1
INNOVATIVE AND SUSTAINABLE HOUSING DEVELOPMENT APPROVALS PILOT PROJECT IN THE TOWN OF NEWMARKET

The Environmental Services Committee recommends:

1. **Receipt of the presentation by Tracey Carrigan, Manager, Environmental Education and Promotion and Jason Unger, Assistant Director of Planning, Town of Newmarket; and**

2. **Adoption of the recommendation contained in the following report dated August 24, 2012, from the Commissioner of Environmental Services and the Commissioner of Transportation and Community Planning.**

1. RECOMMENDATION

It is recommended that Council receive this report for information.

2. PURPOSE

This report informs Council of funding received from the Ministry of the Environment through Showcasing Water Innovation for the Innovative and Sustainable Development Approvals Pilot Project. This project is identified as a demonstration project in the Long Term Water Conservation Strategy set to begin in 2012.

3. BACKGROUND

Ministry of Environment Showcasing Water Innovation funding enables York Region to pilot an expedited approvals process for sustainable or low impact residential developments

New developments, both residential and non-residential, offer an opportunity to build with resource conservation, ecological integrity and community enhancement as measured priorities. Through this pilot project, York Region in partnership with the Town of Newmarket, Lake Simcoe Region Conservation Authority and Toronto Region Conservation Authority are encouraging a local developer to build a new sustainable residential subdivision that includes specific water and energy saving measures, as well as enhanced stormwater management. This project also provides the opportunity to examine whether an expedited development review/ approval process is a feasible and viable incentive to encourage the building industry to implement innovative and sustainable low impact development technologies in their products.

Results from this project will give project partners the opportunity to evaluate the overall benefits and costs of expediting approvals for qualified proposals. The project will develop a point scoring system based on sustainable measures achieved through site and building design and construction, as well as testing this scoring system with a proposed development. The final report on this project will be delivered to the Province in March 2014.

The Region, Town of Newmarket, Conservation Authorities and Mosaik Homes are partnering to undertake this pilot project

The proposed subdivision that is being developed through this sustainable, low impact development pilot project is located at the southeast corner of Davis Drive and Bathurst Street in the Town of Newmarket. This site is formerly known as the McGregor farm and currently owned by Mosaik Glenway Homes Inc. *See Attachment 1* for key map of subdivision.

A project team, consisting of all project partners including staff from the Region, Town of Newmarket, Lake Simcoe Region Conservation Authority, Toronto Region Conservation Authority, and the Mosaik Homes development team, has been established to oversee this pilot project.

4. ANALYSIS AND OPTIONS

The Performance of innovative technologies, such as the integrated stormwater management system, will be quantified

York Region is establishing specific green building performance targets and measures along with a corresponding scoring system to qualify future development projects for municipal incentives, such as an expedited approval process. Throughout the project, the project team will assess and document the development review and approval process while evaluating any opportunities for efficiencies. Findings from these assessments will help evaluate an expedited approvals framework that considers the costs, benefits and resource requirements of stakeholders, including development review and approval agencies, and the development industry. Project results can also inform how the project partners would implement the expedited approval process based on policy directions and Council's Strategic Plan priorities such as focusing on Centres and Corridors and increasing Economic Vitality.

At the final stage of the project, when construction of the Mosaik Homes subdivision is complete, the project partners will monitor, evaluate, and quantify benefits associated with the innovative technologies implemented in this subdivision.

