



*Canadian Nursery Landscape Association*  
*Association Canadienne des Pépiniéristes et des Paysagistes*

The Green City Award – The Importance of Urban Green Space

Climate change is affecting our cities, our communities, and our homes and is changing the way we must design and build our urban landscapes.

Yes, climate change is a global problem, but the effects hit us locally, where we live.

Each city, town and community must seek solutions and develop initiatives that are specific to their needs – on their streets, in their parks, playgrounds and schools, at all their green spaces, at every opportunity.



Never have our living landscapes been so important to our collective health and well-being – thriving, contributing, working green spaces and places for people to gather and enjoy.

It is with these green spaces that we have the power to change and contribute to the health and wellness of our cities and its people.



# Where did the Green City Begin

- ▶ Green cities are by no means a new idea.
- ▶ 'Garden Cities' were defined at the beginning of the last century (1902) in a book entitled 'Garden Cities of Tomorrow'. This vision was part of a garden city movement in reaction to the industrial revolution and the poor health of cities at the time.
- ▶ Afterwards, the mass use of cars became 'the' significant driver for urban planners and 'garden city' principles were mostly tossed aside.



# Why are Green Cities Important

- The world is urbanizing.
- In 2014, around 54% of the world's population were living in towns and cities, and this number is projected to increase to 70-80% by 2050. Almost two thirds of the urban area that will exist by the year 2030 is yet to be built, so it is vital that we take the opportunity to create and maintain healthy and sustainable urban environments.



# Why are Green Cities Important

- To be healthy cities, modern cities must be green cities,
- Plants and trees in cities are indispensable to: cool and filter air, clean and control water, control carbon, improve health and happiness, both mentally and physically. They are truly a critical source of healthy city life.



# Why are Green Cities Important

- ▶ Green cities, among other things, include green spaces, community spaces, parks and urban forests. All plants from groundcover to trees are essential to complete those green spaces, inside and out.
- ▶ New studies are highlighting the importance of plants in indoor spaces like office space, schools and especially health care facilities.



# Award Evaluation Criteria

- Air Quality – 20 Points
- Temperature Mitigation – 20 Points
- Water Quality & Stormwater Management – 20 Points
- Natural Assets & Land Use – 20 Points
- Health & Well-Being – 20 Points
- 100 Points Maximum





# Air Quality & Temperature Mitigation

- ▶ **Air Quality** – Reducing airborne pollutants specifically through the use of green spaces
- ▶ **Temperature & Urban Heat Island** – Reducing localized temperatures and heat island impacts



# Air Quality – The Lungs of the City

The award will explore how your municipality reduces airborne pollutants specifically using tree canopy and other living green infrastructure (green spaces).

- ▶ Crown canopy coverage
- ▶ Other designated and/or dedicated green space
- ▶ Green requirements for new developments
- ▶ Tree removal



# Temperature & Urban Heat Island

This section explores how your municipality reduces localized temperatures and heat island impacts using living green infrastructure.

- ▶ Street tree planting program and regulations
- ▶ Large scale green spaces are required through planning
- ▶ Medians and boulevards (streetscape) are used primarily for living green infrastructure
- ▶ Artificial turf vs natural turf



# Water Quality & Stormwater Management

Water quality and stormwater management overlap as most forms of stormwater management also act to filter and clean the water through the process. This section explores how your municipality is working to retain, detain, and treat runoff from rainfall in urban landscapes, which allows both cleansing and control.



# Water Quality & Stormwater Management

## Permeable Paving

Rainwater runoff can be retained or detained using permeable paving.

- ▶ What percentage of urban development is permeable (pervious) vs non-permeable?
- ▶ Photo from Calgary flood of 2013



# Water Quality & Stormwater Management

## Green Roofs

Rainwater runoff can be retained or detained using green roofs and walls.

- ▶ Do you have a green roof regulation and/or bylaw?
- ▶ Do you provide incentives to developers to include green roofs?



# Water Quality & Stormwater Management

## Rain Gardens & Bioswales

Rainwater runoff can be retained or detained using raingardens and/or bioswales or other water storage methods.

