

ENVIRONMENT COMMITTEE – FEBRUARY 24, 2009

MEASURING ENVIRONMENTAL SUSTAINABILITY PERFORMANCE OF DEVELOPMENT FILE #22.24.1

Recommendation

The City Manager, Commissioner of Planning and Director of Policy Planning in consultation with the Director of Reserves and Investments recommends:

- 1) That Council endorse the development of a framework to measure and promote sustainability performance of development through the application process, currently to be titled Sustainable Development Evaluation; and
- 2) That Council adopt in principle the work plan presented in this report to be used as the basis for developing proposals to seek external funds to carry out the work plan; and,
- 3) That a capital project entitled "Measuring Environmental Sustainability Performance of Development" in the amount of \$80,000 be forwarded to the Budget Committee to be included for consideration in the 2009 Capital Budget and funded from external funding sources.

Economic Impact

The funding for this project is not included in any of the 2009 City budgets. Therefore, Staff is recommending that the capital project in the amount of \$80,000 be forwarded to the Budget Committee to be included for consideration in the 2009 Capital Budget subject to receiving external funding as described in the Report below.

Communications Plan

An inter-departmental team (Building Standards, Community Services, Engineering, Economic Development, and Planning) led by Policy Planning will ensure appropriate review and participation in the development of the Sustainable Development Evaluation criteria.

External communications and an outreach strategy for stakeholder consultation for the development of the Sustainable Development Evaluation criteria will be developed pending Council approval of the recommendation in this Report and successfully obtaining external funding to carry out the work plan identified below. Relevant external stakeholders include architects, designers, planning consultants, engineering consultants, developers, builders, York Region, PowerStream, neighbouring municipalities, and the Toronto Region Conservation Authority. Mailings, E-newsletters, workshops or other approaches will be employed for outreach to ensure adequate stakeholder consultation in the development of the Sustainable Development Evaluation criteria.

Purpose

The purpose of this report is to seek Council endorsement of a work plan to develop a framework for measuring the sustainability performance of development applications, currently known as Sustainable Development Evaluation. The development of such a framework is an identified action plan in the Community Sustainability and Environmental Master Plan. While components of the Official Plan review process and Focus Area Studies will include aspects of sustainable community design and sustainable built form on a City-wide or area basis, the focus of this effort is to develop evaluation criteria that can be applied through the development review process at the site and neighbourhood level.

Background - Analysis and Options

Previous Action

On October 9, 2007, The Environment Committee recommended “that staff provide a report to the Environment Committee outlining such strategy that includes energy conservation, water conservation, waste management and other aspects of development.” The recommendation was a response, in part, to a presentation on the York Region program, Sustainable Development Through LEED™, adopted by York Region Council at its meeting of June 21, 2007. A separate report on this topic is planned to come forward to Council at the February 23rd 2009, Committee of the Whole, Working Session. While the Environment Committee made several recommendations related to LEED™ and sustainability, this report responds to the broader recommendation, as cited above, to reduce ecological footprints of development. As a result, this report presents a structured approach to implement a variety of sustainability measures through the development review process to address energy conservation, water conservation, waste reduction, sustainable materials, and natural heritage enhancement.

Relationship to Community Sustainability & Environmental Master Plan and Official Plan Review

This report presents one approach to implement sustainable development measures. The Community Sustainability & Environmental Master Plan (CSEMP) will address the social, economic and environmental aspects of sustainability by delivering a framework of goals, objectives and action plans to guide the City's operational and regulatory functions. The Official Plan Review is the appropriate policy forum to address critical issues that include, but are not limited to, urban form, livability, and mobility. Policies and actions that address short-term and long-term targets will be more comprehensively addressed in these broader policy planning initiatives. This report presents a structured approach to implement a variety of sustainability measures through the development review process that can be implemented prior to the finalization of the Official Plan. Revision of the criteria for sustainable development evaluation should occur on an ongoing basis, but particularly once the CSEMP is completed so that the structure of the sustainable development criteria is consistent with the framework of the CSEMP.

