

**CITY OF VAUGHAN**

**EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 5, 2011**

Item 1, Report No. 3, of the Priorities and Key Initiatives Committee, which was adopted without amendment by the Council of the City of Vaughan on April 5, 2011.

**1      INFLOW AND INFILTRATION REDUCTION & LONG TERM WATER CONSERVATION STRATEGIES CITYWIDE**

**The Priorities and Key Initiatives Committee recommends approval of the recommendation contained in the following report of the Commissioner of Engineering and Public Works, dated March 21, 2011:**

**Recommendation**

The Commissioner of Engineering and Public Works, in consultation with the Commissioner of Finance and City Treasurer, recommends:

1. That Council endorse the Inflow and Infiltration Reduction and the Long Term Water Conservation Strategies that have been developed in collaboration with the area municipalities and endorsed by Regional Council on February 17<sup>th</sup>, 2011, subject to minor adjustments to the final drafts arising out of the pre-submission consultation with the Ministry of the Environment;
2. That through development and endorsement of the Inflow and Infiltration Reduction Strategy, York Region and the City commit to:
  - develop and maintain this Strategy including the programs, goals and inter-agency and regulatory reporting requirements for staged reduction of inflow and infiltration over the next 20 years;
  - recommend to future Councils that they commit funds for inflow and infiltration reduction that is economically justified by the avoidance of future treatment and conveyance costs;
  - measure wastewater flows before and after carrying out construction/rehabilitation works on sewers and to document inflow and infiltration expenditures and flow reduction measures; and
  - continue to work together in a collaborative manner over the life of the Strategy and to commit the appropriate staffing and financial resources towards implementation of the Strategies based on a business case analysis.
3. That staff report back to a future Finance and Administration Committee on the financial details associated with the implementation of the Inflow and Infiltration Reduction and Long Term Water Conservation Strategies; and
4. That a copy of this report be forwarded to York Region.

**Contribution to Sustainability**

Inflow and infiltration are unwanted sources of water within the existing City and Regional sanitary sewerage systems. By taking steps to reduce and eliminate these sources of excess water, additional conveyance capacity becomes available, thereby contributing to a more sustainable infrastructure network and increasing overall operational efficiency.

Water conservation policies and related efforts will assist in the protection of natural resources and long term water supply, maximizing sustainable growth and development, and minimizing energy consumption.

## CITY OF VAUGHAN

### EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 5, 2011

#### Item 1, Priorities Report No. 3 – Page 2

The proposed joint York Region and Local Municipal Inflow Infiltration Reduction and Long Term Water Conservation Strategies are consistent with the objectives of the City's Community Sustainability and Environmental Master Plan (Green Directions Vaughan, April 2009). The policies, decision making framework and implementation plans related to the reduction of inflow and infiltration and water conservation will assist in the pursuit of:

- Sustainable growth and development;
- Minimizing energy consumption;
- The creation of a City with sustainable built form;
- The conservation and protection of our long term water supply, and
- Sharing sustainable best practices and ideas between and among municipal staff and the community.

#### **Economic Impact**

There are no immediate budgetary impacts resulting from the adoption of this report.

The Inflow and Infiltration Reduction Strategy will be supported by a collaborative long term funding model based on a cost sharing approach between the two tiers of local governments.

The key funding principles are:

- A set rate will be collected by both the local and Regional level as identified through the needs of the Strategy and as agreed to by the municipal partners.
- The amount collected at the local level will be used to address priorities identified both through the Strategy and as determined by each local municipality.
- The amount collected at the Regional level will be used to address Regional inflow and infiltration priorities both at the Regional and local level.
- The allocation of Regional funds intended for use in the local systems will be managed and allocated by a joint team with staff representatives from each municipality and the Region. Funding will be granted based on the most effective application to achieve the desired inflow and infiltration improvements as quickly as possible.

The City currently budgets approximately \$1.2 million annually for the maintenance of the existing sanitary sewer system. Additional funding and resources for the Strategies are being requested as part of the draft 2011 Water/Wastewater Budget. It is anticipated that as further monitoring and investigation is done throughout the City's sewerage system, additional funding and resources may need to be allocated in future operating and capital budgets to effectively implement the initiatives and programs set out in the Strategies.

#### **Communications Plan**

One of the key mandates of the Strategies is to implement a comprehensive communications, education, and advocacy plan to clearly message the environmental benefits of the Inflow and Infiltration Reduction and Long Term Water Conservation Strategies to the various stakeholder groups including residents, businesses and the construction industry.

#### **Purpose**

The purpose of this report is to seek Council's endorsement of the Inflow and Infiltration Reduction and Long Term Water Conservation Strategies, which have been prepared by York Region in collaboration with the area municipalities.

## CITY OF VAUGHAN

### EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 5, 2011

Item 1, Priorities Report No. 3 – Page 3

#### Background

Wastewater servicing in York Region is multi-jurisdictional based on a two tier governance structure. York Region is responsible for major pumping stations, trunk sewers and treatment plants. The area municipalities are responsible for the local collection sewerage systems and pumping stations that outlet into the Regional trunk system.

On March 31, 2010, the Ministry of the Environment approved the Individual Environmental Assessment for the Region's Southeast Collector Trunk Sewer Project subject to a series of conditions. One key condition required the Region to develop an Inflow and Infiltration Reduction Strategy, which shall include a program for the reduction of inflow and infiltration in the Southeast Collector Trunk Sewer from both the Regional and local municipal sewerage systems. This Strategy shall include reduction priorities, targets, timelines, tactics and initiatives, and associated implementation costs.

In order to develop the comprehensive Strategy, the Region formed an Inflow and Infiltration Task Force in April 2010. The Task Force established a Water & Wastewater Steering Committee that is comprised of representatives from each of the nine municipalities and the Region. The Steering Committee is responsible for reviewing inflow and infiltration issues and formulating an overall direction for the development of the Strategy.

On June 8<sup>th</sup>, 2010, Vaughan Council adopted the following recommendation with respect to the development of a joint Regional and Area Municipal Inflow and Infiltration Reduction Strategy:

*“That in partnership with the Region of York, the City of Vaughan agrees to actively participate in the Inflow and Infiltration Reduction Task Force to:*

- *continue to seek out sources of inflow and infiltration;*
- *adopt standards and guidelines intended to reduce inflow and infiltration in new developments and within existing systems; and*
- *Develop adequate funding and cost sharing principles to address future remediation projects.”*

The Water and Wastewater Task Force has been meeting on a regular basis since April of 2010. Senior staff from Development / Transportation Engineering, Public Works and Finance has participated in these meetings. On January 31, 2011, staff provided a report to the Priorities and Key Initiative Committee on the status of the joint Regional and Municipal Water and Wastewater Task Force, and the development of the proposed strategies for inflow / infiltration reduction and long term water conservation.

Subsequently, on February 15<sup>th</sup>, 2011, Council adopted the following recommendation:

*“That staff be directed to report back to a future Priorities and Key Initiatives Committee meeting on the final recommended York Region and Local Municipal Inflow Infiltration Reduction and Long Term Water Conservation Strategies and implementation details.”*

#### Inflow and Infiltration Reduction and Long Term Water Conservation Strategies

On February 17<sup>th</sup>, 2011, Regional Council endorsed the recommendations of the reports to the Regional Environmental Services Committee meeting on the draft Inflow and Infiltration Reduction and Long Term Water Conservation Strategies, copies of which are included as Attachments No. 1 and 2 to this report. These Strategies along with a proposed implementation plan will be completed and submitted to the Ministry of the Environment by March 31, 2011.

## CITY OF VAUGHAN

### EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 5, 2011

#### Item 1, Priorities Report No. 3 – Page 4

##### Inflow and Infiltration Reduction Strategy

The draft Inflow and Infiltration Reduction Strategy is defined by a series of program areas and activities, which are highlighted below:

#### 1. Overall Program Goals and Inflow and Infiltration Targets

Based on Ministry of the Environment (MOE) approval conditions related to the Individual Class Environmental Assessment Study for improvements to the York-Durham Southeast Collector Sewer, York Region and all local municipalities must commit to a 10% reduction in peak flows due to inflow and infiltration over the next 20 years through water efficiency and inflow and infiltration reduction programs. This target must be achieved throughout the entire Regional and local municipal sewerage and water systems. The reduction of wet weather flows together with water conservation efforts will minimize total conveyance, treatment and disposal system costs and improve overall system security and efficiency.

