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Item No.
Environment & Sustainability Standing Committee
September 10, 2014

TO: Chair and Members of Environment & Sustainability Standing Committee

SUBMITTED BY: Original signed

Jane Fraser, Director, Planning & Infrastructure

DATE: August 7, 2014

SUBJECT: **Stormwater Infrastructure Update**

INFORMATION REPORT

ORIGIN

- Environment and Sustainability Standing Committee, October 3, 2013, 7.1.1: Regulatory and Policy Strategy: Stormwater Management; and
- Regional Council, February 26, 2013, 8.1: Stormwater Infrastructure Funding Interim Solution

LEGISLATIVE AUTHORITY

- HRM Charter, section 79, power to expend money for streets, culverts, and stormwater systems, and for purposes of preventing or decreasing flooding;
- HRM Charter, section 104, power to make by-laws re methods of payment for stormwater systems;
- HRM Charter, section 229, allows a municipal planning strategy to include provisions for stormwater management and sedimentation and erosion control;
- HRM Charter, section 235 allows a land-use by-law to prescribe methods for erosion and sedimentation control during development, regulate removal of top soil, and regulate lot grading and drainage;
- HRM Charter, section 242 allows a development agreement to contain provisions re. stormwater systems, grade alteration and disposal of stormwater;
- HRM Charter, section 246, allows a site plan approval to deal with grade alteration and stormwater management;
- HRM Charter, sections 281 and 282 allows a subdivision by-law to include provisions regarding stormwater management, drainage and grading plans, and stormwater systems; and
- HRM Charter, section 353 allows Council to make by-laws re stormwater management, grading and drainage.

BACKGROUND

In February 2013, Regional Council directed staff to develop an integrated stormwater management policy with Halifax Water, and in October 2013, a scope and overview of a stormwater management policy was presented to the Environment and Sustainability Standing Committee.

In broad terms, the objectives of an integrated policy were described as developing policies that guide municipal and utility operations and governance when delivering stormwater management services, in a manner that meets both legislative requirements as well as community expectations relating to public safety and environmental stewardship.

Also in February 2013, the Environment and Sustainability Standing Committee approved five specific actions that aligned with the recommended scope of the Integrated Stormwater Management Policy. These actions were as follows:

- Develop a consolidated Lot Grading By-Law that looks at the needs of the entire Region;
- Develop a Memorandum of Understanding with NS Department of Environment relating to Sedimentation and Erosion Control;
- Develop a Stormwater Management By-Law;
- Develop a standardized environmental section template for secondary planning projects; and
- Align the streets by-law with the Halifax Rules and Regulations.

DISCUSSION

A policy framework has been developed to comply with the policy overview presented to this Committee.

The Integrated Policy will be structured to address three main themes: **Ownership and Maintenance of Stormwater Systems**, **Land Development Practises**, and **Drainage on Existing Properties**. Each of the approved actions described in the Background section of this report fall into one of these themes as described below.

Ownership and Maintenance of Stormwater Systems:

In May 2014, a Partial Draft was completed of a Responsibilities Guide that reflects:

- the 2007 Transfer Agreement between HRM and Halifax water;
- the 2013 final approved version of the "List of HRM/Halifax Water Responsibilities after Proposed Merger" (the "Merger Matrix"); and
- the work of a Special Technical Committee established under Section 37 of the Transfer Agreement subsequent to the final version of the Merger Matrix.

Work completed to date addresses roles and responsibilities in relation to operations and maintenance of the stormwater system. The 2007 Transfer Agreement provided for the transfer of all existing municipal stormwater infrastructure within the street right-of-way or defined easements. This infrastructure includes both "minor" piped systems (capacity for a maximum 1 in 5 year frequency storm event) and "major" systems (pipes, swales, etc., with capacity for storm events greater than 1 in 5 year frequency).

There is a policy gap surrounding responsibilities relating to provision of minor and major storm systems where none currently exists and the impacts/liabilities of flooding in these scenarios. Responsibilities need to be documented and roles agreed to, which will inform a **Long Term Funding** strategy for deep sewers and other remediation to replace the Interim Funding Strategy. Work on this is underway and a draft guide is expected to be completed for ownership and maintenance procedures by December 2014.

Land Development Practices:

HRM is responsible for reviewing land development applications and approving subdivision grading and stormwater management plans. Halifax Water is responsible for the review and approval of the plans for the public municipal stormwater infrastructure that will be owned and operated by Halifax Water.