Policy Basis for Sustainable Development Evaluation Criteria

Two recent pieces of provincial legislation, the Planning and Conservation Land Statute Law Amendment Act and the Places to Grow Act, provide most of the policy support for implementing a sustainable development evaluation protocol Site Plan and Plan of Subdivision review. Key components of the legislation are described below.

1. The Planning and Conservation Land Statute Law Amendment Act 2006 (Bill 51)

As identified in the January 21, 2008 Report to the Committee of the Whole, The Planning and Conservation Land Statute Law Amendment Act 2006 (Bill 51) provides several opportunities to integrate sustainability initiatives into the planning process, including:

- (i) Community Improvement Planning for efficient use of land and energy conservation;
- (ii) Site Plan Control provisions for the exterior design features of buildings as well as the ability to secure streetscape improvements to encourage sustainable design; and
- (iii) Consideration in a Plan of Subdivision and Site Plan for energy conservation and supply as well as sustainable transportation alternatives to support public transit and be oriented to pedestrians.

The Development Planning Department has established a working group to implement the provisions of Bill 51 with particular focus on defining a “complete application”. The Sustainable Development Evaluation criteria can be included as a required form to be prepared by the applicant for each development application in order to provide a “complete application”.

2. Places to Grow Act

The Table below summarizes the sustainability provisions in the Places to Grow Act as articulated in the Growth Plan for the Greater Golden Horseshoe (Ministry of Public Infrastructure Renewal 2006). Municipalities can amend official plans to integrate these measures in policy. The column at the left, “Sustainability Theme”, is a proposed categorization of the policies in the Growth Plan for the Greater Golden Horseshoe that provides a more straight-forward classification of sustainability measures as it may apply to development application review.

| Sustainability Theme | Sustainability Measure | Places to Grow Reference | Places to Grow Issue |
|--|---|--|---|
| Community Design and Built Form | Efficient use of land | 2.2.3.6 | Intensification targets |
| | Mixed use | 2.2.3.7 b) 2.2.6.2 | Intensification areas Preserving employment areas |
| | | 2.2.7.1 c) | Greenfield |
| | Pedestrian-oriented public realm | 2.2.3.7 c) | Intensification areas |
| | Optimized existing and new infrastructure | 3.2.5 3.2.6 | Water and wastewater systems Community infrastructure |
| Built heritage and cultural landscapes | 4.2.4.1 e) | Cultural heritage conservation | |
| Improved Mobility | Transit-supportive communities | 2.2.3.7 d) 2.2.5 3.2.3 | Intensification areas Major transit stations Intensification areas |
| | Reducing the dependence on the automobile | 2.2.7.1 b) and d) 3.2.2.1 b) 3.2.2.3 b) 3.2.3.3 | Greenfield Transportation infrastructure Transportation corridors Integrated pedestrian and bicycle networks |
| Resource Conservation | Reduced consumption | 3.2.5.4 a) 4.2.4.1 a) 4.2.4.1 b) 4.2.4.1 c) 4.2.4.1 d) | Water and wastewater systems Water conservation Energy conservation Air quality Integrated waste management |
| Natural Habitats and Open Space | Natural heritage system | 4.2.1.3 | Natural heritage features |
| | Connected open space | 4.2.1.4 | Accessible open space system |

Examples from Other Municipalities of Evaluation of Sustainable Development Measures at Development Review

1. Markham Centre Performance Measures

Markham Centre is envisioned as a model for smart growth that began with a public consultation process in 1992 and resulted in the Markham Centre Secondary Plan (OPA 21) being adopted by Markham Council in 1994. As described in the Performance Measures Document (Town of Markham 2004, as amended), Markham Centre is designed to have “a distinctly urban character,

with higher density, mixed-use developments, strong streetscapes and world-class parks and public amenities". There are 11 guiding principles for Markham Centre developments. These have been further defined into 64 performance measures under 5 categories, which are intended to further articulate the objectives for Markham Centre and provide a clear direction of expectations for development. The performance measures within each of the five categories identified below also reflect potential relationships to LEED Canada NC 1.0:

- (i) greenlands (natural environment);
- (ii) transportation;
- (iii) built form;
- (iv) green infrastructure (sustainable technology for resource conservation); and
- (v) public space (including parks and public art).