Pilot project strives to reach higher water/energy conservation and stormwater/site management standards for new developments

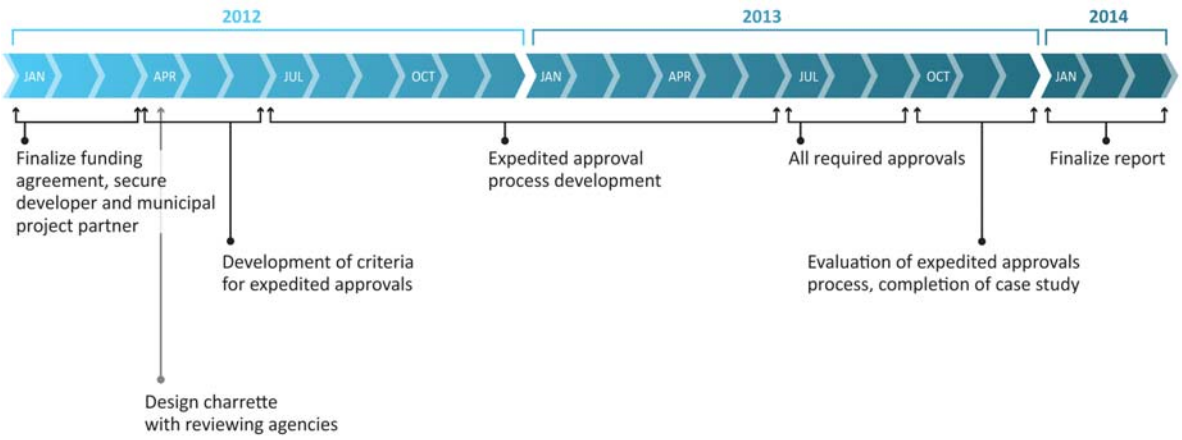
The pilot project is focused on analyzing and determining any efficiencies in the development approvals process, as well as identifying which water conservation and energy conservation standards may be required to qualify for a possible expedited approvals process.

As part of this pilot project, the project's consultant reviewed three main types of expedited approvals processes that have been used in the United States:

1. Committee comprised of representation from all reviewing agencies to review and make decisions on applications.
2. Single trained coordinator assigned to a portfolio of green applications and moves each application through the process.
3. Combination of 1 and 2.

This pilot project will verify if an expedited approvals process can become one of the feasible incentives for low impact development; and if so, recommend the best model. The goal is to promote higher water and energy conservation standards among new residential developments by examining the time savings, benefits and resource implications of an expedited approval for all development review and approval agencies. Figure 1 provides an outline of the pilot project schedule.

Figure 1
Pilot Project Schedule



Minimum project targets to focus on measured environmental improvements

Table 1 outlines the water and energy conservation targets for the pilot project.

Table 1
Pilot Project Water and Energy Conservation Targets

Category	Current Requirement	Minimum Target to Qualify for Incentives	Environmental Benefit
Stormwater Quality – Phosphorous	Level 1/Pre=Post Phosphorus, whichever is lower	Further 10% Reduction	Help restore water quality and ecological health in the watershed, including Lake Simcoe.
Stormwater Quality – Total Suspended Solids	80% removal of TSS	Further 10% Reduction	Airborne dust, urban debris, and eroded soils (TSS) are carried by stormwater. This runoff adds sediment to lakes and streams, and can create cloudy or 'turbid' water. Reduced amounts of TSS can mitigate impacts to fish and aquatic habitat, as well as improve overall water quality.
Stormwater Quantity – Runoff	2 to 200 year post to pre control	Same as current	When natural landscapes are replaced with impervious surfaces, rainfall can no longer soak into the ground, resulting in an increase in polluted stormwater runoff. Reducing the volume of runoff reduces the impacts on the receiving streams.
Stormwater Quantity – Erosion	5mm Rainfall Runoff Criteria	25mm Rainfall Runoff Criteria	
Stormwater Quantity - Infiltration	Water Balance – maintain existing infiltration	Same as current	Development reduces the opportunity for infiltration. Water that previously evaporated or seeped into the ground becomes surface runoff. Maintaining a natural water balance, including infiltration rates, is critical to ecological functioning of natural features (wetlands, woodlands, watercourses).
Water Conservation	Ontario Building Code	Minimum 25% reduction over Ontario Building Code Standard	Reducing customer water demands reduces costs to both the customer and water supplier, helps protect drinking water sources, reduces the need for costly infrastructure expansion, and helps maintain the health of aquatic environments.