#### 2. Monitor and Analyze Flows

Monitoring will measure wet weather flow response in the sanitary sewer system to help identify areas of concern, isolate problem areas, and provide guidance for areas that require additional field investigation. Continuous and permanent flow monitoring over an extended time period is critical in identifying these variations in flow. A variety of flow metering techniques will be deployed to meet the requirements of the Strategy. The monitoring program will be developed early on in the Strategy and will include details such as flow meter type, meter accuracy, data quality and management procedures, financial costs, meter relocation planning, etc.

#### 3. Investigate and Mitigate

The Strategy describes the processes that will be applied to investigate the severity, extent and location of the inflow and infiltration sources. Detailed field investigations using fog and dye testing, CCTV inspections, and manhole inspections will be conducted in areas that are identified as high priority - direct connections from roof downspouts and cross connections, degrading infrastructure or improper installation.

Subject to the results of the investigations, solutions will be identified and specific rehabilitation techniques will be selected based on cost effectiveness, criticality, risk of failure, expected lifecycle / performance improvements, and environmental impacts.

#### 4. New Construction and Capital Projects

The Strategy describes the appropriate commissioning standards that will be applied to new sewerage systems to ensure design conformance.

#### 5. Financial Management

The objective of the financial management component of the Strategy is to develop a sustainable source of funding to support the long term implementation that is equitable to the partners and community while addressing inflow and infiltration reduction targets. Based on the Region's projected estimates, an initial funding target of \$100 million over a 20 year period was used to assess the potential funding requirements. This equates to a future annual investment of \$5 million per year across the Region. This Strategy requires that each local municipality contributes and maintains a specific and sustainable funding allocation towards the inflow and infiltration reduction program. A preliminary list of program activities associated with the required funding includes the following:

## CITY OF VAUGHAN

### EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 5, 2011

#### Item 1, Priorities Report No. 3 – Page 5

- Flow monitoring
- Inspection programs
- Data analysis
- Development of common guidelines and standards
- Continuous improvement
- Communication programs
- Rehabilitation/replacement programs
- Pilot tests

Funding for the inflow and infiltration reduction program will come from water and sewer rates.

#### 6. Communication and Management

A comprehensive communication plan has been identified as one of the components required to successfully achieve inflow and infiltration reduction in York Region. The Region and area municipalities shall jointly oversee the communication, education and advocacy programs to ensure the messaging meets the evolving program, and to ensure the programs are effectively delivered to the various stakeholders. A communication and advocacy team will work closely with other members of the program team to ensure current and future works comply with all applicable regulations.

#### 7. Reporting Inflow and Infiltration Reduction

An annual report will be presented to the Ministry of the Environment detailing the progress on implementing the Strategy including inflow and infiltration reductions. The first report shall be provided one year following finalization of the Strategy (March 31, 2012) and every 12 months thereafter. The report will describe the status of each of the milestone activities and the progress towards the stated inflow and infiltration reduction target.

In support of the Region's annual report to the MOE, each local municipality will be required to plan for and develop an annual Inter-Agency Summary Progress Status as well as achievement reports. The Inter-Agency report will contain information that describes the local municipality's inflow and infiltration reduction activities that have occurred during the previous year and activities anticipated for the future.

#### 8. Continuous Improvement

The Strategy describes the continuous efforts required to improve the way services or programs are implemented and focuses on areas which may require enhancement as the Strategy is implemented.

#### Long Term Water Conservation Strategy Components

The Long Term Water Conservation Strategy builds on the success of the "Water for Tomorrow" program, which was adopted by York Region in 1998. The proposed Long Term Water Conservation Strategy details specific conservation and efficiency programs that will need to be implemented by both the Regional and local municipalities over the next 20+ years.

Water conservation related programs will improve water management practices that will in turn reduce and enhance the beneficial use of water. The value and cost-effectiveness of water-use efficiency can be measured in terms of conserving and protecting our long term water supply; maximizing sustainability; and minimizing energy consumption. The basic components of the Long Term Water Conservation Strategy, which was endorsed by York Region on February 17th, 2011 are highlighted below:

## CITY OF VAUGHAN

### EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 5, 2011

#### Item 1, Priorities Report No. 3 – Page 6

##### 1. Best-in-Class Water Conservation and Efficiency Measures

The Strategy describes the preparation, review and analysis of best-in-class water conservation and efficiency programs, initiatives, strategies and tactics adopted by other jurisdictions throughout the world. It has been created by reviewing water efficiency and conservation practices worldwide, and adopting those that are technically, environmentally and economically feasible for implementation in York Region.

##### 2. Development of Performance Targets and Timelines

Performance targets will be developed in conjunction with the Region and area municipalities which will establish a breakdown of the water savings targets and timelines based on continuation of current “Water for Tomorrow” programs and implementation of new programs and tactics.

##### 3. Consultation With All Stakeholders

All aspects of the Long Term Water Conservation Strategy were informed by findings from the public engagement and consultation process. Public consultation sessions were held in September and October 2010 to engage a wide variety of stakeholders throughout the Region. These sessions provided public outreach and education initiatives for water efficiency and conservation programs. The Strategy includes a comprehensive on-going communication plan which includes education and an advocacy plan.

It is important to note that overall water conservation will also result in a reduction in flows entering the City and Regional sanitary sewerage systems, thereby making these systems more efficient and sustainable.

#### Governance and Strategy Leadership

The Region intends that both Strategies will be championed and led jointly by the Water and Wastewater Task Force with overall leadership, direction and assistance being provided by Regional staff. As the Regional Strategies are implemented over the next 20 years, the Task Force will continue to provide primary leadership for the Strategy as it represents the interests of both the Region and each of the area municipalities.

#### Regional Assignment of Servicing Capacity

The Ministry of the Environment conditions of approval for the Southeast Collector Sewer Individual Class Environmental Assessment require that specific environmental sustainability targets related to inflow and infiltration reduction and water conservation be achieved in both the Regional and local municipal sewerage systems. Accordingly, Regional assignment of servicing capacity to local municipality's is contingent upon participation in the development and implementation of the Inflow and Infiltration Reduction and Water Conservation Strategies. The City's continued participation in the implementation of these Strategies will ensure that future distribution of servicing capacity will be available to the City to provide for the planned growth envisioned in the City's Official Plan.

#### Vaughan's Current Inflow and Infiltration Reduction Program

Enhanced sanitary sewer inspection work throughout Vaughan's local sewerage system has been underway over the last several years as part of York Region's pilot project. This work has been funded by the Region and has been spearheaded by the City's Public Works Department, in close cooperation with Development Engineering staff. Approximately \$135,000 in fog testing and camera inspection work was completed in Vaughan as part of the Region-funded project. The Region is now reviewing the data collected in order to determine the extent of inflow and infiltration within Vaughan's local sewerage system for areas that have been monitored to date.

## CITY OF VAUGHAN

### EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 5, 2011

#### Item 1, Priorities Report No. 3 – Page 7

In addition to the work completed for the Region, City Engineering and Public Works staff has been actively involved in inflow and infiltration reduction for many years. Ongoing routine maintenance activities associated with inflow and infiltration reduction include:

- Closed circuit (CC) TV inspections of sewer pipes;
- Fog and dye testing;
- New development inspections;
- Manhole inspections and repairs;
- Cross connection investigation and repair;
- Lateral repairs;
- Mainline repairs; and
- Sewer monitoring.

Large scale sewer replacement projects are also undertaken by the Engineering Services Department to improve the overall condition of the City's sewer network which in turn reduces inflow and infiltration. To meet the targets and objectives set out in the Inflow and Infiltration Reduction Strategy, it is anticipated that there will be a need to augment and expand the City's current program.

#### **Relationship to Vaughan Vision 2020 / Strategic Plan**

In consideration of the strategic priorities related to Vaughan Vision 2020, the recommendations of this report will assist in:

- The pursuit of excellence in service delivery;
- Planning and managing growth and economic vitality;
- Leading and promoting environmental sustainability;
- Maintaining assets and infrastructure integrity;
- Ensuring and enhancing community safety, health and wellness;
- Ensuring financial stability; and
- The demonstration of leadership and promotion of effective governance.

This report is consistent with the priorities previously set by Council, however additional resources will be required to implement the final Strategies. As the strategy development progresses, staff will submit funding requests through the appropriate capital and operating budget process in order to effectively meet our local obligations related to these initiatives.