An Advisory Committee of 20 to 25 people representing ratepayer groups, academia, development and business interests evaluate the sustainability performance of development applications based on an applicant's self-assessment to the Performance Measures. The Staff reports to Council concerning individual applications include the Advisory Committee's evaluation of the proposal's adherence to the Performance Measures.

2. North Oakville East Secondary Plan and Sustainability Checklist

The North Oakville East Secondary Plan, which establishes the Town's vision for North Oakville, commits the Town to the principle of sustainable development. Their sustainability checklist (Town of Oakville 2008) is critical to assess sustainable features of planned developments and ensure ongoing commitment to sustainable development in the Plan. It has been divided into four principles of sustainability, as defined in the North Oakville East Secondary Plan:

- (i) development form;
- (ii) air quality/energy efficiency;
- (iii) water management; and
- (iv) the natural heritage system.

The sustainability checklist applies to all of north Oakville lands. It is identified in pre-consultation meetings as a requirement to be prepared by the applicant in order to submit a complete application. Elements of the sustainability checklist that have policies in the official plan are mandatory. Discretionary items of the sustainability checklist that have been met by project proponents are recognized in staff reports to Council on development applications.

3. City of Pickering Sustainable Development Guidelines

The Sustainable Neighbourhood Plan is a project of the City of Pickering triggered in part by the planning process for the Seaton lands and the new Official Plan review. Two main guidelines were produced in May 2007 for further consideration following consultants' reports and stakeholder discussion (Dillon Consulting, Bogdan and Associates Inc. and Halsall 2007). The Neighbourhood Guideline is applied at the equivalent to a secondary plan or block plan scale. The second guideline operates at plan of subdivision, site plan, rezoning and building permit level. The two guidelines are structured using the same main categories, but recognize different outcomes consistent with the scale of the development application. There are 9 categories in the sustainable development guidelines:

- (i) Pre-consultation
- (ii) Environmental protection
- (iii) Location of development/selection of lands
- (iv) Design of development, land use and distribution
- (v) Design of development, density and compact built form
- (vi) Design of development, connections
- (vii) Design of development, pedestrian-oriented community

- (viii) Resource efficiency
- (ix) Evolution/monitoring.

The Guidelines are being used informally as a resource by staff on a City-wide basis in the development review process. The Guidelines are explicitly noted in all pre-consultation meetings and all application forms request that applicants submit a report outlining the sustainability elements contained in the proposal. In the Duffins Heights Neighbourhood, a Council resolution requires applicants to submit a report outlining how the report is consistent with the Sustainable Development Guidelines when submitting applications. Similar language is being used in an official plan amendment for the Neighbourhood. As part of the City's Official Plan Review, a city-wide policy approach on sustainable development will be established.

While the Sustainable Development Guidelines are intended to improve new development, City of Pickering staff also developed a draft neighbourhood scorecard in order to evaluate the sustainability of established neighbourhoods. As a result, changes such as infill development, completing trail networks, park improvements, tree planting, or improving sidewalks could improve the overall neighbourhood score in established neighbourhoods.

4. Toronto Green Development Standards

The Toronto Green Development Standards (TGDS) applies to municipal buildings and is designed to encourage sustainable development in the private sector. The focus of the TGDS is on measurable targets (e.g. 20% canopy cover at maturity), actual outcomes that allow flexibility in achieving the outcomes (e.g. 25% energy savings above Model National Energy Code) and the design and construction of the built form rather than on building operations and workplace programs.

The TGDS includes over 30 development features and targets structured in 6 categories:

- (i) air quality,
- (ii) greenhouse gas emissions/energy efficiency,
- (iii) water quality,
- (iv) water efficiency,
- (v) solid waste, and
- (vi) ecology.

Different performance targets and indicators are identified for high- and mid-rise buildings versus low-rise residential dwellings.

