

MEMO / NOTE DE SERVICE



To / Destinataire	Mayor and Members of Council	File/N° de fichier:
From / Expéditeur	Wayne Newell, Director Infrastructure Services	
Subject / Objet	Status Update July 24, 2009 Flooding Investigation	Date: January 22, 2010

On September 2, 2009, staff made a presentation to Council on the July 24, 2009 severe rainstorm (over 100 mm of rain in a 24-hour period in some areas) that resulted in nearly 1,500 flooded basements, overflows at two sewage pumping stations, and seven culvert failures. These events occurred primarily in the City's west end, mainly in Ward 4 - Kanata North (Beaverbrook), Ward 5 - West Carleton-March (Carp Village), Ward 6 - Stittsville, and Ward 23 - Kanata South (Katimavik and Glen Cairn). An investigation, led by the Infrastructure Services Department (ISD) and supported by several City departments, was initiated immediately to understand why flooding occurred, what can be done to reduce the risk of future occurrences, and to implement solutions.

Council directed that staff move to solution implementation expeditiously as recommended works are identified. Staff are following that direction. All required work to achieve this goal is underway and solution implementation will begin in 2010.

The investigation consists of five phases: Phase 1 - Background data collection (complete); Phase 2 - Assessment and problem definition (complete); Phase 3 - Identification and evaluation of alternative solutions (ongoing); Phase 4 - Development and approval of action plan (Q3 2010); and Phase 5 - Implementation of approved action plan (commencing immediately after approval).

The purpose of this memo is to provide a status update on this investigation and to outline the budget requirements moving forward as directed by Council. Also attached is a summary report of the results of Phases 1 and 2 of the investigation for your information. The main report has also been completed and provides the technical details of the investigation. Two versions of the main report have been prepared since the investigation report is subject to a peer review and will be made available to the public. The substantial difference between the peer review version and the public version is the removal in the public version of references that could identify specific properties to protect privacy. The findings of both reports are otherwise identical. Phase 3 is ongoing. Solutions in some areas have been identified and the remaining areas will be completed in 2010.

Work continues on the review of alternatives and the selection of appropriate solutions that will reduce the risk of future basement flooding in the affected areas. Consultants are being retained to assist with this work. Public meetings have taken place in the most affected wards and moving forward, additional meetings will take place as solutions are identified. In Kanata South, for example, a Community Committee has been established and will continue to be involved throughout the process.

Given the complexity of the investigation, and the scope and the variety of solutions required to address different areas, targeted solutions will be identified and implemented as expeditiously as possible.

In an effort to minimize the possibility of delays in implementation, the following preliminary funding requirements are identified in the 2010 Draft Rate Supported Capital Budget. Projects and funding requirements for 2011 and 2012 will be refined in Phase 4. Depending on the scope of work, funding requirements could extend beyond 2012.

Projects (to be refined as part of Phase 3)	2010	2011	2012
Installation of Inlet Control Devices, sealing of Maintenance Hole covers and other flow removal measures	\$2.0M	\$1.0M	
Improvements to major system/overland drainage (design in 2010)	\$0.5M	\$1.0M	\$1.0M
Improvements to Hazeldean Pumping Station*	\$0.5M	\$2.0M	
Modifications to Monahan Drain	\$0.2M		
Sewer capacity and hydraulic improvements** (design initiated in 2010)	\$0.8M	\$7.5M	\$3.5M
Total	\$4.0M	\$11.5M	\$4.5M

* *Improvements to be undertaken in 2 phases. First phase focused on performance improvements that can be carried within the existing station and the second on those that require more extensive modifications. Does not include funding related to Front-ending Agreement.*

** *Specific projects will be defined as part of Phase 3. These may extend beyond 2012.*

Attached are some key messages for your reference.

Please do not hesitate to contact me or Alain Gonthier, Manager, Asset Management at extension 21197 should you require further information.

original signed by

W.R. Newell, P.Eng.

Attach. 1 – Phases 1 and 2 Investigation Summary Report

Attach. 2 – Key Messages

cc: Kent Kirkpatrick, City Manager
 Nancy Schepers, Deputy City Manager, ISCS
 Dixon Weir, General Manager, Environmental Services
 Chris Day, Manager, Corporate Communications