

Existing Green Development Standards

It is not necessary for a municipality to create a Green Development Standard from scratch. There are several other options:

- Require developers and builders to pick from a list of existing standards (eg: Halton Hills, Whitby, Toronto, etc)
- Modify an existing generic standard such as the one developed for the Federation of Canadian Municipalities by the Clean Air Partnership

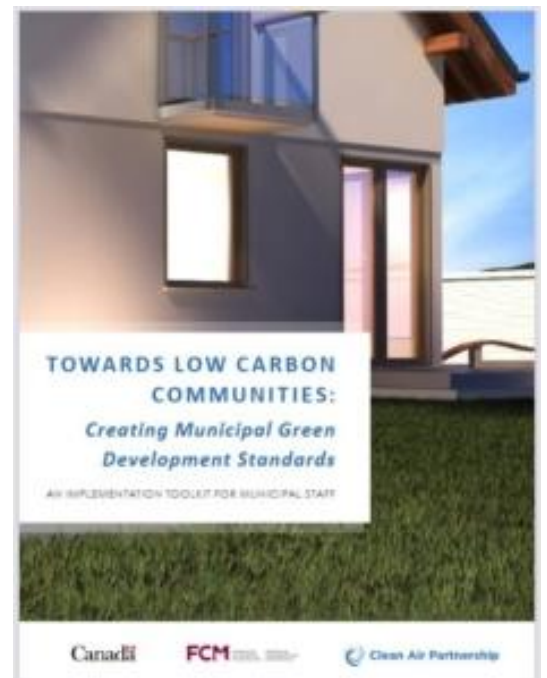
The Federation of Canadian Municipalities and the Clean Air Partnership's [Clean Air Partnership - GDS-toolkit](#) provides a detailed review of existing Green Development Standards in Ontario (page 54) and a framework to develop new plans (page 55). Appendix A (page 103) has a Low Rise Residential development plan as well as a list of metrics which includes:

- Energy Efficiency
- Energy Management
- Pedestrian Infrastructure
- Green Buildings
- Tree Canopy
- Soil Quantity and Quality
- Natural Heritage
- Parks
- Storm water Management
- Solar Readiness
- Water Conservation

The Green Development Standard is directed towards urban centres and needs additional metrics for rural areas such as:

- Agricultural Nutrient Management
- Flood water protection
- Soil Erosion protection

The Green Development Standards can be incremental but it's important to get started. An approach might be to allow builders to choose from an approved list of existing standards while a local GDS is being developed.



MUNICIPALITIES WITH GREEN DEVELOPMENT STANDARDS

Green Development Standards have been developed and implemented in many communities, including several local municipalities.

- Federation of Canadian Municipalities ^[1]
- Mississauga ^[2]
- Municipality of Clarington ^[3]
- Ottawa ^[4]
- Toronto ^[5]
- Vaughan ^[6]
- Whitby ^[7]



THE TOWN OF HALTON HILLS

The Town of Halton Hills is a leader in applying Green Development Standards to supplement the Ontario Building code.

- Halton Hills' **Green Development Information Guide** can be found here: ^[8]
- Halton Hills' **Green Development Standards Study – Final Report** can be found here: ^[9]
- Halton Hills' **Green Development Standards Checklist** can be found here: ^[10]

Halton Hills – Checklist

The Checklist is a points-based system where the developer has to achieve a minimum number of points before a development application will be approved. The checklist is divided into 3 main sections: Low Rise Residential, Mid to High Rise, and Low Rise Non-Residential. The main sections are subdivided into different categories depending on the type of development.

Low Rise Residential

Low Rise Residential Green Development Standard Checklist

| Criteria | | Points | Rationale | Implementation | |
|----------------------------|-----|---|-----------|---|--|
| Energy Conservation | | | | | |
| Energy Conservation | □ 1 | All ground-related dwellings shall be constructed in accordance with the most current version of Energy Star® requirements in place at the time of Building Permit application. | 12.0 | By some estimates, 40% of energy use in North America can be attributed to the heating, cooling and maintenance of buildings. Building to the Energy Star® standard enables new homes to be approximately 20% more energy efficient than those built to the minimum requirements of the provincial building code and strikes a balance between the premium level of energy efficiency associated with the Energy Star® label and an acceptable incremental cost. According to Natural Resources Canada, an Energy Star® home reduces greenhouse gas emissions by about three tons per year when compared to a similar home built to the minimum building code. Energy Star homes meet minimum insulation requirements and minimum amounts of electrical savings. Due to their high energy efficiency, Energy Star® homes also reduce air pollution and lessen other environmental impacts such as climate change. Various energy conservation incentives may be available for eligible projects. Applicants are encouraged to investigate the availability of any such incentives, including contacting Halton Hills Hydro and the Ontario Power Authority regarding current incentive programs. Information on the SaveONenergy program for homes that install various energy efficient measures including: prescriptive; performance based; custom and training. Information is available at: https://saveonenergy.ca/Business/Program-Overviews/New-Home-Construction.aspx | Demonstrated at time of: Building Permit Secured by: Subdivision or Site Plan agreement |

Low Rise Residential Green Development Standard Checklist
Town of Halton Hills

1

- Energy Conservation
- Water Conservation and Quality
- Community Design
- Air Quality
- Innovation & Green Features
- Waste Management
- Communications