#### **Regional Implications**

Through the development and implementation of the Strategies, the Region and the nine local municipalities have the opportunity to demonstrate leadership in inflow and infiltration reduction and long term water conservation within the industry and contribute to the sustainability of the water and wastewater systems. On February 17<sup>th</sup>, 2011, Regional Council endorsed both the draft Inflow and Infiltration Reduction and Long Term Water Conservation Strategies.

#### **Conclusion**

The endorsement and implementation of the Inflow and Infiltration Reduction and Long Term Water Conservation Strategies will result in increased system capacity in both local and Regional servicing systems thereby allowing the City and the Region continued growth in a more sustainable and environmentally friendly manner.

**CITY OF VAUGHAN**

**EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 5, 2011**

Item 1, Priorities Report No. 3 – Page 8

It is anticipated that additional funding and resources will need to be allocated in future operating and capital budgets to successfully implement the initiatives and programs set out in the Strategies.

**Attachments**

1. York Region – Environmental Services Committee Report, February 9, 2011  
Inflow and Infiltration Reduction Strategy (Adopted by Regional Council on February 17, 2011)
2. York Region – Environmental Services Committee Report, February 9, 2011  
Long Term Water Conservation Strategy (Adopted by Regional Council on February 17, 2011)

**Report prepared by:**

Jennifer Cappola-Logullo, Water / Wastewater Engineer, Ext. 8433  
Michael Frieri, Manager of Engineering Planning & Studies, Ext. 8729  
Andrew Pearce, Director of Development/Transportation Engineering, Ext. 8255

(A copy of the attachments referred to in the foregoing have been forwarded to each Member of Council and a copy thereof is also on file in the office of the City Clerk.)



**CITY OF VAUGHAN**

**EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 5, 2011**

Item 2, Report No. 3, of the Priorities and Key Initiatives Committee, which was adopted without amendment by the Council of the City of Vaughan on April 5, 2011.

**2                   BLOCK 61 INFLOW AND INFILTRATION REDUCTION PILOT PROJECT  
                          HUNTINGTON LANDOWNERS TRUSTEE INC.  
  WARD 1**

**The Priorities and Key Initiatives Committee recommends approval of the recommendation contained in the following report of the Commissioner of Engineering and Public Works, dated March 21, 2011:**

**Recommendation**

The Commissioner of Engineering and Public Works, in consultation with the Director of Legal Services, recommends:

1. That a by-law be enacted authorizing the Mayor and Clerk to execute the necessary agreements with Huntington Landowners Trustee Inc. (Block 61 Developers' Group) and York Region for the Block 61 Inflow and Infiltration Reduction Pilot Project based on the principles and terms set out in this report;
2. That York Region be requested to endorse and participate in the Block 61 Inflow and Infiltration Reduction Pilot Project;
3. That staff be directed to report back to a future Committee of the Whole meeting on the results of the Block 61 Inflow and Infiltration Reduction Pilot Project; and
4. That a copy of this report be forwarded to York Region.

**Contribution to Sustainability**

The reduction of inflow and infiltration (unwanted sources of water) within the existing local and regional sanitary sewerage systems will result in a more sustainable infrastructure network by increasing conveyance capacity and overall operational efficiency.

The proposed Block 61 Inflow and Infiltration Reduction Pilot Project is consistent with the objectives of the City's Community Sustainability and Environmental Master Plan (Green Directions Vaughan, April 2009) as it will assist in:

- The promotion of sustainable growth and development;
- Minimizing energy consumption;
- The creation of a City with sustainable built form;
- Sharing sustainable best practices and ideas between and among municipal staff and the community; and
- Support the City's mandate to minimize inflow and infiltration within the existing sewerage system and to optimize overall system efficiency.

**Economic Impact**

The proposed Block 61 Inflow and Infiltration Reduction Pilot Project is a developer initiated project which will be fully funded by Huntington Landowners Trustee Inc. Accordingly, there is no economic impact to the City resulting from the adoption of this report.

## CITY OF VAUGHAN

### EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 5, 2011

Item 2, Priorities Report No. 3 – Page 2

#### **Communications Plan**

A comprehensive communication plan is proposed by the Block 61 Developers' Group to ensure the City, Region and local residents / businesses are informed during all phases of the Pilot Project. The communication plan includes public awareness components such as notices to residents, site visits with individual property owners, and a project website. Notices will include a detailed description of required field investigation and remedial works that may be carried out throughout the duration of the project.

#### **Purpose**

The purpose of this report is to seek Council's endorsement of the proposed Block 61 Inflow and Infiltration Reduction Pilot Project, which will be undertaken by Huntington Landowners Trustee Inc. in close coordination and collaboration with City and Regional staff.

#### **Background**

The Ministry of the Environment (MOE) imposed conditions of approval on the Regional Southeast Collector Sewer Individual Environmental Assessment (IEA) that requires specific environmental sustainability targets related to inflow and infiltration reduction and water conservation are achieved. This responsibility lies with both regional and local municipalities. The distribution of additional servicing allocation capacity from the York Sewage / Water Supply Systems to local municipalities will be dependant upon successfully achieving these sustainability targets.

Accordingly, since April of 2010 staff has participated in a joint Regional and Municipal Water and Wastewater Task Force in order to establish a strategy by which the MOE sustainability targets can be achieved. Final strategy documents and detailed implementation plans will be submitted to the MOE by March 31, 2011. The Strategies will include priorities, targets, timelines, tactics, initiatives and implementation logistics / costs associated with meeting the targets established for inflow and infiltration reduction and water conservation. One recommendation of the Strategy supports the pursuit of innovative solutions to addressing inflow and infiltration reduction in sewers including the undertaking of pilot projects.

#### **York Region Endorsement of Developer Funded Pilot Projects**

On September 23, 2010, York Region approved the undertaking of a developer funded inflow and infiltration reduction pilot project within the Town of Markham. At the same time, York Region extended the opportunity to each local municipality to undertake one similar pilot project within their own jurisdiction. In general terms, the developer is proposing to fund and undertake works to reduce the inflow and infiltration in priority sewer systems in return for receiving servicing capacity based on a ratio of the flow reduction.

Each pilot project will provide the Region with opportunities and challenges. The opportunities include:

- developer funded inflow and infiltration reduction project;
- developer expedient schedule and resources availability; and
- acquiring project experience which can be used for other inflow and infiltration reduction programs.

The main challenge is to ensure that the pilot projects meet the objectives of the Region's overall inflow and infiltration reduction strategy and the MOE's Southeast Collector Sewer Individual Environmental Assessment conditions of approval.

## CITY OF VAUGHAN

### EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 5, 2011

#### Item 2, Priorities Report No. 3 – Page 3

Any reduction in inflow and infiltration that may be realized by the proposed pilot project will provide the following benefits:

- Accelerated inflow and infiltration reduction in the local and regional sewerage systems;
- Improved sewerage system efficiencies;
- Reduced potential for sewage spills and related environmental impacts as a result of cross connections;
- Reduced potential for basement flooding;
- Reduced municipal liability;
- Increased certainty of sewer system condition;
- Assistance in meeting MOE approval conditions for the Southeast Collector;
- Reduced surcharge risks in regional and local sewerage systems; and
- Reduced volumes reaching the treatment plant.

#### Block 61 Pilot Project

In January 2011, Huntington Landowners Trustee Inc. (the Block 61 Developers' Group) submitted a proposal to implement an Inflow and Infiltration Reduction Pilot Project in the City to facilitate the development in Block 61.

Block 61 is located within the Kleinburg-Nashville Community. It is bound by Major Mackenzie Drive to the south, Huntington Road to the west, Nashville Road to the north and Stevenson Avenue to the east. The existing Canadian Pacific Railway (CPR) right-of-way runs through the Block in a north-south direction thereby bisecting the Block into an east and west portion as shown on Attachment No. 1.

The lands west of the existing CPR right-of-way are designated for residential development by the area specific Official Plan Amendment No. 699. On February 1, 2011, a Public Hearing was held for the proposed Block 61 West (Nashville Heights) Block Plan. The participating landowners in the Block have submitted draft plan of subdivision and zoning applications which are currently under review by staff. The proposed Block Plan will accommodate the development of approximately 3,000 units with an equivalent population of about 10,200 people. The lands east of the CPR right-of-way comprise of two draft approved plan of subdivisions; Lake Rivers Inc. (19T-05V10) and Molise Kleinburg Inc. (19T-06V14) as shown on Attachment No. 1. Collectively, these plans contain a total of 760 residential lots. Both plans are currently advancing towards detailed design in support of a phase 1 development. In total, Block 61 east and west will comprise of about 3,800 units.

