



CITY OF HAMILTON
PLANNING AND ECONOMIC DEVELOPMENT DEPARTMENT
Planning Division

TO:	Chair and Members Planning Committee
COMMITTEE DATE:	September 6, 2022
SUBJECT/REPORT NO:	Public Consultation on Sustainable Building and Development Guidelines – Low Density Residential Uses (PED22185) (City Wide)
WARD(S) AFFECTED:	City Wide
PREPARED BY:	Mallory Smith (905) 546-2424 Ext. 1249
SUBMITTED BY:	Steve Robichaud Director, Planning and Chief Planner Planning and Economic Development Department
SIGNATURE:	

RECOMMENDATION

- (a) That Report PED22185, (City Initiative CI-22-I) including the report titled Sustainable Building and Development Guidelines Phase 1 – Low Density Residential Uses - Background Research Report, attached as Appendix “A” to Report PED22185, be received;
- (b) That staff be authorized to proceed with public engagement for the proposed Sustainable Building and Development Guidelines for Low Density Residential Checklist attached as Appendix “B” to Report PED22185 and report back to the Planning Committee on the feedback received, including the identification of the preferred approach for the Sustainable Building and Development Guidelines incorporation into the City of Hamilton’s Site Plan Guidelines.

EXECUTIVE SUMMARY

In December 2020, the City retained WSP to establish a set of criteria for the evaluation of Low Density Residential (LDR) development proposals against the objectives of achieving sustainable and resilient communities that reduce greenhouse gas (GHG) and carbon emissions and decrease energy usage and water consumption. The Report is titled ‘Sustainable Building and Development Guidelines Phase 1 – Low Density

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

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Residential Uses - Background Research Report' and is referred to in this Report as the 'Background Report'. The purpose of the work was to develop an assessment tool in the form of a checklist for the City to use in determining the extent to which Sustainable Building and Development Guidelines (SBDG) can be incorporated into new or retrofitted developments. This assessment tool can ultimately be implemented as part of the submission requirements for Planning Applications under the *Planning Act*.

This first phase of the project focuses on Low Density Residential uses, which for the purpose of this report mean single detached dwelling, duplex dwelling, or semi-detached dwelling as defined in Hamilton Zoning By-law No. 05-200. The study area encompasses the entire City of Hamilton. The subsequent phases of the project will include medium and high density residential development, industrial, commercial, and institutional development within the City. As a result of the introduction of two new LDR zones in Zoning By-law No. 05-200, approved by Council on August 12, 2022, additional uses may be explored to be included in the draft LDR Guidelines. The Community Energy Emissions Plan (CEEP) was brought forth to Planning Committee on August 8, 2022 and was approved by Council on August 12, 2022. The CEEP was a prerequisite to bringing the Guidelines forward.

The purpose of Sustainable Building and Development Guidelines is to improve the environmental performance of new industrial, commercial, institutional, and residential development within the City. Phase 1 of the work specifically applies to LDR uses. The Background Report resulted in the development of a draft Sustainable Building and Development Guidelines for Low Density Residential Uses Checklist, referred to in this report as the 'Guidelines'. The first phase of the Background Report has focused on targets and criteria for Low Density Residential Uses. The Guidelines attached to the Background Report will establish minimum and aspirational targets and criteria with respect to building construction and design, natural environment and open space, mobility, infrastructure, etc., a grading or scoring system to evaluate the performance of proposed developments against the targets and criteria, and, minimum information requirements to be submitted with development applications to inform the evaluation of the proposed development against the Guidelines.

The Guidelines may apply to proposed LDR development under the following conditions:

- Where an Application is made under the *Planning Act* for a Draft Plan of Subdivision that proposes five or more low density residential dwellings with access from a public street, and where the Application is subject to the City of Hamilton Site Plan Control By-law; and,
- Proposed Applications that require an amendment to the City's Official Plan or Zoning By-law to satisfy the above.

The Background Report (attached as Appendix “A” to Report PED22185) includes a summary of the existing documents and similar assessment tools from other municipalities, existing sustainable building standards and land use policies, programs, and best practices, and regional and provincial regulations. The Report provides an overview of emerging trends, as well as a Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis of the application and implementation of Sustainable Building and Design Guidelines within the City.