Category	Current Requirement	Minimum Target to Qualify for Incentives	Environmental Benefit
Outdoor Water Conservation	Ontario Building Code	Topsoil depth increased to 12" and soil nutrient augmentation	Outdoor water use is discretionary. Reducing irrigation demands helps reduce peak water demands, thus reducing the stress on the existing infrastructure and helping reduce the need for infrastructure expansion.
Energy Conservation	Ontario Building Code	Minimum 25% reduction over Ontario Building Code Standard	Reducing energy demands can reduce the use of fossil fuels, energy purchase costs, greenhouse gas emissions, and air-polluting smog emissions.

Collaboration among partners promotes creative solutions

A design charrette was held April 18, 2012 with all development review and approval agencies to consider the potential low impact technologies that could be designed and applied to the Mosaik Homes subdivision, to achieve the targets identified in Table 1. Participants also had a chance to brainstorm solutions for site-specific issues and challenges.

The project team has met regularly since the initiation of the project in mid March 2012, and will continue to meet regularly for the duration of the project. Town of Newmarket staff also brings experience gained from development of Rodeo Homes EcoLogic Development which was built to LEED platinum specifications. Team meetings provide a forum for open discussion to address design aspects and detailed implementation of sustainable development components. These meetings also provide the opportunity for all stakeholders to share and generate creative solutions for the proposed development and help build relationships and foster increased collaboration among the project partners, including staff from development review agencies.

The project is progressing well with full participation by all parties. In several instances, the developer has indicated a willingness to exceed water conservation targets identified in Table 1.

Link to Key Council-approved Plans

Integrating water conservation programming with water and wastewater infrastructure planning and sustainable community planning has been and continues to be a Regional priority. This commitment is reinforced in both the 2011-2015 Strategic Plan and the Regional Official Plan.

An objective of the Strategic Plan states that the Region will focus on continuing to deliver and sustain critical infrastructure necessary to support our growing communities by identifying and leveraging capacity available in the existing infrastructure. One method to achieve this objective is through increased water conservation per capita.

An objective of the Regional Official Plan is to ensure adequate water resources for today's residents and future generations, through conservation and efficiency.

- To develop a long term, innovative strategy for water conservation and efficiency
- To pursue with local municipalities and conservation authorities, implementation of water efficiency innovations, such as water reuse systems, rainwater harvesting and innovative stormwater management

The Regional Official Plan also highlights specific policies to ensure water conservation is integrated into new developments to create high-quality sustainable communities by encouraging new development to achieve greater water conservation efficiency than currently stipulated in the Ontario Building Code.

5. FINANCIAL IMPLICATIONS

The total project budget is $440,380 with a completion deadline of March 31, 2014. Below is a summary of project costs and funding sources.

Table 2
Showcasing Water Innovation – Innovative and Sustainable Development Approvals Pilot Project Budget (March 2012 – 2014)

Total Project Budget	**$440,380**
Total Project Expenditures	
Project Partners In-Kind Contributions (eg. staff time) (York Region, Town of Newmarket, Mosaik Homes, Lake Simcoe Region Conservation Authority and Toronto Region Conservation Authority)	$243,360
Consultant Costs for development, implementation, tracking and reporting	$197,020
Total Project Funding	
Ministry of the Environment Funding	$144,500
Project Partners In Kind Contributions	$98,120
York Region Funding Contribution (from Water for Tomorrow)	$197,760

If an expedited approval process is demonstrated to be an effective incentive, through this pilot project evaluation, there will need to be assessments of staff resources related to all development review and approval agencies, including York Region. This would be an essential stage prior to making any final recommendations for broader implementation.