The Block 61 Pilot Project will develop a methodology for estimating the overall inflow and infiltration reduction in the local and Regional sewerage systems, part of which will be used for risk reduction and the remainder for allocation to new development areas. It is expected that both flow rates and flow volumes will be reduced so as to optimize or free-up capacity in the existing system. The overall benefit of the project is that the efficiency of the City and Region's sewerage system is improved at no cost to the City, and in return the developer receives sanitary servicing capacity which will facilitate the development within Block 61.

The individual phases of the pilot project will include the following components:

1. Catchment area selection;
2. Initial sewage flow monitoring;
3. Catchment area testing;
4. Inflow and infiltration source identification and evaluation;
5. Remedial works to reduce inflow and infiltration;
6. Post remedial monitoring; and
7. Inflow and Infiltration reduction verification / reporting.

## CITY OF VAUGHAN

### EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 5, 2011

#### Item 2, Priorities Report No. 3 – Page 4

The Block 61 Developer's Group is committing to fully fund the pilot project. Based on a preliminary schedule, it is anticipated that the pilot project will take approximately 18 to 24 months to complete. Through partnership with the City, the Developers Group will assist in achieving a reduction in inflow and infiltration in the City's sewerage system at no cost to the City or Region in exchange for sanitary servicing capacity for Block 61.

Ultimately, York Region must verify that any remedial works completed has resulted in a measurable reduction in peak wet-weather flows and volume in the York-Durham Sewage System. Once the flow reduction is quantified and confirmed by the Region and City, it will be converted into equivalent residential units. Based on the parameters of the pilot project, Huntington Landowners Trustee Inc. must demonstrate an actual flow reduction equivalent to two residential units in order to receive one unit of new servicing capacity.

Overall, the Pilot Project will achieve a net improvement in risk reduction / management and enhance environmental protection and public safety. In return, it will allow for the advancement of future servicing allocation capacity to new development areas above and beyond current commitments from York Region. Development/Transportation Engineering and Public Works staff will work closely with the Block 61 consultants and representatives from York Region throughout the duration of the Pilot Project.

#### Pilot Project Target

The development in Block 61 will required a total of about 3,800 units of servicing capacity to provide for the full build out of the block. Based on the 2:1 ratio, the pilot project must identify a total of 7,600 units of capacity to reach this target.

In addition, City staff has requested that the pilot project realize a further flow reduction equivalent to 800 units. These additional 800 units will be assigned to the City and may be allocated to any development application within the City, regardless of catchment area, in accordance with the current Servicing Capacity Distribution Protocol as approved by Council. Accordingly, the overall objective of the pilot project is to identify servicing capacity for a total of 9,200 units (3,800 + 800 x 2). The engineering consultant for Block 61 is optimistic that this overall target flow reduction can be achieved successfully based on the experience gained in the Markham Pilot to date.

#### Initial Allocation of Capacity

Development in Block 61 may be in a position to proceed before the pilot project has been completed. Accordingly, it may be necessary to allocate servicing capacity to the initial phase of the development in Block 61, which will return to the City after the pilot project is completed. The Region has also requested that the City show support to the initial phase of the development proceeding through the allocation of capacity for the first phase from existing assigned capacity. This will be addressed in the next annual servicing capacity allocation update report in Q2-2011. Any capacity realized through the Block 61 Inflow and Infiltration Reduction Pilot Project is in addition to the City's current Regional assignment of 2013 capacity. Future Regional assignments of servicing capacity to the City will consider the results of the Pilot Project and growth projections.

#### Principles of Agreement

In order to facilitate the proposed Pilot Project, a tri-party agreement will be required between the City, York Region and Huntington Landowners Trustee Inc. (Block 61). The tri-party agreement will be based on the following principles:

**CITY OF VAUGHAN**

**EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 5, 2011**

Item 2, Priorities Report No. 3 – Page 5

1. All work associated with the Block 61 Inflow and Infiltration Reduction Pilot Project shall be area specific and coordinated with the Region's broader inflow and infiltration reduction program; no other similar allocation seeking pilot project will be permitted in the City until it is demonstrated that there is an overall benefit to the Region and the City;
2. The inflow and infiltration reduction pilot project shall be fully funded by Huntington Landowners Trustee Inc. (Block 61 Developers' Group) and will not be eligible for Development Charge credits;
3. The Block 61 Developers Group shall pay any and all costs incurred by the City in connection with the Block 61 Inflow and Infiltration Reduction Pilot Project including the cost of consultants engaged by the City for the purpose of peer reviewing the results of the pilot, verification monitoring and testing, staff time and resources, etc.;
4. The Block 61 Developers Group may complete more than one high priority catchment area, if necessary, to achieve sufficient inflow / infiltration reduction to meet the overall project target of 3,800 new residential units for Block 61 and 800 residential units for the City;
5. The Block 61 Developers Group shall receive 3,800 residential units of capacity realized by inflow / infiltration reduction and the City shall receive 800 residential units of capacity.
6. The total allocation capacity target for this pilot project is 4,600 residential units (3,800 + 800). The advancement of allocation capacity realized by the pilot project shall be distributed as follows:
  - a. The first 3,000 units shall be used for development in Block 61.
  - b. The remaining 1,600 units shall be divided equally between the City and Block 61 at a ratio of 1:1.
7. The Block 61 Developers Group shall commit to complete all remediation works identified in any single catchment area as mutually identified by the Block 61 Developers Group, the Region and the City prior to completion of the project and prior to receiving the corresponding allocation of servicing capacity;
8. Capacity assignment shall be provided in stages based on proven inflow / infiltration reduction through remedial works carried out by the Block 61 Developers Group and City approved development phasing;
9. The inflow and infiltration reduction work shall be carried out in catchment areas as recommended by the Block 61 Developers Group and approved by the Region and the City;
10. The Block 61 Developers Group shall develop an inflow and infiltration reduction / monitoring work plan to be approved by the City and Region prior to commencement of the work. The work plan shall outline the approach and shall include flow monitoring works for the chosen catchments. Upon approval by the City and Region, the Block 61 Developers Group may choose to expand the work into other catchment areas if necessary to achieve flow reduction targets, provided the remedial works in the original catchment areas are completed; or adequate securities are posted with the City and the Region to ensure completion of the additional work;
11. The City and the Region and/or its agent will review the analysis and monitoring works carried out by the developer to determine inflow/infiltration reduction. At its sole discretion, the City and the Region and/or its agent may carry out independent analysis and monitoring works to quantify and verify the results;

**CITY OF VAUGHAN**

**EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 5, 2011**

Item 2, Priorities Report No. 3 – Page 6

12. The methodology used to quantify inflow / infiltration reduction shall be one adopted by the Region with baselines defined by the Region. Verification and quantification of I/I reduction will take into consideration, but shall not be limited to, the length of the monitoring period, the quality and consistency of data collected, the number and intensity of storm events during the monitoring period; and shall be at the sole discretion of the City and York Region;
13. Capacity assignment to the City shall not exceed more than 1 unit for every 2 units of proven capacity created by inflow / infiltration reduction;
14. The Region will at its sole discretion determine the exact allocation assignment ratio to be used, based on the nature of remediation and the flow reduction verification process;
15. The Block 61 Developers Group shall implement the new sewer design, inspection and commissioning standards developed by York Region in conjunction with local municipalities in the Block 61 development. All new infrastructure shall be inspected to the satisfaction of the Region and the City;
16. Prior to implementing any remedial work, a resident communication protocol shall be established by the developer in close cooperation with the City, to the satisfaction of the Region and City;
17. The Region and/or City may inspect the work and may require stoppage of work at its sole and absolute discretion, if the work has been commenced without obtaining the necessary approvals, or private properties entered without prior consent of property owners and/or the work is not performed in accordance with the Region's overall inflow / infiltration reduction program;
18. All flow monitoring records collected by the Block 61 Developers Group shall become the property of the Region and the City at the end of the pilot project;
19. The City shall consider reserving/allocating servicing capacity to the initial phase of development in Block 61. This reservation/allocation of capacity shall be from the City's available capacity assignment, and allocated in accordance with the City's Servicing Capacity Distribution Protocol;
20. The Block 61 Developers Group shall provide the City with a letter of Credit for the full estimated value of the remedial work and where work is subsequently expanded into other catchment areas, the Letter of Credit shall be increased accordingly;
21. The Block 61 Developers Group shall fully indemnify the Region and City against any and all legal action that may arise throughout the full duration of the pilot project, including design, monitoring and construction of works and thereafter, as well as against any action taken against the Region and City as a result of the Region and City agreeing to proceed with this project;
22. The Region and the City will support draft plan approval provided that the Block enters into a "No Presale" Agreement for development lands beyond Phase 1 and provided that a Holding Zone be placed on all development lands beyond Phase 1 capacity;
23. Servicing allocation commitments will be finalized by the City and the Region in consultation with the Block 61 Developers Group and once the City and Region are satisfied that all benefiting parties are in good standing with the Trustee; and

## CITY OF VAUGHAN

### EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 5, 2011

#### Item 2, Priorities Report No. 3 – Page 7

24. The Block 61 Inflow and Infiltration Reduction Pilot Project shall be deemed complete once all targets have been achieved.