The Guidelines represent one of the most tangible ways for the City to direct and influence more sustainable community development practices for Low Density Residential uses. While the City’s Urban Hamilton Official Plan establishes broad sustainable policy direction, the Guidelines could be considered an important implementation tool, along with other land use planning instruments, such as the City’s Zoning By-laws. The Guidelines may afford the City an opportunity to address a breadth of emerging challenges associated with development, such as public health, climate change, energy and resource use. By addressing a breadth of impact categories, the first phase of the Guidelines represents an impactful tool contributing to the responsible management of growth and change while improving the overall health and well-being of the community. Future phases of the Guidelines will expand on the LDR uses and develop guidelines for other land uses.

Alternatives for Consideration – See Page 12

FINANCIAL – STAFFING – LEGAL IMPLICATIONS

Financial: N/A

Staffing: N/A

Legal: N/A

HISTORICAL BACKGROUND

The project aligns with the stated goals of the City’s Corporate Goals and Areas of Focus for Climate Change Mitigation and Adaptation which was presented in December 2019 to the Corporate Climate Change Task Force in Report CMO19008/HSC19073. Goal 1 of the Corporate Goals and Areas of Focus for Climate Change Mitigation and Adaptation was to increase the number of new and existing high-performance state-of-the-art buildings that improve energy efficiency and adapt to a changing climate. The high impact action associated with that goal is for the City to work within its jurisdiction and authority to achieve a high level of environmental performance in future private sector construction. The goal identifies six areas of focus for further work, including, to

produce information materials and best practice guidelines related to green building practices. The document identifies 2020 as the year for initiation.

As a result, a Request for Proposal was sent out to develop a set of Sustainable Building and Development Standards for Low Density Residential uses in December of 2020. WSP was retained by the City to conduct the background research and provide recommendations, attached as Appendices “A” and “B” to Report PED22185.

The Guidelines also help to implement the City’s Climate Action Strategy, which was adopted by Council in August 2022 through Report CM22016/PED22058(a)/HSC22030(a).

POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

Our Future Hamilton

The draft Guidelines align with the City’s Community Vision Statement (Our Future Hamilton), which includes advancing environmental sustainability and stewardship through the Clean and Green community priorities.

The extensive engagement undertaken during the development of *Our Future Hamilton* revealed that top priorities for Hamilton residents included:

- The advancement of environmental responsibility and stewardship;
- Including the reduction of contribution to climate change;
- To strive to be a zero-waste community;
- The protection and improvement of water and air quality;
- The preservation and rehabilitation of the City’s natural ecosystems; and,
- The transition to more sustainable practices.

The Guidelines will assist the City in moving towards achieving these components of the Vision. The nine areas of focus identified in the Background Report align with the *Our Future Hamilton* priorities.

Urban Hamilton Official Plan

The Urban Hamilton Official Plan includes policies that encourage the reduction of GHG and increase of energy efficient development. The following policy, among others apply:

“B.3.7.2 The City shall support energy efficient and environmental designed development through:

- a) Approval of planning applications, including applications for zoning by-law amendments, site plan approval, and plans of subdivision or condominium, as appropriate;
- b) The use of environmental building rating systems such as certification under the Leadership in Energy and Environmental Design (LEED) program or an equivalent rating system for upgrading/retrofitting of existing development and new development;
- c) Designs which use renewable energy systems or alternative energy systems;
- d) Designs which use cogeneration energy systems;
- e) Designs which minimize building heat loss and capture or retain solar heat energy in winter and minimize solar heat penetration in summer. Consideration shall be given to such measures as green roofs or reflective roofs, discouraging excessive surface parking, allowing direct access to sunlight, and effective landscaping;
- f) Building or structure orientations that maximize solar or wind energy;
- g) Designs that encourage sustainable forms of transportation, including active transportation, transit, and energy conserving vehicles;
- h) Designs that facilitate cooperation/joint energy efficiency between developments to optimize the efficient use of resources;
- i) Energy conservation initiatives, including energy demand management;
- j) Water and storm water conservation/management practices such as green roofs, water recycling systems, urban storm water swales, etc.;
- k) Encouraging the use of reclaimed building materials as appropriate;
- l) Pilot projects and community energy plans as appropriate; and,
- m) Other environmental development standards that encourage energy efficiency and environmental design, as contained in the City's approved engineering policies and standards and master planning studies and are supported by the City's financial incentive programs."