- ▶ Do you have raingardens and/or bioswales as part of your urban development guidelines and/or bylaws?
- ▶ Do you provide incentives to developers to include such methods?



# Water Quality & Stormwater Management

## Rain Gardens & Bioswales

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# Water Quality & Stormwater Management

## Urban Wetlands

- ▶ Are urban wetlands and environmentally sensitive areas protected through municipal guidelines and/or bylaws?
- ▶ Are new stormwater catchment solutions built into new developments?



# Natural Assets & Land Use

This section explores what policy(s) your municipality has in place to create effective land use planning and retain and protect existing natural assets.

► What kinds of green infrastructure or natural assets are formally protected or supported by policy and/or regulation?



# Natural Assets & Land Use

- ▶ What kinds of green infrastructure initiatives does your municipality have in place?
- ▶ What kinds of municipal public outreach and education programs are in place to support Green City designs?



# Natural Assets & Land Use

Municipal greenways and natural open green spaces within each neighbourhood can contribute to municipal wide connectivity.

► Does your municipality have established clear greenways through neighbourhoods that connect to adjacent neighbourhoods creating municipal wide greenways?



# Health & Well Being

This section explores how your municipality supports physical health, mental health, and quality of life (livability), while improving safety and reducing crime and perceptions of danger within your municipality.

► How are you using your green spaces with health & well being a goal?



# Health & Well Being

- ▶ Have you improved citizen engagement in recreational or social activities in green spaces through municipal outdoor recreational programs and activities?
- ▶ What percentage of your municipal citizens have green spaces or parks within a ten-minute walk of where they live?
- ▶ How many kilometres of trails are available to the public in your municipality?



# Health & Well Being

► Do you support urban food production and food safety through garden plots, on rooftops, or as community gardens?



# Green City Award

Thank you for letting us tell you about the CNLA Green City Award! Through the award we hope to encourage municipalities from coast to coast to up their game and improve the health and livability of their urban spaces. We are looking forward to your entries!





Introducing the Canadian  
Landscape Standard 2.0.

Launching in March of 2020

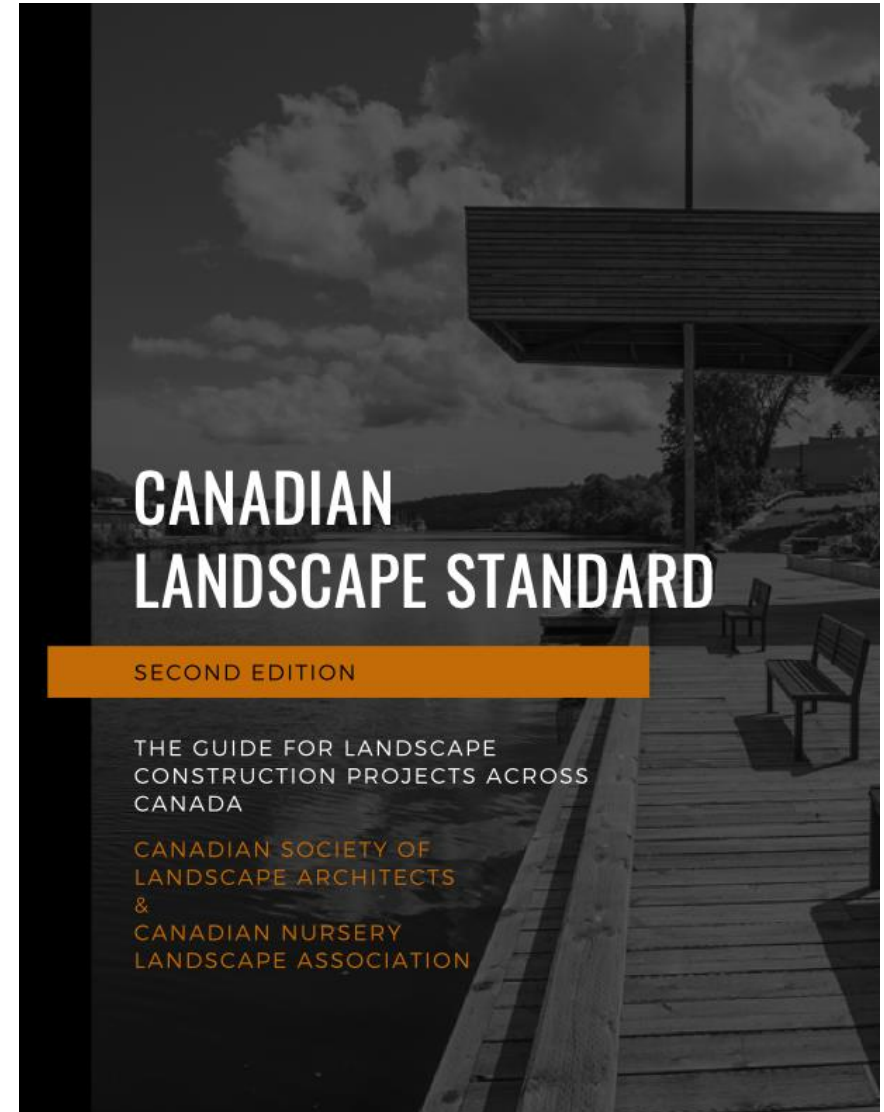
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**Canadian Society of  
Landscape Architects**