Based on the principles outlined above, it is recommended that the City enter into a tri-party agreement with York Region and the Block 61 Developers Group so the Block 61 Inflow and Infiltration Reduction Pilot Project can be undertaken.

It is anticipated that flow monitoring within the City's existing sewerage system may commence in advance of the execution of the final agreement in order to maximize the use of flow monitoring data captured from the upcoming spring melt and wet weather events.

#### **Relationship to Vaughan Vision 2020 / Strategic Plan**

In consideration of the strategic priorities related to Vaughan Vision 2020, the recommendations of this report will assist in:

- The pursuit of excellence in service delivery;
- Planning and managing growth and economic vitality;
- Leading and promoting environmental sustainability;
- Maintaining assets and infrastructure integrity;
- Ensuring and enhancing community safety, health and wellness;
- Ensuring financial stability; and
- The demonstration of leadership and promotion of effective governance.

This report is therefore consistent with the priorities previously set by Council and the necessary resources have been allocated and approved.

#### **Regional Implications**

Regional endorsement of the Block 61 Inflow and Infiltration Reduction Pilot Project will be required. The City will continue to actively participate with York Region in all inflow and infiltration reduction programs and initiatives in order to satisfy the MOE conditions of approval for the Southeast Collector Sewer. Accordingly, it is recommended that a copy of this report be forwarded to the Region with a request that the Region endorse and participate in the Block 61 Inflow and Infiltration Reduction Pilot Project.

#### **Conclusion**

The proposed Pilot Project will be fully funded by the Block 61 Developers' Group. Successful completion of the pilot will improve the overall efficiency in both local and regional sanitary sewerage systems and will assist in meeting the MOE approval conditions for the Southeast Collector. The Pilot Project anticipates a "win-win-win" outcome for the City, Region and the proponents in Block 61. The duration of the pilot from initial monitoring to post remediation monitoring is anticipated to take approximately 18 to 24 months to complete. By achieving the inflow and infiltration reduction targets anticipated by the pilot, additional servicing allocation capacity will be realized for active development applications throughout the City.

Staff will report back to a future Committee of the Whole meeting on the results of the proposed Block 61 Inflow and Infiltration Pilot Project.

#### **Attachments**

1. Block 61 Location Plan

CITY OF VAUGHAN

**EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 5, 2011**

Item 2, Priorities Report No. 3 – Page 8

**Report prepared by:**

Jennifer Cappola-Logullo, Water / Wastewater Engineer, Ext. 8433  
Michael Frieri, Manager of Engineering Planning & Studies, Ext. 8729

(A copy of the attachments referred to in the foregoing have been forwarded to each Member of Council and a copy thereof is also on file in the office of the City Clerk.)



CITY OF VAUGHAN

**EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 5, 2011**

Item 3, Report No. 3, of the Priorities and Key Initiatives Committee, which was adopted without amendment by the Council of the City of Vaughan on April 5, 2011.

**3 GREEN DIRECTIONS VAUGHAN  
COMMUNITY SUSTAINABILITY AND ENVIRONMENTAL MASTER PLAN  
IMPLEMENTATION UPDATE**

The Priorities and Key Initiatives Committee recommends:

- 1) That the recommendation contained in the following report of the City Manager and the Manager of Environmental Sustainability, dated March 21, 2011, be approved; and
- 2) That staff provide to the Priorities and Key Initiatives Committee meeting of September 12, 2011 an update on the project titled "Develop Sustainable Development Evaluation Criteria".

**Recommendation**

The City Manager and the Manager of Environmental Sustainability in consultation with the Senior Management Team recommends that:

- 1) This Attachment 1, outlining progress to date in implementing the actions prescribed in Green Directions Vaughan be received for information purposes.
- 2) That a Media Release and a web based report be issued to inform the public of the advances made in implementing *Green Directions Vaughan* in the second year of implementation.

**Contribution to Sustainability**

Objective 6.1 of *Green Directions*, "To fully support the implementation of Green Directions at all levels of City operations", provides under Action 6.1.6 that, an annual report to the Environment Committee be prepared on the status of existing programs and accomplishments for the purpose of monitoring the implementation of the plan. Although this report would not replace the annual report it will provide a status update on implementation of the community sustainability and environmental master plan.

**Economic Impact**

There will be no economic impact resulting from the adoption of this report.

**Communications Plan**

Following the second year of implementation of *Green Directions Vaughan* it would be appropriate to issue a Media Release and a web based report acknowledging this milestone. This is consistent with Goal 5 of *Green Directions Vaughan*, "To be leaders in advocacy and education on sustainability issues", where "Vaughan is committed to sharing its successes with the community. . ." and action 6.1.6 "Prepare an annual report...for the purposes of monitoring the implementation of the plan. Recommendation No. 2, will provide Staff with direction to proceed with the preparation of a Media Release and a web based annual report to illustrate some of the major advances the City has made in implementing *Green Directions Vaughan*.

## CITY OF VAUGHAN

### EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 5, 2011

Item 3, Priorities Report No. 3 – Page 2

#### **Purpose**

The purpose of this report is to provide the Priorities and Key Initiatives Committee with an update on the implementation of the *Green Directions Vaughan*.

#### **Background - Analysis and Options**

##### Background

In April 2009 Council approved the *Green Directions Vaughan, our Community Sustainability and Environmental Master Plan*. As the City's sustainability plan, *Green Directions* contains a set of recommended actions that address the range of municipal responsibilities including both operational and regulatory functions. It also serves as the City's Integrated Community Sustainability Plan (ICSP). The ICSP is a long-term plan designed to guide the community toward a more sustainable future by addressing environmental, cultural, social and economic issues. Preparation of the ICSP is a requirement of the federal government's New Deal for cities as a condition of receiving funding from the federal gas tax.

On May 25, 2010 the Environment Committee received a report on implementation of *Green Directions Vaughan* following the first anniversary of its approval. The report highlighted the status of existing programs, key accomplishments, new initiatives and further opportunities for the purposes of monitoring the implementation of the plan. The primary focus of the report was directed to projects that are identified in the 2009-10 timeframe or those that were targeted as "on-going".

*Green Directions* establishes a definition of "sustainability", an "environmental ethic" and a set of "principles" to guide the implementation of the plan. The definition of sustainability reflects the breadth of municipal responsibilities, where, "Sustainability means we make decisions and take actions that ensure a healthy environment, vibrant communities and economic vitality for current and future generations."

The plan identifies six categories that classify Vaughan's functions. These are further broken down into goals, objectives and a series of actions, which describe how each of the goals can be achieved. The categories and goals include:

##### What We Use:

Goal 1: To significantly reduce our use of natural resources and the amount of waste we generate.

##### How and Where we Grow:

Goal 2: To ensure sustainable development and redevelopment.

##### How We Get Around:

Goal 3: To ensure that Vaughan is a city that is easy to get around with low environmental impact.

##### How We Live:

Goal 4: To create a vibrant community where citizens, businesses and visitors thrive.

##### How we Lead:

Goal 5: To be leaders in advocacy and education on sustainability issues.

## CITY OF VAUGHAN

### EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 5, 2011

#### Item 3, Priorities Report No. 3 – Page 3

##### How we Operate:

Goal 6: To ensure a supportive system for the implementation of *Green Directions*.