6. LOCAL MUNICIPAL IMPACT

Town of Newmarket staff will continue to be involved in developing and evaluating the expedited approvals process for low impact, "Green" Development. Town staff play a critical role as the site will be adopted by the Town as its westerly gateway to Newmarket. Accurately evaluating the development approvals process and dealing with design concerns will ensure that the project and initiatives remain on target now and in the future. To ensure ongoing success, continued cooperation by the Town of Newmarket is essential. If this model is proven to be successful it could form the basis for a Region-wide expedited approvals process for low impact development.

The Ministry of the Environment expects that the Region, Town of Newmarket, Toronto Region Conservation Authority, Lake Simcoe Region Conservation Authority and Mosaik Homes will collaborate to deliver the pilot project by March 31, 2014. The partnership will continue throughout the next steps of the project, which include monitoring and evaluation of the implemented technologies after occupancy of the homes.

7. CONCLUSION

The expedited approvals pilot project is on track for completion by March 31, 2014. Progress reports detailing activities and budget status will be submitted to the Ministry of Environment on a regular basis. The first progress report was submitted on June 28, 2012. After the project completion, all partners will assess the pilot and its future application based on policy objectives and Council's Strategic Plan priorities such as focusing on Centres and Corridors and increasing Economic Vitality.

For more information on this report, please contact Laura McDowell, Director, Environmental Promotion and Protection at 905-830-4444 Ext. 5077 or Heather Konefat, Director of Community Planning at Ext. 1502

The Senior Management Group has reviewed this report.

(The attachment referred to in this clause is attached to this report.)

Showcasing Water Innovation Funding

Innovative and Sustainable Development Approvals Pilot Project in the Town of Newmarket

Environmental Services Committee

Tracey Carrigan, Manager
Environmental Promotion & Education
and
Jason Unger, Assistant Director of Planning
Town of Newmarket

September, 12, 2012

Overview

Ministry of the Environment Showcasing Water Innovation funding enables York Region to pilot an expedited approvals process for green low impact residential development

- New development represents a significant opportunity for water conservation
- Included in the Long Term Water Conservation Strategy as a pilot project
- New development residential pilot of an expedited approval process for low impact development/green construction
- Developing a scoring system for green building measures
- Monitoring and evaluating green technologies