**Canadian Nursery  
Landscape Association**



# NEW SECTION HIGHLIGHTS

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Interlocking Concrete Paver Institute [ICPI] Hardscape Standards – one Standard for North America that will align with the National Master Specification and our industry accreditations. <https://www.icpi.org/>

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Illustrations and details will be added to Sections to help the user better understand and communicate.

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Invasive Species and the National Voluntary Code of Conduct for the Ornamental Horticulture Industry – for Landscape Architects, Landscape Contractors, Growers, Plant Breeders, Retailers, Suppliers and Specifiers.

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Snow & ice Operations Risk Management Guidelines

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Composting regulations and guidelines

# CLIMATE CHANGE

- CSLA Climate Change Position paper
- CSLA Adaption Primers

<http://www.csla-aapc.ca/climate-change/climate-change>

<http://www.csla-aapc.ca/primers>

- CNLA The Living Landscape

- CSLA Landscape Charter

<http://www.csla-aapc.ca/charter>





# GREEN INFRASTRUCTURE

- Urban Forests
- Stormwater Systems
- Parks and Open Spaces
- Agriculture & Urban Agriculture
- Natural Heritage
- Living Architecture – Green Roofs and Green Walls

# LANDSCAPE COMMISSIONING

- Applying the principles of traditional building commissioning to the landscape so the landscape meets or exceeds expected performance goals;
- Green asset management
- Integrate the existing Maintenance Sections – formerly  
Establishment Maintenance  
Landscape Maintenance

Section LANDSCAPE COMMISSIONING to be used as a tool to create Landscape Operations Manuals, Plant Health Care Programs, Landscape Maintenance Contracts.



Green Cities Foundation  
is a Canadian charity  
whose mission is to  
connect  
**Plants & people**  
for a greener, healthier  
urban climate.

[GCFoundation.ca](http://GCFoundation.ca)

# #GreenMyCity

GCFoundation.ca

Through the #GreenMyCity Program, Green Cities Foundation will rehabilitate, restore or "green" public spaces in Canadian Cities.

These projects will improve the quality of life for the more than 82% of the Canadians who call these cities home. Donations will have a measurable, positive impact on air quality, storm water damage and mental and physical health.

PHASE 1

Canadians **identify** a community in their city that would benefit from building or rehabilitating a public green space, and **apply** to have the Green Cities Foundation select their project to be built.

PHASE 2

Up to 5 projects will be **selected** for greening each year, across the country. Volunteers will work with the city and community to **develop** a design, project plan and budget.

PHASE 3

Volunteers will be **organized**, donations of materials **assembled**, and volunteer horticulture industry professionals will **lead** the community to **build** the green space.



Green Cities Foundation is a Private Charitable Foundation established by the Canadian Nursery Landscape Association (CNLA), for which CNLA remains a generous contributor. Our annual operating costs are paid by CNLA.



Thank you!