Policies relating to Watershed Planning, Flood Plain Protection, Coastal Inundation, and Development standards such as best management practises, wetland protection and riparian buffers are included in the Regional Plan and have recently been reviewed as part of RP+5. There are, however, regulatory gaps that exist which relate to development standards and approvals.

Discussions are underway between the NS Department of Environment, HRM, and Halifax Water to clarify roles and responsibilities to better achieve the policy outcomes, and it is anticipated that these discussions will provide joint management guidelines between the three parties. In addition, the **Stormwater Management By-Law**, referenced in the Background section of this report, could require drainage plans and sedimentation and erosion control plans for a broader range of activities such as large site specific developments and stand-alone site improvements, including parking lot construction and top soil removal.

Work is currently underway preparing a **Region-wide Lot Grading and Drainage By-Law**. One of the key issues to be addressed is the need to extend the by-law to development beyond the Urban Development Area, which is not serviced with a central wastewater system. A review of drainage complaints indicates that since 2005, on average 50 drainage complaints per year have been received from properties that are NOT served with a central wastewater system. Of this amount, approximately 30 per year are related to deficiencies in the road or ditch drainage system and would not be addressed by a lot grading and drainage by-law. The nature and extent of drainage complaints does not make a compelling argument for extending urban lot grading standards to the entire municipality. Options include a modified standard for large lots, educating builders/home owners, and/or modifying business processes related to review of building permit inspections and approvals in un-serviced areas.

Consultations will begin shortly with stakeholders, and it is anticipated that a recommendation concerning the content of a draft by-law can be presented to the standing committee in December 2014. It is also important to recognize that going forward most development in the un-serviced areas will be subject to a development agreement, which has proven to be more effective at regulating lot grading and drainage than a by-law, if the appropriate provisions are included.

Drainage on Existing Properties:

A policy was adopted by Regional Council in 1997 relating to drainage on private property, including ownership and maintenance of privately owned stormwater systems and the municipality's role in providing advice to private property owners.

Since the merger with Halifax Water in 2007, business processes have been developed to respond to and triage drainage complaints between HRM and Halifax Water. However, a service level review is needed to better define responsibilities and levels of service provided to residents when providing advice. There may also be situations where several properties require a deep storm sewer and would benefit from the **funding strategy** referenced above.

In general terms, the policy adopted in 1997 needs to be reviewed for content and relevance. Policy topics include:

- water and ice on the street;
- ownership;
- maintenance and repair of stormwater systems on private property;
- drainage complaints/advice to property owners;
- cost sharing to resolve drainage problems on private property;
- stormwater systems on lands of HRM; and
- drainage from lands of Halifax Regional School Board.

These topics will be reviewed and included with the Responsibilities Guide.

Schedule:

The time frame for completing the Integrated Stormwater Management Policy is as follows:

Action	Key Outstanding Task/Issue	Completion Date
Complete Operations and Maintenance Management Guide	Roles & Responsibilities relating to the major storm	December 2014
Table Draft Lot Grading & Drainage By-Law	Lot grading standards for rural development	January 2015
Table Stormwater Management By-Law Provisions	Content and scope of erosion and sedimentation control provisions	March, 2015
Draft Management Guide for development practises with Province and Halifax Water	Integrated approach to balance pre and post development flow and Integrate Provincial Wetlands Regulations (2011) into development practices	March 2015
Standardized environmental template for Secondary Planning Strategies	Facilitate policy review by RWAB	February 2015

FINANCIAL IMPLICATIONS

Development of the integrated policy is being carried out with staff resources and there are no financial implications at this time. Financial implications of the individual actions will be identified separately in subsequent reports to this Committee.

COMMUNITY ENGAGEMENT

Community engagement on the actions identified above has occurred with the NS Homebuilders industry, web-based public surveys, Regional Watershed Advisory Board, and Halifax Water, as identified in the Report to the Committee dated October 3, 2013.

Discussions with the Regional Watershed Advisory Board are continuing.

Stakeholder engagement is being facilitated through a staff committee known as the Development Liaison Group and includes the NS Home Builders Association and the Urban Development Institute.

Formal public engagement will continue as part of the by-law adoption processes, if initiated by Regional Council.

ATTACHMENTS

None

A copy of this report can be obtained online at <http://www.halifax.ca/commcoun/index.php> then choose the appropriate Community Council and meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

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