The objectives are more specific statements of the general goals and they describe how the goals will be achieved. Each of the goals has multiple objectives. The actions refer to tasks that need to be undertaken to achieve the prescribed objective. There can be multiple actions attached to each objective. Actions are assigned to a Commission for implementation within a specific timeframe.

##### Report format

A significant portion of the success of *Green Directions Vaughan* will depend on the internal operations and functions that support its implementation. In order to monitor the implementation of the plan, action 6.1.6 indicates that the City should prepare an annual report addressing, among other things:

- The status of existing programs
- New Initiatives
- Accomplishments
- Further opportunities.

Continuing with the approach established for the first annual report, this report will focus on the measures taken to date to implement the plan's action items. As a result, this report will focus predominantly on the action items that have been implemented, planned within the initial timeframe of the plan or classified as ongoing.

Attachment No.1 is based on the section within *Green Directions* that summarizes actions for each action item; the Goals, Objectives, Time Frames and Project Responsibility have been noted. A final column summarizes the update for each action item as of March 2011.

In order to highlight the implementation progress of *Green Directions*, a few initiatives have been selected to report back on. These select projects are currently underway or have been recently completed. These representative projects also correspond to the three main tenets of sustainability; healthy environment, economic vitality and vibrant community. In addition, there is at least one example from each of the six goal areas.

##### New initiatives/Status of existing programs

- i) Employee Education Strategy

##### Action status

- Project initiation: Q1, 2010
- Target Completion: Q2,2011

Sharing sustainable best practices between and among municipal staff and the community is one component of the goal of leading and advocating on sustainability issues. Action 5.1.5 commits the City to developing an environmental education strategy to familiarize staff with the provisions of *Green Directions* expanding into an on-going education program.

A consultative process was employed to engage staff in the development of the Employee Education Strategy. The thirteen initiatives that encompass the Employee Education Strategy are a combination of new and old programs, projects and campaigns. The initiatives provide information for individuals to learn from and take action on as well as challenge individuals to establish new behaviours. Although the goal of the Strategy is to foster more sustainable behaviour in the workplace it will lead to a more sustainable lifestyle for employees at home as well.

## CITY OF VAUGHAN

### EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 5, 2011

#### Item 3, Priorities Report No. 3 – Page 4

The Employee Education Strategy will be a catalyst to establish a corporate culture of sustainability and lead to successful implementation of *Green Directions Vaughan*. As the implementation of *Green Directions* moves forward, education of employees is a priority. As employees build capacity on sustainability through education the sustainability objectives of the City will be become even more attainable.

#### ii) Green procurement policy

##### Action status

- Project initiation: Q2, 2010
- Target completion: Q2, 2011

One of the best tactics to reduce use of natural resources and the waste generation is to purchase more sustainable products. Objective 1.5 of *Green Directions* provides that the City should reduce the amount of waste generated in City owned facilities and procure sustainability products for the City's use. To achieve this objective, Action 1.5.5 recommends the development and implementation of a green purchasing policy.

The draft Green procurement policy notes the purpose of the document is to provide a framework for the purchase of Environmentally Preferable Products and services that compliment the City's existing, formal purchasing practices. Include environmental considerations in purchasing decisions where possible as technological advancements become available. By including environmental considerations in purchasing decisions, along with traditional concerns (price, performance, and availability), the City of Vaughan will remain fiscally responsible while promoting practices that improve public health and safety, reduce pollution, conserve natural resources, and recognize manufacturers and vendors that reduce the adverse environmental impact of their production and distribution systems.

The draft Green Procurement policy is scheduled to be vetted through Directors and Commissioners. Once the policy is finalized and introduced across City Departments, internal training will be provided to staff most affected by the Green procurement policy.

#### iii) The Vaughan District Energy Feasibility Study

##### Action Status

- Project Initiation: Q4, 2009
- Target Completion: Q1 2011

Action 1.2.2 states that the City should consider opportunities for developing community energy strategies for the purpose of reducing energy use on a community basis, by applying such measures as district energy systems. It further provides for the City to evaluate all major development areas for their potential for district energy systems and that a feasibility study is undertaken for the Vaughan Metropolitan Centre.

On May 4, 2010, the Vaughan Holdings Inc. Board of Directors ratified the retention of a consultant to conduct the Vaughan District Energy Feasibility Study. The study scope involved examining the potential for a District Energy System in the Metropolitan Centre and a high-level examination of opportunities elsewhere in the City. The study reviewed potential ownership and operating models as well as potential implementation plans.

District Energy Systems are efficient users of energy and by displacing autonomous systems they reduce the production of greenhouse gases, especially with the use of Combined Heat and Power systems. They are also an effective economic development tool. Building owners can gain a potentially cheaper means of heating and cooling their buildings, lower capital costs, more

## CITY OF VAUGHAN

### EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 5, 2011

#### Item 3, Priorities Report No. 3 – Page 5

usable floor space with less space taken up with mechanical systems and decreased maintenance costs. These systems can provide a municipality with a competitive edge in attracting new investment.

#### iv) Adoption of the New Official Plan

##### Action Status

- Project Initiation: Vaughan Tomorrow/OP Review initiated Q1/Q2 2007
- Target Completion: Q3 2010

Objective 2.1 of *Green Directions* is to achieve sustainable growth and development by completing and implementing the *Vaughan Tomorrow* program. The Official Plan has been adopted by Council and is awaiting approval from the Region. The adoption and approval of the new Official Plan, the focused area plans and the accompanying master plans will be one of the most important steps the City will take over the next 25-years. Land use and urban form and structure are major determinants of a City's sustainability. The new Official Plan will be a critical influence on how well Vaughan performs environmentally, as a desirable community in which to work and live and from a financial and economic perspective.

The Official Plan process helped to achieve several actions identified in *Green Directions Vaughan* including 2.2.1 which addressed more intensification with increased height and density and mixed use in thoughtfully developed nodes and along transit corridor, 2.2.3. which addressed ensuring that a mix of housing types are provided in Vaughan and that affordability is a consideration in planning.

#### v) Implementation of the Pedestrian and Bicycle Master Plan

##### Action Status

- Project Initiation: Q4, 2009
- Target Completion: Q1 2011

Developing and sustaining a network of sidewalks, that supports all modes of non-vehicular transportation is an objective of *Green Directions*. Through the implementation of the Pedestrian and Bicycle Master Plan the City of Vaughan is committed to making choices that will reduce automobile dependency, traffic congestion and transportation-related greenhouse gas emissions. Vaughan promotes active transportation options for its employees and citizens such as walking and biking. In addition to reducing greenhouse gas emissions and reducing congestion, active transportation has corollary health benefits.

Public Works has ordered the Bicycle Route signage, and installation of the signs has commenced. Implementation funds continue to be secured via yearly Capital Budget deliberations in partnership with the Region of York. York Region has approved funding for proposed Bicycle and Pedestrian Master Plan implementation projects for 2011. The Teston Road multi-use path was completed in the fall of 2010. Development / Transportation Engineering staff participate on the committee that has been established to draft a new Ontario Traffic Conference Manual for bicycle facilities. Staff are exploring the opportunity of establishing a Cycling Advisory Group to obtain input from Vaughan cyclists by Q2 of 2011.

#### vi) Develop sustainable development evaluation criteria

##### Action Status:

- Project Initiation: Q2, 2010
- Target Completion: Q4, 2011

## CITY OF VAUGHAN

### EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 5, 2011

#### Item 3, Priorities Report No. 3 – Page 6

In order to create a city with sustainable built form, an effort must be made toward creating sustainability guidelines for development and redevelopment projects. Action 2.3.1, notes that these sustainability guidelines will establish evaluation criteria that can be applied from neighbourhoods to sites and include areas such as development form/sustainable sites, resource efficiency, transportation, public realm as well as greenspace and wildlife.

The City of Vaughan is partnering with the City of Brampton, the Town of Richmond Hill, with support from the Federation for Canadian Municipalities Green Municipal Fund, to conduct a community-based study and develop sustainability guidelines that will inform the processes their councils use to review new development and redevelopment projects. In the first phase, recommendations for sustainability guidelines will be developed. The guidelines will explore appropriate metrics and performance increments in areas such as building energy efficiency, passive energy conservation, water efficiency, local heat island mitigation, and low-impact development standards. There is a specific focus regarding performance indicators to ensure reductions in energy consumption and greenhouse gas (GHG) emissions.

