

# City of Langley

## A Checklist for Sustainable Community Development

### About this Checklist

Sustainability is about ensuring a high quality of life for all citizens while learning how to live within our collective global capacity. Every person, business and organization has a part to play. The City of Langley is committed to taking a leadership role in this challenge and has identified sustainability as an integral component of its plans and policies. The following checklist is designed to raise awareness of sustainability considerations in proposed developments and to encourage applicants to “go the extra mile” in their projects. This checklist shall accompany all rezoning, development permit, and subdivision applications.

For more information about the City of Langley’s sustainability program, please refer to the website at: <http://www.city.langley.bc.ca/sustainability.htm>.

*Note: although most of the items contained in the checklist are voluntary, some items may be required by other City Bylaws and may not be specified herein.*

### Applicant Instructions

The checklist describes an ideal - it is unlikely that projects will earn recognition in all sections, and no pass/fail standard has been set. Different types of developments will produce different results, and some sections may not be applicable to all developments.

Applicants should fill in the checklist by applying either, ‘yes’, ‘no’, or ‘N/A’ (for ‘not applicable’) to the box immediately to the right of the criteria.

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*Design, layout, and content developed by Hyla Environmental Services Ltd. Original content based on LEED® for New Neighbourhoods.*



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## Sustainable Community Development Checklist

### Environment: Protection & Enhancement of Environment

#### 1. Biodiversity



- |  |  |
|--|--|
| a. An <b>ecological inventory</b> has been completed as a means to protect species at risk and imperiled ecological communities. This measure may be required if the property falls within a designated Environmentally Sensitive Area (ESA; See OCP Policy 9.2.1 and the Environmentally Sensitive Areas Map (Schedule "D" of the OCP)). Also see Provincial Ministry of Environment guidelines for sensitive ecosystem inventories ( <a href="http://www.env.gov.bc.ca/sei/">http://www.env.gov.bc.ca/sei/</a> ) |  |
| b. If an ecological inventory has been completed, opportunities to protect and/or augment <b>existing flora and fauna</b> and restore and/or improve <b>natural habitat</b> during development have been explored. These measures are highly recommended. Refer to Section 9.0 of the OCP  |  |
| c. Please indicate if <b>invasive plant species</b> will be removed. If so, ensure that existing, endemic vegetation remains intact and the reestablishment of invasive species on the property is prevented   |  |

Additional Comments:

#### 2. Environmental Impact



- |  |  |
|--|--|
| a. Construction techniques during development involve means to protect <b>air quality</b>                        |  |
| b. Construction techniques minimize <b>site disturbance</b> . See sedimentation and erosion control requirements |  |
| c. Incorporates ground-level <b>light pollution reduction principles</b>   |  |
| d. Incorporates dark skies <b>light pollution reduction principles</b>   |  |

Additional Comments:

#### 3. Solid Waste and Recycling



- |   |  |
|---|--|
| a. Provides <b>enhanced recycling facilities</b> with design features to enhance the ability to <b>recycle the full range of recyclable materials</b> |  |
| b. Incorporates a <b>construction recycling plan</b> . If applicable, an <b>operating recycling plan</b> has been developed                           |  |
| c. Incorporates the use of <b>recycled building materials</b> (e.g., from demolished buildings)   |  |

Additional Comments:

### Environment: Protection & Enhancement of Environment

#### 4. Storm Water Management



- |  |  |
|--|--|
| a. Includes a minimum of <b>30 cm of topsoil</b> . See storm water best management practices   |  |
| b. Incorporates a <b>storm water management plan</b> including a groundwater recharging system (see '4d' below), if applicable. See OCP Policy 9.2.5 and 9.2.6 |  |
| c. When completed, the development protects <b>groundwater</b> from contamination. See storm water best management practices                                   |  |
| d. Protects <b>receiving water</b> from non-point source pollution and protects against water changes in base flows  |  |

Additional Comments:

### Environment: Resource Efficiency<sup>1</sup>

#### 5. Energy Efficient Construction



- |   |  |
|---|--|
| a. Achieves an <b>EnerGuide for New Houses rating of 80</b> for <b>single unit and row houses</b>   |  |
| b. Achieves an <b>energy performance of 25%</b> better than the current Model National Energy Code for <b>commercial, industrial, and institutional</b> buildings |  |
| c. Achieves an <b>energy performance of 25%</b> better than the current Model National Energy Code for <b>multi-unit residential</b> buildings                    |  |

<sup>1</sup> All of the items that fall within Resource Efficiency are supported by the City's Official Community Plan (OCP), which refers to the greenhouse gas reduction target contained in the City's Community Energy and GHG Emissions Plan (Policy 15.3.1 and 15.3.2 of the City's OCP). The reduction target for the community is a 16 percent reduction from 2007 levels.