Mid to High Rise:

| | Criteria | Points | Rationale | Implementation | |
|----------------------------|----------------------------|---|-----------|--|--|
| Natural Environment | | | | | |
| Natural Environment | <input type="checkbox"/> 1 | Use low-maintenance, drought resistant, non-invasive plant material native to Halton Region for a minimum of 50% of the landscaped areas (including vegetated roofs). | 2.0 | Reduces the demand for potable water which can increase by as much as 50% during the summer months placing a strain on potable water systems. For a list of native species refer to Conservation Halton Landscaping and Tree Preservation Guide Appendix 1 found at http://www.conserv@hilton.on.ca/ShowCategory.dfm?subCatID=898 or the Credit Valley Conservation Plant Selection Guideline Document found at: www.creditvalleyca.ca/wp-content/uploads/2013/04/Credit-Valley-Conservation-Plant-Selection-Guideline-FINAL-March-2013-2.pdf | Demonstrated at time of: Site Plan approval Secured by: Site Plan agreement |
| | <input type="checkbox"/> 2 | Plant a minimum of 1 tree native to Halton Region for every 30 sq metres of post development site area covered by soft landscaping or for a constrained site, plant some of the trees in nearby public open spaces. | 2.0 | This enhances the urban forest which provides shade to reduce the heat island effect, cleans the air by filtering some air born pollutants, provides oxygen, and improves slope stability through their root base. | Demonstrated at time of: Site Plan approval Secured by: Site Plan agreement |
| | <input type="checkbox"/> 3 | Provide triple the typical tree pit size of high quality soil per tree with a minimum depth of 0.8 m. | 1.0 | This helps to ensure that planted trees survive and thrive which increases the tree canopy in order to improve the environment and the streetscape. High quality soil is well drained, un-compacted soil comprised of 5 to 15 % organic material with a pH level of 6.0 to 8.0. | Demonstrated at time of: Site Plan approval Secured by: Site Plan agreement |

Mid to High Rise Green Development Standard Checklist
Town of Halton Hills

10

- Energy Conservation
- Water Conservation and Quality
- Transportation
- Air Quality
- Natural Environment
- Innovation & Green Features
- Waste Management
- Communications

Low Rise Non-Residential:

| | Criteria | Points | Rationale | Implementation | |
|-------------------------|--|--|------------|--|---|
| Waste Management | | | | | |
| Waste Management | <input type="checkbox"/> | 1 Ensure that a least 5% of a project's materials (based on value) comprise salvaged, refurbished or reused materials. | 1.0 | This will decrease the amount of construction material generated and maximize the recycling of non-hazardous construction and demolition debris. | Demonstrated at time of: Building permit Secured by: Site Plan agreement |
| | <input type="checkbox"/> | 2 Ensure that at least 15% of a project's construction materials (based on value) comprise recycled content. | 1.0 | This reduces the demand for virgin materials and therefore the environmental impacts associated with their extraction, processing, manufacturing and transportation. | Demonstrated at time of: Building permit Secured by: Site Plan agreement |
| | <input type="checkbox"/> | 3 Where wood based materials and products are used, utilize a minimum of 25% that are certified in accordance with the Forest Stewardship Council's principles and criteria for wood building components. | 2.0 | The Forest Stewardship's Council ensures sustainable harvesting and replanting practices. | Demonstrated at time of: Building permit Secured by: Site Plan agreement |
| | Maximum Possible Points In Waste Management | | 4.0 | | |

- Energy Conservation
- Water Conservation and Quality
- Transportation
- Air Quality
- Natural Environment
- Waste Management
- Innovation & Green Features
- Communications

These checklists were developed for the Town of Halton Hills and rural communities will have different criteria for green development. For example, for Community Design, a substantial number of points would be given for infilling and intensification in order to preserve farmland.

REFERENCES

- [1] fcm.ca/en/resources/mcip/case-study-green-development-standards-growing-communities
- [2] www.mississauga.ca/wp-content/uploads/2020/07/16135257/Green-Standards-Development-Standards-2012.pdf
- [3] www.clarington.net/en/business-and-development/resources/Community-Planning-and-Studies/Secondary-Plans/Soper-Springs/Sustainability-and-Green-Principles-AODA.pdf
- [4] engage.ottawa.ca/ottawa-high-performance-development-standard1

-
- [5] www.toronto.ca/city-government/planning-development/official-plan-guidelines/toronto-green-standard/toronto-green-standard-version-3/low-rise-residential-version-3/
- [6] www.vaughan.ca/cityhall/environmental_sustainability/GreenDirections/GeneralDocuments/2019Green_Directions_Vaughan_FINAL.pdf
- [7] www.whitby.ca/en/work/resources/Green-Standard/Whitby-Green-Standard-Reference-Guide.pdf
- [8] www.haltonhills.ca/en/your-government/resources/Documents/GreenDevelopStandardsBrBooklet4print.pdf
- [9] www.haltonhills.ca/en/business/resources/Documents/Green-Development-Standards-Study.pdf
- [10] www.haltonhills.ca/en/your-government/resources/Documents/Green-Development-Standards-Checklist.pdf