The second phase, will test the proposed metrics to ensure that the required and enhanced performance levels are feasible, robust and will result in measureable sustainability gains. The city's consultant will conduct workshops with municipal staff, undertake stakeholder consultation, and coordinate an external peer review to recommend the most suitable performance measures and forecast the results of using these measures consistently throughout the municipalities. The project is expected to reduce the ecological impact of new development and redevelopment projects, with a particular emphasis to promote measureable decreases in energy consumption and GHG emissions for new developments in the municipalities.

#### vii) Partnership opportunities for existing non-profit and volunteer groups

##### Action Status:

- Project Initiation: Q2, 2009
- Target Completion: ongoing

Creating vibrant communities by fostering a city with a strong social cohesion and a clear sense of its culture and heritage is an objective of *Green Directions Vaughan*. Action 4.1.6, notes that partnership opportunities should be provided for existing non-profit and volunteer groups to meet the community's social, cultural and recreational needs.

The Recreation and Cultural Department continue to add new community service organization (CSO) groups in 2010, including: Art of Living Foundation, Jewish Russian Community Centre, Beth Radem Congregation, and Latin Seniors and Adult Association of Vaughan. An updated community service organization (CSO) policy will go to Council in May 2011.

#### viii) Catalyzing the development of Green Business

##### Action Status:

- Project Initiation: Economic Development Strategy Q1 2010
- Target Completion: Q3 2010

Objective 4.3 of *Green Directions* is to encourage the establishment of green businesses in Vaughan and the application of sustainable business practices. One of the recommendations emerging from the Employment Sector Strategy Study is that environmental and green industries should be targeted for attraction based on Vaughan's location at the centre of a major market for green products and its existing strength manufacturing, building products and related services.

## CITY OF VAUGHAN

### EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 5, 2011

#### Item 3, Priorities Report No. 3 – Page 7

*Green Directions'* Action 4.3.1 provides for the development of a business attraction and retention strategy to encourage environmentally-friendly businesses and industries to set up in Vaughan. The Employment Sectors Strategy Study contains recommendations in this regard for use in the new Official Plan and in the Economic Development Strategy.

The preparation of the Economic Development Strategy is now completed. Specifically, objective 2.5 of the Economic Development Strategy states undertake projects focused on the built environment, environmental sustainability and green design with the ultimate goal of enhancing local technical capacity and industry development in the green building sector. The corresponding action 2.5.3 commits to developing a business attraction and retention strategy to encourage environmentally-friendly or progressive businesses to set up in Vaughan with a completion timeline of 2014. It will be a key influence in securing investment by green industries and businesses.

#### Accomplishments

Many departments within the City of Vaughan have demonstrated notable environmental achievements through implementing *Green Directions Vaughan* actions. Some of the notable accomplishments include:

#### Energy Efficient Street Light Changeover Project (LED Lighting)

Transportation and Development Engineering and Public Works Department staff received Council approval in 2010 to move forward with the implementation of the Light Emitting Diode (LED) Street Lighting Retrofit project. The retrofit involves replacing 1400 high pressure sodium street lights in industrial areas with LED technology. The LED technology is anticipated to save the city money through reduced energy and maintenance costs. This project will result in a reduction of the carbon footprint or greenhouse gas emissions associated with street lighting.

#### Demonstration Project on Adaptive Roadway Lighting

Public Works has partnered with Natural Resources Canada and others on a pilot project examining adaptive roadway lighting. New street lighting technology has been put in place on McNaughton Road on a total of 10 streetlights as part of the pilot. The goal is to reduce energy consumption without visibly impacting roadway lighting levels. The streetlights are remotely controlled by Public Works Department staff via the Internet and each fixture is monitored for energy consumption. Remotely dimming streetlights during off-peak periods has resulted in energy savings for the City.

#### Watermain Replacement and Road Reconstruction

Engineering Services is typically involved in 3-4 water main replacements annually. In 2010, a Thornhill area water main replacement minimized the environmental impact from several perspectives. The project used horizontal 100mm boreholes between trenches to reduce the need for excavating and hauling and importing fill. By pulverizing existing asphalt on-site for use within the site, resulted in 30-40 % cost reduction from natural resource usage. By eliminating the need to truck out waste materials, green house gas emissions were significantly. The project also re-established a ditch line which resulted in improved storm water management in the area.

#### Relationship to Vaughan Vision 2020/Strategic Plan

This report is consistent with the *Green Directions Vaughan* objective to lead and promote environmental sustainability and implement the Community Sustainability and Environmental Master Plan.

## CITY OF VAUGHAN

### EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 5, 2011

Item 3, Priorities Report No. 3 – Page 8

#### Regional Implications

There are no Regional implications resulting from the adoption of this report.

#### Conclusion

The implementation phase of *Green Directions*, the City of Vaughan's Community Sustainability and Environmental Master Plan continued throughout the later part of 2010. A number of the major initiatives have progressed significantly which has helped generate momentum for the implementation of the Plan.

The integration of the concept of sustainability continued through the adoption of the Official Plan, assimilation of terminology into other master plans as well as the City's policy and planning documents. With a strong foundation of sustainability in the policy framework of the organization it is evident sustainability is a dominant theme and an explicit corporate priority. The emphasis now shifts to implementation of the Community Sustainability and Environmental Master Plan.

Since the last update in May 2010 progress has been made on a number of major initiatives identified in *Green Directions*. This report has identified some significant examples, which will have a lasting impact on the City. The status of all the Actions prescribed in *Green Directions* is set out in Attachment 1.

Generally, these initiatives will require inter-departmental cooperation; in some instances the participation of senior levels of government and the private sector may be necessary; and staff or other resources have or may need to be assigned. Those cited include:

- Employee Education Plan;
- Green Procurement Policy
- Vaughan District Energy Feasibility Study
- Adoption of the New Official Plan
- Implementation of the Pedestrian and Bicycle Master Plan
- Develop sustainable development evaluation criteria
- Partnership opportunities for existing non-profit and volunteer groups
- Catalyzing the development of Green Business

Many departments within the City of Vaughan have demonstrated notable environmental achievements through implementing *Green Directions Vaughan* actions. Three examples from Public Works, Transportation and Development Engineering and Engineering Services are highlighted as accomplishments.

Work on these initiatives and accomplishment is on-going and they represent a significant progress in the implementation of Green Directions Vaughan and three main tenets of sustainability; healthy environment, economic vitality and vibrant community. Therefore, it is recommended that Attachment No. 1 be received for information purposes. A further update will be provided in Q2, 2011 which will mark the second anniversary of the adoption of *Green Directions*.

#### Attachments

1. Green Directions Vaughan  
Community Sustainability and Environmental Master Plan  
Implementation Update  
March 2011



CITY OF VAUGHAN

**EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 5, 2011**

Item 3, Priorities Report No. 3 – Page 9

**Report prepared by:**

Chris Wolnik, Manager of Environmental Sustainability, ext. 8633

(A copy of the attachments referred to in the foregoing have been forwarded to each Member of Council and a copy thereof is also on file in the office of the City Clerk.)

CITY OF VAUGHAN

**EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 5, 2011**

Item 4, Report No. 3, of the Priorities and Key Initiatives Committee, which was adopted without amendment by the Council of the City of Vaughan on April 5, 2011.

4 **VAUGHAN OFFICIAL PLAN 2010  
STATUS REPORT  
FILE 25.1.1  
WARDS 1 TO 5**

**The Priorities and Key Initiatives Committee recommends:**

- 1) **That the recommendation contained in the following report of the Commissioner of Planning, dated March 21, 2011, be approved; and**
- 2) **That Communication C1, Memorandum of the Commissioner of Planning, dated March 17, 2011, be received.**

**Recommendation**

The Commissioner of Planning recommends:

That this report be received for information purposes to provide an update on the City of Vaughan Official Plan (VOP) 2010.

**Contribution to Sustainability**

The policies of the new City of Vaughan Official Plan 2010 (VOP 2010) provide for more efficient growth management. These policies relate to the creation of complete communities including sustainability, natural and built heritage protection and green and intensified built form.

**Economic Impact**

n/a

**Communications Plan**

n/a

**Purpose**

The purpose of this report is to provide an update on the progress of additional tasks related to the VOP 2010 since its adoption by Vaughan Council on September 7, 2010, and to outline next steps towards its final approval.

**Background - Analysis and Options**

The City of Vaughan Official Plan 2010 (Volumes 1 and 2), was adopted by Vaughan Council on September 7, 2010. At that meeting Council directed that further studies be completed on specific areas of the plan, and that any proposed changes resulting from these studies be treated as modifications to the Plan through the Regional approval process.