Additional Comments:

#### 6. Energy Supply and Connectivity



- |  |  |
|--|--|
| a. Allows for connection to <b>district energy systems</b> and on-site heat and power generation   |  |
| b. Provides <b>on-site power generation</b> through cogeneration plants and renewable sources, if servicing multi-unit buildings and/or large commercial/industrial buildings  |  |
| c. Provides <b>on-site renewable energy generation</b> such as solar electricity, wind power, solar technologies for space heating and domestic hot water, and heat exchange such as geothermal and/or heat recovery ventilation |  |

Additional Comments:

## Sustainable Community Development Checklist

### 7. Green Building Features



- |   |  |
|---|--|
| a. Project designed to meet a <b>green buildings standard</b> (LEED®, Built Green™, Green Buildings BC). Note OCP Policy 9.2.8, encourage LEED® certified (Leadership in Energy and Environmental Design) building projects, although any industry-recognized energy efficient standard for building construction is acceptable |  |
| b. Reduces the <b>heat island effect</b> with green roofs, underground parking, community gardens and planted structural slabs  |  |
| c. Uses <b>climate sensitive design features</b> (e.g., passive solar, minimize the impact of wind, and rain, etc.)   |  |

Additional Comments:

### 8. Water Conservation



- |  |  |
|--|--|
| a. Uses <b>drought tolerant plants</b> . Uses xeriscaping as a guide and avoids over-landscaping   |  |
| b. Uses <b>non-water dependent materials</b> in the landscaping design such as a mix of rocks and other materials. Does not exclude the use of indigenous, drought tolerant plants |  |
| c. Incorporates an <b>irrigation system with central control and rain sensors</b> designed with water conservation in mind   |  |
| d. Uses <b>ultra-low flush and/or dual flush toilets</b> and other water conserving devices (e.g., reuse of greywater and/or water storage for irrigation)                         |  |

Additional Comments:

### 9. Brownfield and Greyfield Development

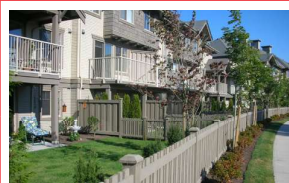


- |  |  |
|--|--|
| a. Revitalizes <b>land designated as contaminated</b>                    |  |
| b. Redevelops <b>surface level parking</b> to a higher land use category |  |

Additional Comments:

### Social: Compact, Safe & Diverse Community<sup>2</sup>

#### 10. Compact Community Design



- |  |  |
|--|--|
| a. The development is within 400 metres of public transit or the development results in the addition of public transit to the area |  |
| b. Encourages <b>pedestrian-oriented streets</b>   |  |
| c. Fills in <b>pre-existing vacant parcels</b> of land   |  |

<sup>2</sup> See page 8 for a link to the City's Social Plan

Additional Comments:

#### 11. Pedestrian & Cycling Movement



- |   |  |
|---|--|
| a. Includes <b>bicycle parking and storage lockers</b> for cyclists. Please refer to Zoning Bylaw 2100              |  |
| b. Includes <b>showers and change rooms</b> in commercial and industrial developments for employees cycling to work |  |
| c. Creates <b>green spaces</b> , or <b>strong connections</b> to adjacent natural features, parks, and open spaces  |  |
| d. Improves <b>bike networks and trails</b> and <b>connections</b> to <b>designated bike routes</b> in the City     |  |
| e. Improves <b>pedestrian amenities</b> such as benches, information kiosks, trail maps, etc.                       |  |
| f. Provides <b>links to amenities</b> such as school(s), trails, grocery store, public transit, etc.                |  |

Additional Comments:

#### 12. Responsible Transportation



- |  |  |
|--|--|
| a. Includes <b>infrastructure</b> and dedicated parking <b>spaces for electric plug-in vehicles</b>                      |  |
| b. Provides <b>dedicated parking spaces</b> for vehicles used for <b>carpooling and car co-ops</b>                       |  |
| c. Includes dedicated <b>spaces for motorcycles and mopeds</b>   |  |
| d. Creates <b>transit oriented facilities</b> that address user satisfaction and provide safe pick-up and drop-off areas |  |

Additional Comments:

#### 13. Smart Location



- |   |  |
|---|--|
| a. Provides <b>services, or an amenity</b> in close proximity to a residential area                         |  |
| b. Provides a <b>variety of housing</b> in close proximity to a public amenity, transit, or commercial area |  |

Additional Comments:

## Sustainable Community Development Checklist

### Social: Compact, Safe & Diverse Community

#### 14. Diversity of Use



- |  |  |
|--|--|
| a. Provides a <b>diversity of housing types</b>          |  |
| b. Provides a <b>diversity of unit sizes</b>             |  |
| c. Includes <b>seniors housing</b>                       |  |
| d. Includes <b>affordable entry-level market housing</b> |  |
| e. Includes <b>non-market rental housing</b>             |  |

Additional Comments:

#### 15. Safe Community



- |   |  |
|---|--|
| a. Incorporates <b>Crime Prevention Through Environmental Design (CPTED)</b> principles                               |  |
| b. Incorporates physical <b>traffic calming</b> in the road design such as traffic circles and narrowed intersections |  |
| c. Includes <b>pedestrian friendly features</b> such as street lighting and crosswalks                                |  |
| d. Addresses <b>safety for cyclists and pedestrians</b>   |  |

Additional Comments:

#### 16. Social Community



- |   |  |
|---|--|
| a. Creates or enhances <b>community social gathering places</b> (public plaza, halls, meeting spaces, etc.)   |  |
| b. Provides <b>land for amenities</b> or provides <b>amenities</b> such as community activity opportunities, daycares, recreational facilities etc. |  |
| c. Provides an area for <b>community gardens or urban agriculture</b>   |  |

Additional Comments:



### Economy: Economics<sup>3</sup>

#### 17. Economic Sustainability



- |  |  |
|--|--|
| a. Creates <b>permanent employment opportunities</b> and/or densities that would assist in supporting local businesses   |  |
| b. Adheres to and supports the goals of the City's Economic Development Strategy by promoting <b>diversification</b> of the local economy by business type and size that is appropriate for the area |  |
| c. Expands community opportunities for <b>training, education, entertainment, recreation, or tourism</b>   |  |
| d. Results in a <b>net increase in the property tax base</b> (land conversion)   |  |

<sup>3</sup> See Economic Development Strategy in the reading list on page 8

Additional Comments:

### Culture: Arts, Culture, and Heritage<sup>4</sup>

#### 18. Culture



- |   |  |
|---|--|
| a. Employs <b>high quality design elements</b> and public art to add vibrancy and promotes <b>community values and identity</b> |  |
| b. Provides <b>public art</b> in the community  |  |
| c. Provides <b>flexible creative space</b> for residents to work  |  |
| d. Encourages opportunities for <b>cultural awareness and exchange</b>  |  |
| e. Incorporates the <b>revitalization of a heritage building</b> in a manner that preserves its authentic style and materials   |  |

<sup>4</sup> See Cultural Master Plan in the reading list on page 8

Additional Comments:

### Further Reading

The following documents can be found at the City's sustainability web page located at <http://www.city.langley.bc.ca/sustainability.htm>

Sustainability Framework

Corporate Energy and Greenhouse Gas Emissions Plan

Community Energy and Greenhouse Gas Emissions Plan

Official Community Plan Amendment Bylaw No. 2817

Other documents cited in the checklist can be found at the following links:

Official Community Plan: [http://www.city.langley.bc.ca/official\\_community\\_plan.htm](http://www.city.langley.bc.ca/official_community_plan.htm)

Provincial Ministry of Environment guidelines for sensitive ecosystem inventories: <http://www.env.gov.bc.ca/sei/>

Social Plan: <http://www.city.langley.bc.ca/sites/langley2/uploads/1263323052600.pdf>

Economic Development Strategy: <http://www.city.langley.bc.ca/sites/langley2/uploads/1308871373163.pdf>

Cultural Master Plan: <http://www.city.langley.bc.ca/sites/langley2/uploads/1263243846817.pdf>