Selecting Sustainable Development Evaluation Criteria to Reflect Environmental Priorities

Any improvement in the sustainability performance of urban development is valuable. However, there is a need to ensure that priority areas for action that will have a significant positive benefit are being addressed. Environmental priorities are suggested below based on (1) a review of relevant ecological footprint assessments, (2) a scan of priorities identified by the environmental not-for-profit community and (3) the 2008 report of the Greening Greater Toronto Initiative. The details of the scan are provided below while the environmental priorities can be summarized as follows:

- (i) Complete Communities (compact and transit-supportive urban form);
- (ii) Improved Mobility (transit and active transportation);
- (iii) Climate Protection (energy conservation and clean energy);
- (iv) Clean Air;
- (v) Waste Reduction and Integrated Waste Management;
- (vi) Water Conservation and Clean Water;
- (vii) Greenspace (natural heritage, open space and urban parks).

1. Ecological Footprint

Our global ecological footprint, measured using 2003 data, is about 2.2 hectares per person (WWF Living Planet Index 2006). This is a measure of the area of biologically productive land and water needed to provide ecological resources and services – food, fibre, and timber, land on which to build, and land to absorb carbon dioxide (CO₂) released by burning fossil fuels. The average Canadian resident has a footprint of 7.25 hectares while the footprint of York Region residents is over 8 hectares per person (Wilson and Anielski 2005).

The Earth's *biocapacity*, which is about 1.8 hectares per person (WWF Living Planet Index), is the amount of biologically productive area – cropland, pasture, forest, and fisheries – that is available to meet humanity's needs. Hence, looking only at global averages, our footprint already exceeds the earth's carrying capacity by 25%. Indeed, we would need three planets to meet our consumptive lifestyles if everyone lived as the average York Region resident.

A recent application of ecological footprint to household income (Mackenzie et al. 2008) reveals some key priority areas to reduce ecological footprints related to urban development. For all income brackets, food consumption and housing make up the largest parts of our ecological footprint compared to mobility, goods consumptions, and services consumption. However, for lower-income households, food and housing account for more than 70% of the ecological footprint while these two items account for 45% of the footprint of the highest-income households.

Next to housing, the largest footprint for higher-income households is mobility. Personal vehicle use accounts for 80% of this footprint while purchased transportation (air, rail, bus and water travel) comprise the remainder.

Given that the median household income in Vaughan is relatively high compared to other municipalities in the GTA, that over 70% of dwellings are single detached homes and that over 80% of residents commute by personal vehicle (Statistics Canada 2001), we can suggest that the lifestyle characteristics with the largest ecological footprint for Vaughan residents are housing, mobility and food consumption. While sustainable development measures cannot directly address food consumption, strategies such as local and sustainable food programs can be addressed through the Community Sustainability & Environmental Master Plan and in Official Plan policies. Of more relevance for this discussion, however, sustainable development criteria can be developed to lower the ecological footprint (a) of commuting mode and (b) for construction and ongoing energy consumption and maintenance of dwellings and other built form. Therefore, reducing footprints in these areas requires, among other initiatives:

- (i) urban design, including vegetation and soft surfaces, for passive solar gain in winter and passive cooling in summer,
- (ii) energy conservation and reduction in fossil carbon consumption,
- (iii) lower embodied energy of materials used for built form and personal vehicles,
- (iv) increase in active transportation,
- (v) long life and adaptive re-use of built form, and
- (vi) improved recycling and use of reclaimed materials in construction practices.

2. Priorities of the Environmental Community

Thirteen environmental groups based in Ontario identified six environmental priority areas for action (<http://www.prioritiesforontario.ca/news/20070319>): (1) conservation of the boreal forest; (2) implementation of a clean, green provincial electricity plan; (3) safeguarding the Greenbelt and strengthening policies to stop urban sprawl and protect greenspace across southern Ontario; (4) adoption of a pollution-fighting Pollution and Cancer Prevention Act; (5)

establishment of a Great Lakes Protection Plan and full implementation of the recommendations of the Walkerton Inquiry; and (6) a comprehensive provincial waste reduction strategy.