The following is an account of the specific studies directed by Council and the progress on each to date.

- (i) Land Use Study of the Centre Street corridor (north side) between New Westminster Drive and Concord Road (see Attachment # 1)

CITY OF VAUGHAN

**EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 5, 2011**

Item 4, Priorities Report No. 3 – Page 2

On March 8<sup>th</sup>, 2011, Council approved the Terms of Reference for the Thornhill Centre Street Area Land Use Study, including the expansion of the study area from that initially directed by Council, to include the north side of Centre Street from Concord Road to Vaughan Boulevard. In addition, Council approved the retention of the Planning Partnership on a single source basis to undertake the study as an adjunct to the on-going Thornhill Centre Street Corridor Urban Design Guidelines and Streetscape Master Plan Study. A public consultation meeting and workshop is tentatively scheduled for March 21, 2011. At this meeting, the consultant will present for discussion and further exploration possible land use scenarios and urban design for the properties within the boundary of the area land use study. It is anticipated that the study will be completed by the fall of 2011.

- (ii) Area Land Use Study of Dorian Place within the Yonge-Steeles Secondary Plan Area (see Attachment # 2)

Council directed that Dorian Place be studied further in relationship to issues raised by residents of the street. This will be addressed through discussion with the residents and the exploration of alternative concept plans for this area. On December 15, 2010 staff met with residents of Dorian Place for an informal discussion on some of the issues and concerns specific to their street, and to determine whether there was a consensus for re-designation of the properties from residential to a mixed-use residential/commercial designation. All but one of the residents present at the meeting were in favour of re-designating Dorian Place. All of the residents in attendance were interested in the City developing alternative concept plans and bringing them back to them for their input at a future meeting. Following this second meeting, if the Dorian Place residents are interested in pursuing re-designation, a further meeting to include the broader community will be scheduled to present the proposed modifications and concept plan, and to receive their input. Staff will work together with the City's Consultant IBI Group Architects for the Yonge-Steeles Study, to complete this review. It is anticipated that this review will be finalized in the fall of 2011.

- (iii) Area Reviews of lands within the Vaughan Metropolitan Centre (VMC) Secondary Plan (see Attachment # 3)

- a) 7601 Jane Street (located between Jane Street and Maplecrete Road, and immediately south of Doughton Road)

As per the Council direction of September 7, 2010, staff was directed to consider the feasibility of landowner requests to designate the entire subject lands under a common designation of "Downtown Mixed-Use". The landowner was requested to submit a concept plan with the appropriate justification. Further to this, staff met with the landowner and his consultants on November 30, 2010, to clarify the principles of the VMC vision, and to advise on the required submission material. A second meeting, at which the landowner introduced a preliminary concept plan, was held on March 1, 2011. This preliminary plan will be reviewed by staff and the City's consultant for the VMC Secondary Plan; and comments on the submission will be provided and discussed with the landowner.

Any resulting recommended modifications to the Council Adopted Secondary Plan, will then be presented at a public consultation meeting including area residents and VMC area landowners in the spring or fall of 2011.

- b) Northwest Quadrant of the VMC Secondary Plan (area between Highway 400 to the west, Jane Street to the east, Hwy. 7 to the south, and Portage Parkway to the north)

## CITY OF VAUGHAN

### EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 5, 2011

#### Item 4, Priorities Report No. 3 – Page 3

As a result of the landowners' requests to consider modifications to this particular area of the VMC Secondary Plan, staff requested that they submit an alternative plan as part of the review process. Staff outlined in a letter to the landowners, the parameters of any modification to the subject area, and the required justification report which should accompany the alternative concept plan. Subsequently, staff met with the landowners' representatives on February 28, 2011, at which time a preliminary concept plan was presented. Staff have requested that corresponding data respecting proposed densities, unit numbers, and parkland areas be submitted for the concept plan, so that the submission may then be reviewed by staff and the City's consultant for the VMC Secondary Plan. Comments on the submission will then be provided and discussed with the landowners.

The resulting recommended modifications to the Council adopted Secondary Plan, will then be presented together with those respecting 7601 Jane Street, at the public consultation meeting including area residents and VMC area landowners, in the spring or fall of 2011.

- c) Requests for modifications have also been made by other landowners in the VMC Secondary Plan area. Staff will meet with and review the concerns of the landowners and report back within the same timeframe as for the other two areas discussed above.

#### Regional Comments

Regional comments related to various sections of the VOP 2010 must also be addressed. City staff have met with the Region, and through on-going discussion will work towards resolving any outstanding issues prior to final approval of the Official Plan. Discussions will focus on the following primary Regional requests for modifications:

- (i) Changes or clarifications to the environmental policies of section 3.0 of the VOP.
- (ii) The inclusion of a Phasing and Sequencing Plan for development in the VOP 2010 which addresses infrastructure triggers through reference to the Region's timing for Regional Master Plans.
- (iii) Nomenclature as it relates to Vaughan's Urban Structure to be consistent with the Region of York Official Plan.

#### Toronto and Region Conservation Authority (TRCA) Comments

The Special Policy Area (SPA) boundaries and policies proposed in the Woodbridge Centre Secondary plan require approval from the Ministry of Municipal Affairs and Housing (MMAH), and Ministry of Natural Resources (MNR). TRCA comments on the SPA review were provided on December 13, 2010 and the City is expecting to make the revisions and send the final SPA Justification Report to MMAH and MNR by the end of April 2011.

The City has also received TRCA comments on the VOP 2010, Volume 1. Meetings will be held between City, Regional, and TRCA staff, to resolve any outstanding concerns within the Regional review period of the Official Plan.

#### Comments requesting other modifications to the VOP 2010 since the Council meeting of September 7, 2010

The City has been copied on 104 letters to the Region of York to date from landowners requesting modifications to the Official Plan since it was adopted by Council on September 7, 2010. As well, City staff have noted other required modifications to mapping and text. These

## CITY OF VAUGHAN

### EXTRACT FROM COUNCIL MEETING MINUTES OF APRIL 5, 2011

#### Item 4, Priorities Report No. 3 – Page 4

requests for modifications will all be reviewed and commented on and staff recommendations will once again be brought forward to Council for their consideration and comment. Council adopted modifications to the VOP 2010, will then be forwarded to the Region of York for their consideration.

Significant progress has been made to date in addressing all of the above comments. However, given the magnitude of requests and that some of the issues are complex, staff is anticipating reporting back to Committee of the Whole in June of 2011 or no later than September 2011. Once Volume 1 modifications have been addressed, the Region will then review and report on the Volume 2 modifications.

The Regional Staff anticipates reporting to Regional Council on the modifications to Volume 1 of the VOP by September of 2011.

#### Next Steps

It is anticipated that proposed modifications for Volume 1 will be brought forward in a staff report to a future Committee of the Whole meeting before the summer hiatus or no later than the beginning of September. Council's directives on the proposed modifications will then be sent to the Region of York for consideration as part of the final approval of the VOP 2010 Volume 2.

The results of the area studies discussed in this report, will be reported on to Council in the fall of 2011 and sent to the Region of York for consideration as part of the final approval of the VOP Volume 2.

#### Relationship to Vaughan Vision 2020/Strategic Plan

The VOP 2010 is consistent with the priorities set by Council in the Vaughan Vision 2020 Plan and in particular, with the City's commitment to "plan and manage growth and economic vitality".

#### Regional Implications

The VOP 2010 has been prepared in consultation with Region of York Staff, and in conformity with the Region's Official Plan which was approved by the Ministry of Municipal Affairs and Housing on September 7, 2010.

#### Conclusion

This status report summarizes the tasks which must be completed as part of the finalization of the Vaughan Official Plan 2010. Once the area studies are concluded, and all other modification requests have been considered, staff will provide a report to Committee of the Whole to receive Council's comments on any recommended changes to the adopted VOP 2010. The subsequent Council approved modifications will then be forwarded to the Region of York for consideration as part of the final approval of the VOP 2010.

#### Attachments

1. Location Map - Centre Street Corridor Land Use Study Area
2. Location Map - Dorian Place Study Area
3. Location Map - VMC Study Area

#### Report prepared by:

Anna Sicilia, Senior Policy Planner

(A copy of the attachments referred to in the foregoing have been forwarded to each Member of Council and a copy thereof is also on file in the office of the City Clerk.)