The draft Guidelines align with environmental policies in the UHOP as it relates to Low Density Residential development through encouraging energy efficiency and environmental design. Future Guidelines will be developed to set standards and guidelines for other forms of land uses.

Rural Hamilton Official Plan

The Rural Hamilton Official Plan includes policies that encourage the reduction of GHG and increase of energy efficient development. The following policy, among others apply:

- “3.7.1 The City shall support energy efficient, low impact, and environmental designed development through:
- a) Approval of planning applications, including applications for zoning by-law amendments, site plan approval, and plans of subdivision or condominium, as appropriate;
 - b) The use of environmental building rating systems such as certification under the Leadership in Energy and Environmental Design (LEED) program or an equivalent rating system for upgrading/retrofitting of existing development and new development;
 - c) Designs which use renewable energy systems or alternative energy systems;
 - d) Designs which use cogeneration energy systems;
 - e) Designs which minimize building heat loss and capture or retain solar heat energy in winter and minimize solar heat penetration in summer. Consideration shall be given to such measures as green roofs or reflective roofs, discouraging excessive surface parking, allowing direct access to sunlight, and effective landscaping;
 - f) Building or structure orientations that maximize solar or wind energy;
 - g) Designs that encourage sustainable forms of transportation and facilitate transportation demand management, including active transportation and energy conserving vehicles;
 - h) Designs that facilitate cooperation/joint energy efficiency between developments to optimize the efficient use of resources;
 - i) Energy conservation initiatives, including energy demand management;
 - j) Water and storm water conservation/management practices such as green roofs, water recycling systems, etc.;
 - k) Encouraging the use of reclaimed building materials as appropriate;
 - l) Pilot projects and community energy plans as appropriate; and,
 - m) Other environmental development standards that encourage energy efficiency and environmental design as contained in the City’s approved engineering policies and standards and master planning studies, and are supported by the City’s financial incentive programs.”

The draft Guidelines align with environmental policies in the RHOP as it relates to Low Density Residential development through encouraging energy efficiency and environmental design. Future Guidelines will be developed to set standards and guidelines for other forms of land uses.

Greenbelt Plan (2017)

An element of the vision of the Greenbelt Plan is to build resilience to and mitigate climate change, including integrating climate change considerations into planning and managing growth that includes incorporating techniques to reduce greenhouse gas emissions, and increasing the resilience of settlement areas and infrastructure within the Greenbelt. The draft Guidelines achieve this by encouraging built form that reduce greenhouse gas emissions and increase resiliency through environmental design.

A Place to Grow: Growth Plan for the Greater Golden Horseshoe (2020)

One of the Guiding Principles of the Plan is to integrate climate change considerations into planning and managing growth such as planning for more resilient communities and infrastructure – that are adaptive to the impacts of a changing climate – and moving towards environmentally sustainable communities by incorporating approaches to reduce greenhouse gas emissions. A goal set in the Growth Plan is to develop strategies to reduce greenhouse gas emissions and improve resilience through the identification of vulnerabilities to climate change, land use planning, planning for infrastructure, including transit and energy, green infrastructure, and low impact development:

“Section 2.2.1.4

- f) Mitigate and adapt to the impacts of a changing climate, improve resilience and reduce greenhouse gas emissions, and contribute to environmental sustainability; and,
- e) Integrate green infrastructure and appropriate low impact development.

Section 4.2.10.2

In planning to reduce greenhouse gas emissions and address the impacts of a changing climate, municipalities are encouraged to:

- a) Develop strategies to reduce greenhouse gas emissions and improve resilience through the identification of vulnerabilities to climate change, land use planning, planning for infrastructure, including transit and energy, green infrastructure, and low impact development, and the conservation objectives in policy 4.2.9.1.”

The draft Guidelines align with environmental policies within the Growth Plan as it related to Low Density Residential development through encouraging built forms that improve resiliency and increase energy efficiency and environmental design. The

Guidelines can contribute to the integration of green buildings and low impact development.

Climate Action Strategy

The Guidelines contribute to the City’s Climate Action Strategy and move toward the goals of the CEEP. The CEEP is based on a goal of achieving a community-wide GHG emission reduction target of net-zero by 2050. It establishes a low-carbon pathway, modelling 28 targets for industrial, building, transportation, renewable energy and the natural environment. The CEEP includes an implementation strategy and financial and economic analysis for fully meeting the 28 targets. It also provides an implementation strategy of actions for both the City of Hamilton and the community to take in order to transition to a prosperous net-zero emission community. The Community Energy & Emissions Plan includes five Low-Carbon Transformations based on current city-wide data. Transformation #2 states “Transforming Our Buildings – creating a city-wide building retrofit program that is scalable, establishing Green Development Standards for new buildings, and building our skilled trade labour force.” The Guidelines contribute to achieving Transformation #2 by implementing Green Development Standards for new LDR buildings.