As the priorities were intended for the diverse landscapes of Ontario, a translation of the priorities for southern municipalities includes:

- (i) maintaining and enhancing natural spaces;
- (ii) maintaining and enhancing water quality and quantity;
- (iii) improving air quality;
- (iv) climate protection; and
- (v) waste reduction.

3. Greening Greater Toronto Initiative

The Greening Greater Toronto Initiative is a project of the Toronto City Summit Alliance and includes a wide variety of collaborators in the private, public and not-for-profit sectors, including representatives for Durham, York and Peel Regional Municipalities. A June 2008 report (Toronto City Summit Alliance 2008) identified five priorities:

- (i) reduced carbon/greenhouse gas emissions;
- (ii) clean air;
- (iii) clean water;
- (iv) reduction and effective management of waste and
- (v) sustainable land use and expanded greenspace.

Feedback from the Development Community

There have been two stakeholder sessions specifically for the development community related to green building and sustainable community design. City of Vaughan staff organized a workshop on October 20th at Kortright Centre supported by PowerStream, Canada Mortgage and Housing Corporation, BILD, the Canadian Green Building Council and the Toronto and Region Conservation Authority. City of Vaughan staff and their consultants, Urban Strategies Inc., organized a workshop at Eagle's Nest Golf Club on November 27th to obtain feedback on the 8 "vision principles" of the "Vision for Transformation" framework of the Official Plan review process. Key feedback from the two sessions can be summarized below.

- (i) Green building is recognized as a higher initial capital cost with lower ongoing maintenance costs. While some developers are creating a market niche for green buildings (e.g. Tridel, Minto) and are able to pass along cost increases, raising the overall level of sustainability performance will require that municipalities provide incentives to developers and builders. Fast-tracking approvals is often recognized as a more useful incentive than financial incentives such as rebates on permits and development charges, although both may be useful.
- (ii) There may be other innovative financial incentives to developers than direct incentives. For example, utilities can assume electrical infrastructure costs sooner rather than 4 to 5 years after build-out. This is often linked to the process by which the Local Municipality assumes infrastructure and/or to phased development.
- (iii) Consumer awareness of the environmental and health benefits of sustainable built form is still limited to a niche market. Municipalities can play a role in raising the awareness of the need to address the environmental and health benefits of sustainable built form and sustainable community design.
- (iv) Consumers are often suspicious of green technology recommendations from builders. This can easily create the perception that the builders are receiving a side benefit from a particular set of technologies. While builders must work to improve the transparency of

their product, such as through third-party verification of sustainability performance, municipalities can also address this issue in awareness campaigns that present objective information about green building.

- (v) Resale homes and buildings are a larger share of the overall market and are often not addressed in green building policies, but through a hodge-podge of retrofit incentive programs. A more coordinated effort to address sustainability retrofits could have more impact on reducing ecological footprints than a narrow focus on new buildings.
- (vi) In addition to the usual barriers of change related to cost and lack of trained professionals, there are disincentives to green building that are counter-intuitive. For example, implementing green technologies can increase the property tax assessment and result in higher taxes from higher MPAC assessment values.
- (vii) Some of the most practical sustainability measures are not observable to buyers and home owners. For example, the most difficult component to pass the Energy Star evaluation is the air tightness test, which simply requires attention to detail when installing the vapour barrier and reduced thermal bridges during framing and exterior cladding. More training of the trades is necessary. Alternatively, a sustainable performance system can be flexible such that inability to meet a particular component can be offset by improved performance in another aspect of the system.
- (viii) A sustainability checklist or framework should be flexible and focus on outcomes, not prescriptions. In this regard, using the term 'standards' can create a negative perception as this implies a prescriptive approach whereas outlining a framework of guidelines allows builders to select sustainability measures.
- (ix) Implementation of a sustainability performance checklist or framework is improved if there is also an integrated design process where the developer and municipality can discuss concepts that can streamline approval and improve sustainability performance.
- (x) A sustainability checklist or framework should be cross-referenced to existing, peer-reviewed systems, such as LEED™ and Energy Star. This way, third-party verification to an independent standard can recognize the relevant components of a City-specific sustainability checklist or framework.
- (xi) There is a need to consider the staff resources that may be required to evaluate and verify sustainability performance measures. Explicitly defining increments of performance improvements in the sustainable development evaluation, whether regarding energy use, water consumption or efficient use of land, can reduce the need for additional time by plans examiners and site plan review.