Pilot Project Partners

York Region

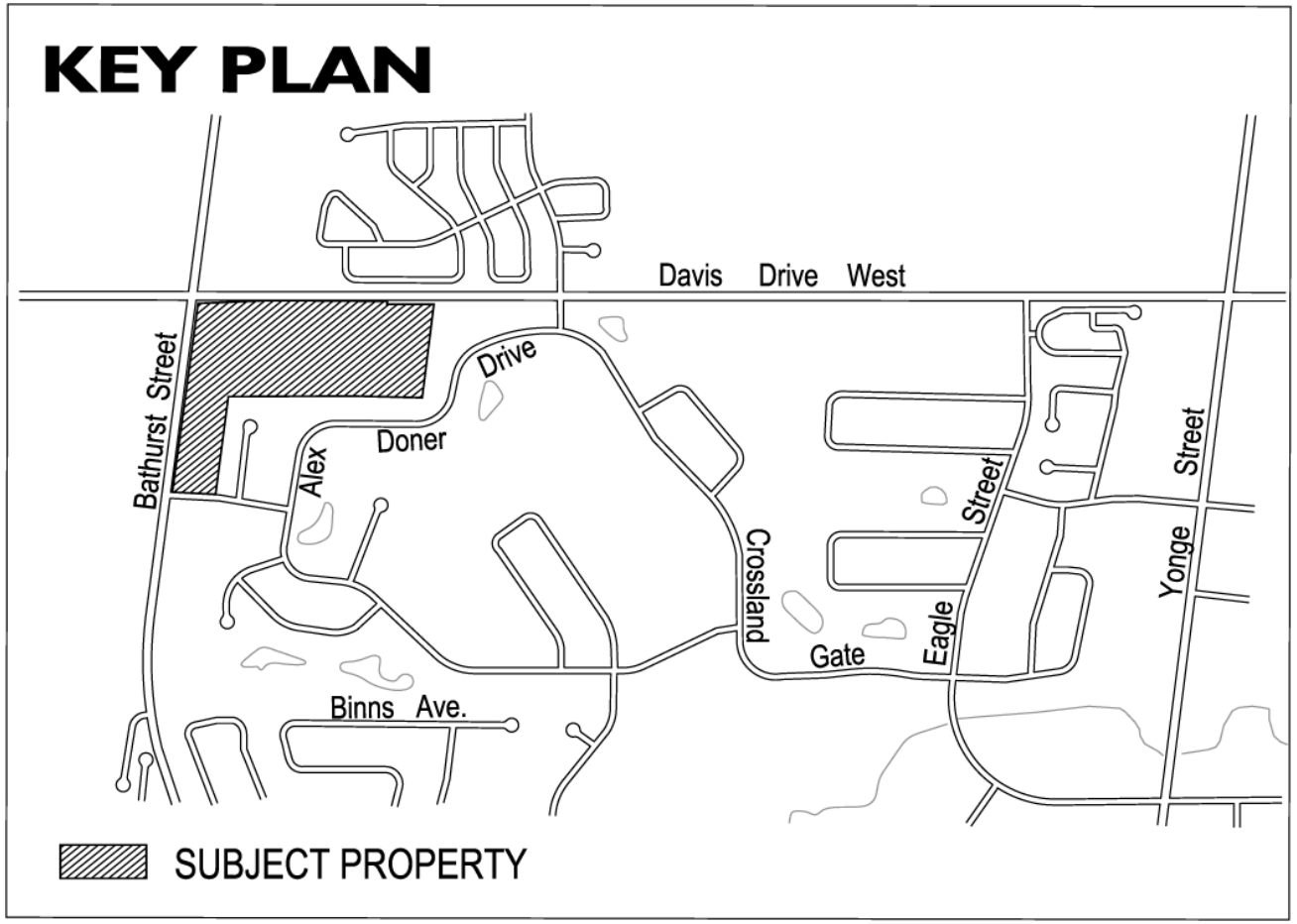
Newmarket

Lake Simcoe Region Conservation Authority

Toronto and Region Conservation for The Living City

MOSAIK HOMES

Mosaik Glenway Homes



Examples of minimum targets for innovative technologies

CATEGORY	CURRENT REQUIRED	EXPEDITED APPROVAL MINIMUM TARGET
Stormwater:		
Quality – Phosphorous	Level 1 / Pre=Post Phosphorus, whichever is lower	Further 10% Reduction
Quality – Total Suspended Solids	80% removal of TSS	Further 10% Reduction
Quantity – Erosion	5mm Rainfall Runoff Criteria	25mm Rainfall Runoff Criteria
Quantity - Infiltration	Water Balance – maintain existing infiltration	Same
Water Conservation	Ontario Building Code	Minimum 25% reduction over Ontario Building Code Standard
Energy Conservation	Ontario Building Code	Minimum 25% reduction over Ontario Building Code Standard

Techniques used to achieve targets

Inside the Home

- 3 litre toilets
- Low flow shower heads
- Water saver humidifiers on furnace
- Front load washer
- Hot water recirculation supply system
- Programmable thermostat
- Participation in Enbridge Savings by Design program

Water and energy conservation minimum 25% reduction beyond code

Techniques used to achieve targets

Outside the Home

- Bio-retention swales
- Exfiltration pipe
- Extra depth topsoil and increased organics in soil
- Infiltration gardens at select locations
- Sod vs. seed feasibility study

Stormwater at least 10% beyond standard

Next Steps

- Creating the Criteria List and weighting
- Assessing the review and approvals process and evaluating opportunities for optimization
- Develop and document the expedited approvals business process
- Monitor and evaluate site to quantify savings realized

Proven environmental benefits of sustainable development merit exploration of expedited approvals – driving "win-win"

Innovative and Sustainable Design Approvals Pilot Project Key Map

COUNCIL ATTACHMENT 1