RELEVANT CONSULTATION

The Background Report and accompanying Guidelines have been circulated to staff for comments. Following the comment period, a draft was presented to the Development Industry Liaison Group (DILG) on April 12, 2021. Attendees to the DILG meeting included representatives from various stakeholders’ groups including from the Hamilton Chamber of Commerce, the City of Hamilton Growth Management, and the West End Home Builder’s Association (WEHBA).

As a result of this Report, future consultation will occur with members of the public and community stakeholders to inform the final Guidelines and implementation measures.

ANALYSIS AND RATIONALE FOR RECOMMENDATION

The Guidelines are intended to elevate the environmental performance of LDR development within the City. It will also be an important tool to facilitate thoughtful and innovative development that helps to achieve healthy, complete, and sustainable communities.

The Guidelines apply to single detached dwellings, duplexes and semi-detached dwellings. With Council’s approval, through Report PED22154, of two new LDR Zones in Zoning By-law No. 05-200 and the expansion of permitted LDR uses and conversion

permissions, the draft Guidelines may need to be updated to incorporate the additional LDR uses.

The goal of the Guidelines is to establish a set of criteria for the evaluation of development proposals to achieve sustainable and resilient communities that reduce greenhouse gas (GHG) and carbon emissions, decrease energy usage and water consumption. By applying a practical set of green development standards, the City will join other municipalities, the development industry, tenants, and home buyers, in embracing green building technologies and improved building performance that aligns with the City's objectives in addressing climate change. The purpose of this work is to develop an assessment tool, in the form of a checklist, for the City to use in determining the extent to which Guidelines are being incorporated into new or retrofitted LDR developments. This assessment tool may be part of the submission requirements for many privately planning applications under the *Planning Act*.

The scope of work completed thus far includes a background review of other municipalities that have developed checklists to be included as part of Applications under the *Planning Act* for low density uses. The major component of the background review involved the assessment and evaluation of lower tier or single tier municipalities that have developed a similar assessment tool. A SWOT analysis of the application and implementation of Guidelines within the City was also included in this background analysis. The best practices evaluation found that Canadian municipalities that have implemented best practices in sustainable development standards have done so using educational guidelines or with more stringent prescriptive and performance-based requirements. Elements of these standards, guidelines and requirements may inform how the guidelines will be applied, which projects they will apply to, and how compliance will be tracked. Each municipality establishes overarching environment requirements that are grouped according to their targeted goal (e.g. GHG reduction, Indoor Water use).

WSP conducted staff and some industry consultation during the preparation of the Background Report. The next steps of Phase 1 of the SBDG draft Guidelines will be for staff to conduct public consultation and further industry consultation.

For the purposes of the Background Report, environmental themes have been combined into nine Impact Categories. Only requirements that are applicable to the LDR uses have been included:

- Energy and Greenhouse Gas Emissions;
- Water;
- Air;
- Land;

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- Social Wellbeing;
- Waste;
- Education;
- Food; and,
- Community Design.

The Background Report identifies nine environmental themes applicable to Low Density Residential development that have been broken into further sub-categories, as shown in Appendix ‘C’ to Report PED22185. The themes informed the components of the Guidelines:

1. **Energy and GHG Emissions** - The Energy and GHG Emissions Impact Category focuses on buildings and their energy performance during the operational stage. In each of the municipal standards reviewed, energy was invariably found to be a predominant focus area, and while GHG emission targets were not always explicitly separated from energy targets, the two are closely related and were typically addressed;
2. **Water** - The Water category focuses on reducing the use of potable water for indoor and outdoor water uses, as well as rainwater management. Reducing potable water use, harvesting, and re-using stormwater, and managing the quantity and quality of stormwater are all common themes in this Impact Category. Each of the municipal standards reviewed include requirements that address one or more of these themes;
3. **Air** - The Air Impact Category focuses on providing a healthy indoor air quality for building occupants and improving local outdoor air quality by mandating requirements or restrictions on airborne pollutant source control and reductions;
4. **Land** - The Land Impact Category focuses on the preservation, restoration, and enhancement of the site and surrounding areas. The municipal requirements reviewed focus on landscaping strategies to promote biodiversity and enhance the natural spaces surrounding the built environment. The urban heat island phenomenon is also addressed by the municipal standards reviewed by requiring the use of reflective roofing materials and hardscapes, or green roofs;
5. **Social Well-Being** - The Social Well-Being Impact Category focuses on elements of development that may affect human health and satisfaction. Public art, culture, equity and inclusion, and safety are among the factors considered in this category;