Proposed Work Plan

A proposal is outlined below to partner with appropriate agencies and seek external funding to undertake necessary further research and conduct appropriate stakeholder consultation in the development of a Sustainable Development Evaluation framework.

1. Formalize Proposal Pending Council Endorsement

Pending Council endorsement to proceed with the development of the Sustainable Development Evaluation framework and criteria, the first step is to write the proposal for prospective funders. The City of Vaughan is unlikely to receive funding directly from foundations. Furthermore, the required funding is for consultants and stakeholder sessions. Hence, the proposal will ideally be written collaboratively with the potential recipients of the funding (consultants) or with a partner from the environmental not-for-profit community who will share the project management responsibilities and add credibility to the proposal. Potential partners include consultants already

working on the various Official Plan review components (DPRA, Urban Strategies or AECOM) while potential environmental partners include TRCA, Ontario Nature and the Clean Air Partnership.

Potential funders are described below.

- a) The Metcalf Foundation has funded Environmental Defence to produce a report, "For the Greener Good", that includes many sustainability measures in existing check lists. They also provided funding for Pembina Institute's Ontario Community Sustainability report.

As with most foundations, Metcalf will likely only consider a proposal from a municipality where the municipality is collaborating with other partners. Interestingly, municipal governments may be qualified donees for foundation funding according to the Charities Act. For example, the Town of Caledon together with the Countryside Alliance and a ratepayers group submitted a successful proposal to the Metcalf Foundation.

- b) The McLean Foundation appears to have an open donation policy rather than a structured funding program. Letters of Inquiry can be sent at any time and applicants are then asked to submit a proposal according to application guidelines. The McLean Foundation web site breaks down donations into Arts-Music, Arts-Theatre, Arts-Visual, Conservation, Education, General, Health and Welfare. The Town of Caledon received a \$10,000 donation in 2006 under the conservation section.
- c) The focus of the environment program of the EJLB Foundation appears to be on research rather than applied projects. A sample of previously funded projects includes:
- \$100,000 over two years to Environmental Defence to support the Greenbelt Act
 - Canadian Organic Growers,
 - Earth Rangers Foundation,
 - \$150,000 over two years to Inter Pares for education and awareness of sustainable agricultural practices,
 - \$7,500 to Life Spin in London, Ontario for the transformation of a vacant urban lot in the Old East Heritage district of London into a community green space and garden.
- d) The Salamander Foundation has provided funding to projects related to sustainable community design, including \$10,000 to the University of Toronto for the Integrated Land Use, Transport and Environment Model (<http://www.jpint.utoronto.ca/>) and \$35,000 to Sierra Legal Defence Fund for a study of 20 Canadian municipalities on "Creating Environmentally Sustainable Communities" (available from the Federation of Canadian Municipalities web site).
- e) The Max Bell Foundation has provided \$65 million in support of projects in Canada since 1971 with a particular focus on innovation. The current program areas of support for the Foundation include education, health and wellness, environment and a category of special projects. Two environmental projects were supported in 2007 in the areas of watershed management.

2. Research Component and Technical Document

Given the volume of work in this area in the last few years, summarizing existing sustainability frameworks is a straight-forward research exercise. The focus of this component of the work plan is to identify key performance-based outcomes (e.g. energy efficiency, water savings, greenhouse gas savings, etc) or performance increments for each sustainability measure. An appropriate target or range of targets and the conservation and/or human health benefits of achieving the target should be documented for each outcome (e.g. 50% potable water reduction, zero potable water use for irrigation and toilets).

As a next step, the sustainability outcomes and targets need to be cross-referenced against existing policy direction and existing third-party standards (e.g. LEED, Energy Star, Green House). This will provide a categorization of outcomes and targets that either (a) are or should be required as base case or "business as usual" performance (i.e. regulated) or (b) that reflect enhanced sustainability performance (e.g. beyond Building Code requirements).

