistant shrubs or trees for the development is provided.	3		

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 - 75% of roof area	3 or 5
High Reflectance 'Cool Roof'	3
Solar Thermal Air Preheat	3
Energy Use - 10% -25% < MNECB OR - 25% < MNECB 	3 or 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 	4 
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 - 30+ years	1 or 3
Dust Control – Bag house utilization	5
Off peak electricity has been considered in the design	3
Significant environmental features are maintained and /or enhanced	3
Economic Development	
Permanent local employment is created during construction.	6
Direct employment to be created after construction.	6

Remove Warranty Level on Roof





Water Conservation, Indoor Environment and Other

Water Conservation			
Rainwater Re-Use	3		
Rainwater Collection - Irrigation	3		
Xeriscaping – No irrigation	3		
Water Efficient Native Plant Landscaping	3		
Low Flow Fixtures (kitchen, shower, etc)	2		
Toilets			
- Single flush (4.5 liter) OR	1		
- Dual flush	2		
Innovative wastewater technologies used (e.g. low consumption fixtures, grey water systems, storm water irrigation)	4		
Indoor Environment			
Low or Non-toxic Products			
- Adhesives & Sealants	1		
- Paints and Coatings	1		
- Carpets	1		
- Composite Wood & Laminate Adhesives	1		
Carbon Dioxide Sensors	1		
HVAC System Filter			
- Electronic air cleaner	1		
- HEPA filtration system	2		
Energy Star Appliances (dishwasher, refrigerator, stove, dryer, etc)	2		
Other			
Innovation - Development adds other unique or innovative features not covered by the Schedule 'A' checklist.	10 (max)		

Reduce the # of points for water conservation as the City's Development Permit guidelines support

Increase the number of points for innovation



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