6. Waste - The Waste Impact Category focuses on reducing the waste generation during construction, and during the operational phases of the development, as well as the procurement of building materials that have lower environmental impacts;
7. Education - The Education Impact Category focuses on the promotion and communication of green building features and technologies to help educate the general public on sustainable design. Not all municipalities focus specifically on education in their green development standards, but a few do include specific measures in this Impact Category;
8. Food - The Food Impact Category focuses on access to gardens and encouraging the infrastructure to support the availability of local food. While it is not as commonly adopted as other categories, it is incorporated into a few municipalities' standards and presents a unique opportunity that is growing in interest and utility. Access to gardens and local food also contributes to the community's social well-being, and the resilience of the local economy and supply chains; and,
9. Community Design - The Community Design Impact Category focuses on the massing and orientation of the project. Some aspects of community design can apply to buildings on an individual basis, but this category is typically more applicable to broader site and community plans.

Following further analysis on the environmental themes identified, the Background Report also identifies the City's SWOT in implementing the Guidelines. Strengths identified include reduction in environmental impacts and risk, and a meaningful impact on community development. Weaknesses included the complexity, resourcing, administration, implementation, and monitoring.

Finally, in Appendix "B" attached to Report PED22185, WSP proposed 'City of Hamilton Sustainable Building and Development Guidelines for LDR Checklist'. The Guidelines may apply to proposed Low Density Residential development under the following conditions:

- Where an Application is made under the *Planning Act* for a Draft Plan of Subdivision that proposes five or more low density residential dwellings with access from a public street, and where the Application is subject to the City of Hamilton Site Plan Control By-law; and,
- Proposed Applications that require an amendment to the City's Official Plan or Zoning By-law to satisfy the above.

The proposed guidelines checklist is attached as Appendix "B" to Report PED22185.

Next Steps

1. With Council approval, public consultation will be initiated on the SBDG Phase 1 – Low Density Residential Uses Background Research Report with residents and stakeholders on sustainable building and development standards; and,
2. The SBDG Phase 1 – Low Density Residential Uses Background Research Report and recommendations provide a platform for public engagement, dialogue and future considerations on zoning regulations based on the nine key themes identified; Energy and GHG Emissions, Water, Air, Land, Social Wellbeing, Waste, Education, Food, Community Design. Feedback from the public will be incorporated into the final Guidelines which will be presented to the Planning Committee at a later date.

ALTERNATIVES FOR CONSIDERATION

Council may choose not to direct staff to engage in public consultation, and not proceed with developing Sustainable Building and Development Guidelines.

ALIGNMENT TO THE 2016 – 2025 STRATEGIC PLAN

Community Engagement and Participation

Hamilton has an open, transparent and accessible approach to City government that engages with and empowers all citizens to be involved in their community

Economic Prosperity and Growth

Hamilton has a prosperous and diverse local economy where people have opportunities to grow and develop.

Healthy and Safe Communities

Hamilton is a safe and supportive City where people are active, healthy, and have a high quality of life.

Clean and Green

Hamilton is environmentally sustainable with a healthy balance of natural and urban spaces.

Built Environment and Infrastructure

Hamilton is supported by state-of-the-art infrastructure, transportation options, buildings and public spaces that create a dynamic City.

Our People and Performance

Hamiltonians have a high level of trust and confidence in their City government.

APPENDICES AND SCHEDULES ATTACHED

Appendix “A” to Report PED22185 - Sustainable Building and Design Guidelines Phase
1 – Low Density Residential Uses Background
Research Report – June 2021

Appendix “B” to Report PED22185 - Sustainable Building Design Guidelines Low
Density Residential Checklist – June 2021

Appendix “C” to Report PED22185 - Identified Environmental Categories and Sub-
Categories

MS:sd