3. Outreach and Stakeholder Feedback

Stakeholder feedback is important not only to improve the proposed framework, but also to evaluate the process used to develop the framework and generate ideas. This component of the work also acts as an outreach campaign to raise awareness of sustainable community design and sustainable built form.

In addition to the stakeholder sessions, City staff will identify a range of development project examples to test the preliminary evaluation framework. Testing will provide important feedback for the development of a working framework.

4. Final Sustainable Development Evaluation Framework

Following stakeholder feedback, the final Sustainable Development Evaluation criteria and framework will be presented to Council with appropriate recommendations for further action.

Relationship to Vaughan Vision 2020

Lead and Promote Environmental Sustainability

Regional Implications

York Region is developing criteria for sustainable communities under the program, Best Practices for New Communities. The focus of this effort is on new communities rather than the full range of development applications that require servicing allocation and other infrastructure considerations.

Conclusion

This report has been developed to be consistent with the ongoing work of the Community Sustainability and Environmental Master Plan (CS&EMP), but with a focus on a specific set of sustainability initiatives related to development applications following from Council recommendations on October 9, 2007. The Report outlines a work plan to develop a framework for measuring the sustainability performance of development applications, currently known as Sustainable Development Evaluation. The development of such a framework is an identified action plan in the CS&EMP. While components of the Official Plan review process and Focus Area Studies will include aspects of sustainable community design and sustainable built form at City-wide scales, the focus of this effort is to develop evaluation criteria that can be applied through the development review process at the site and neighbourhood level. The primary focus of this effort is to identify quantitative metrics of sustainability and to define measurable increments of sustainability improvement. Continued efforts by Staff to define a "complete application" under Bill 51 will be useful in implementing the Sustainable Development Evaluation criteria. Staff recommend that a capital project entitled "Measuring Environmental Sustainability Performance of Development" in the amount of \$80,000 be included for consideration in the 2009 Capital budget subject to receiving external funding.

Attachments

1. Estimated Time Line and Budget for Work Plan - Measuring Sustainability Performance of Built Form in Development Applications.

2. References - Measuring Sustainability Performance of Built Form in Development Applications.

Report prepared by:

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Respectfully submitted,

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**Estimated Time Line and Budget for Work Plan -
Measuring Environmental Sustainability Performance of Development**

Proposed Time Line

| Work Plan Item | Primary Responsibility | Timing |
|--|--|----------------------------------|
| 1. Formalize and Submit Proposal | City of Vaughan in collaboration with partners | Submission for end of March 2009 |
| 2. Research and Technical Document | Consultant, with input from partner agencies and City of Vaughan | October 2009 |
| 3. Outreach and Stakeholder Feedback | Consultant, with input from partner agencies and the City of Vaughan | December 2009 |
| 4. Final Sustainable Development Evaluation Framework and Criteria | Consultant, with input from partner agencies and the City of Vaughan | January 2010 |
| 5. Report to Council | City staff | February 2010 |

Proposed Budget

| Work Plan Item | City of Vaughan Budget | Partner Budgets | Total Budget |
|--|---|--|---------------------|
| 1. Formalize and Submit Proposal | Staff time | In-kind | n/a |
| 2. Research and Technical Document | Staff time | \$45,000 (based on 45 days at \$1000 per diem) ^a | \$45,000 |
| 3. Outreach and Stakeholder Feedback | Staff time for arranging and holding meetings. Costs for mailing, advertising and printing \$2,000. \$5,000 for space rental and food | \$10,000 (based on 10 days at \$1000 per diem plus | \$17,000 |
| 4. Final Sustainable Development Evaluation Framework and Criteria | Staff time | \$15,000 (based on 15 days at \$1000 per diem) | \$15,000 |
| 5. Report to Council | Staff time | n/a | |
| 6. Capital Admin – 3% | | | \$ 2,310 |
| TOTAL | Staff time + \$7,000 | \$70,000 | \$79,310 |

^a Based on 15 days of effort for each of the sustainability themes: transportation; efficient use of land/development form; and resource conservation.

**References – Measuring Environmental Sustainability Performance
of Development**

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