

Ministry of the
Environment

2430 Don Field Drive
Ottawa ON K1H 1E1

Ministère de
l'Environnement

2430, promenade Don Reid
Ottawa ON K1H 1E1



TRANSMITTED BY FAX

August 31, 2005

Mr. Rob Phillips, C.E.T.
Program Manager - West District
City of Ottawa
110 Laurier Avenue West
Ottawa ON
K1P 1J1

Dear Mr. Phillips:

**RE: Kanata West Concept Plan
City of Ottawa**

Thank you for your August 15, 2005 submission. In view of the interest expressed by the public in this matter, I am responding to your request for comments despite a very short review period allocated to the agencies consulted.

I note that the minutes of the June 20, 2005 public meeting at the Glen Cairn Community Centre do not reflect all of what I expressed at the said venue. At question Q19 (Appendix I - Master Servicing Study by Stantec & IBI Group), I indicated that the Ontario Ministry of the Environment (MOE) had not made any decision with regards to this development project. To further clarify my statement: this Ministry may not have approval authority over floodplain development per se however, it is very much concerned by the location of MOE-regulated municipal infrastructure within the floodplain. For example, operational failure of a sewage pumping station located in the floodplain not only may result in the discharge of raw sanitary sewage into the Carp River or one of its tributaries but also, may result in sewage backing up into residential buildings. Need it be repeated that an incident such as the Marchwood Pumping Station failure of September 9, 2004 is a serious matter of public health and safety which must not happen again.

My review of the documentation has been cursory - needlessly time consuming due to the amount of typographical errors and erroneous cross-references in and between the reports - and therefore, the issues and concerns expressed today are not meant to be exhaustive. It is my understanding that the engineering studies that were prepared are typically not meant to be developed in a linear fashion but as part of an iterative and interactive process. For instance, some of the broad level guidelines outlined in the Carp River Watershed Subwatershed Study (CRWSS) are to assist in the conceptual design of different infrastructure components be they roads, bridges, sewers, watermains, transit corridors, etc. Each concept would reveal constraints, for example not-to-exceed elevations, that would need to be confirmed/re-addressed in all studies to provide consistency between them.

It is my understanding that fill placement in the floodplain - the Carp River Modified Floodplain Concept - underpins the Kanata West Concept Plan yet, it is not clear whether the Ontario Ministry of Natural Resources concurs with the Mississippi Valley Conservation Authority's fill permitting

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approach which may result in adverse impacts to Highway 417 (the Queensway). The Queensway bridge crossing of the Carp River may be at risk of being overtopped by the Carp River due to a combination of fill placement in the floodplain and the changes to the subwatershed hydrological conditions caused by the urbanization of the upstream catchment areas. Mr. David Lindensmith, P. Eng., Project Manager at the Ontario Ministry of Transportation (MTO) was contacted by this office and he indicated that his Ministry is just about to request in writing some clarifications on the CRWSS findings from the City of Ottawa.

I have a low degree of confidence in the Carp River flows forecasted for different return periods: some tables of the CRWSS identify post development flows at levels significantly lower than the ones established in 1983 by Cumming Cockburn Limited. The uncertainty associated with the flow forecasting is further compounded with the floodplain delineation because I am not convinced that the calibration of the Carp River water surface profile model was achieved and thus, water levels for future development conditions would be underestimated. Recent incidents in the former City of Kanata appear to show a misinterpretation of the interflow regimes in the presence of bedrock at less than 3 metres below ground surface. Furthermore, the OMB decision of August 11, 2005 provides a new final build out scenario that will require the CRWSS to be revised (p. 20).


Locating Ponds 1 to 5 inclusively within the Carp River floodplain will lead to sediments collected in these facilities being washed out periodically by and into the Carp River and in that context, the MOE Ottawa District Office does not support such sitings - please note that Pond 4 is positioned to service industrial land as defined in O. Reg. 525/98. It appears that some of these facilities will actually be constructed wetlands and therefore, do correspond to Schedule C projects under the Municipal Class EA. Construction phasing is yet another issue that urgently needs to be re-considered. It is my understanding that the most significant fill placement in the floodplain would happen anytime soon and thus, would remove any opportunity for future adjustments (flood relief perhaps) should the revisions to the CRWSS and the floodplain delineation call for it.

In the absence of engineering drawings on how the Signature Ridge Pumping Station will be upgraded to prevent sanitary sewage backup, I can just reiterate the District's position that the flooding of the pumping station and its subsequent failure are not acceptable.

Finally, an undertaking of this magnitude in the Nation's Capital calls, in my mind, for a higher degree of coordination between stakeholders: to that effect, I am quite surprised to see no circulation to MTO of the CH2M Hill reports on Flow Characterization and Flood Level Analysis for existing and future conditions.

Should you have any questions, please free to contact me again.

Yours truly,



Charles Goulet, P. Eng.
MOE Ottawa District Engineer

TOTAL P.03

TOTAL P.02