## Council Direction: N/A

**Information:**

On December 1, 2006, the City of Hamilton experienced an unusually long and consistent rain event. During the course of the event, a large box culvert in Battlefield Creek became blocked with debris, floated downstream by the sustained rain, resulting in a spillover of a large volume of water from the culvert to the Greenhill subdivision by way of the Canadian Pacific Railway (CPR) right of way. The volume of flow in the subdivision greatly exceeded the capacity of the Greenhill area drainage systems, resulting in flooding to a number of residences in the subdivision. There was also flooding at various other locations throughout the City.

There were 34 liability claims presented against the City for damages related to flooding. Of these 34 claims, 7 were from the Greenhill subdivision.

The City also enacted the Regional Municipal Disaster Relief Assistance Program for Residential Basement Flooding. A total of 75 grants were approved, 11 of which came from the Greenhill area.

An investigation was conducted by Risk Management into the circumstances of the Greenhill flooding, particularly the areas of design, maintenance, and response. It was determined that there was no negligence on the part of the City in these areas and that therefore, the City was not liable for related damages.
In addition to the Risk Management investigation, Strategic and Environmental Planning commissioned a report from Engineering Consultants SNC Lavalin to analyze causes of the Greenhill flooding and to recommend enhancements to prevent future similar occurrences. SNC Lavalin’s report is now complete and is scheduled to be placed on public record with the City Clerk in the near future. As with Risk Management, SNC Lavalin found no negligence on the part of the City. Given the conclusions of the two, Risk Management has now formally denied liability in writing to all the Greenhill claimants.

A detailed account of the factors involved in the Greenhill flooding is found in Public Works Committee Report PW08064.

To summarize, the primary factor and proximate cause of the flooding was the obstruction of a large box culvert in Battlefield Creek under Centennial Parkway at the base of the escarpment. The obstruction was caused by the inordinate amount of debris (garbage, tree limbs, silt, rocks, etc.) carried to the culvert by the increased flow in Battlefield Creek during the prolonged rainfall. Eventually the culvert crested and the water found its way to the Greenhill subdivision, pooling in sag locations on National Drive, Ellen Avenue, Chert Avenue, and Derek Drive.

Other factors to the situation were:

- A localized “super squall” episode in the general area of the Greenhill subdivision further taxing east end stormwater systems
- Saturated ground from previous rains
- Erosion in Battlefield Creek caused by increased flows
- Delay in accessing the Battlefield Creek culvert to clear it due to safety considerations
- Decreased capacity of CPR ditches
- The introduction of stormwater from outside the Greenhill subdivision drainage area into the subdivision drainage system
- No option to divert overland flow
- Pumping of settlement pools could not safely begin until flows had stabilized

A total of 7 liability claims were submitted to the City from the Greenhill area. Total damages for the 7 claims is estimated in the $200,000 range.

All 7 claimants had the necessary home insurance coverage in place and all made corresponding claims. Due to the nature of standard home insurance polices, some exterior damages were not covered, although the severity of the application of this exclusion varied from insurer to insurer.

To date, the City has not been pursued for costs by any of the insurers involved. One claimant has retained a lawyer to pursue the City for expenses not covered by insurance.
Insurers are generally dedicated to recovering expenses when they feel there is a viable opportunity to do so. In this instance it appears that the insurers involved have come to the conclusion that a case for negligence can not be made against the City.

Risk Management’s Council approved mandate is to pay claims only when the claim investigation indicates a legal liability to do so. No negligence was found by Risk Management’s investigation, nor was any negligence indicated within the extensive independent engineering report by SNC Lavalin. Consequently the Greenhill claims were denied.

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