

**DATE:** March 25, 2003

**TO:** Chairman and Members of the Planning and Development Committee

**FROM:** Thomas S. Mokrzycki, Commissioner of Planning and Building

**SUBJECT:** **Special Policy Area Study for the Cooksville Creek Floodplain**  
**MEETING DATE: April 14, 2003**

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**ORIGIN:** Planning and Building Department

**BACKGROUND:** On October 10, 2001, City Council approved the following recommendation:

"RECOMMENDATION PDC-0130-2001

1. That City Council authorize the commissioning of the Cooksville Creek - Special Policy Area Study to be undertaken by consultants for a cost of not to exceed \$100,000.00 with funding from the Corporate Contingency Account as set out in the report titled "Cooksville Creek - Special Policy Area Study" dated September 11, 2001 from the Commissioner of Planning and Building.
2. That the amount of \$100,000.00 be transferred from the Corporate Contingency Account to the Planning and Building Department current budget, account 1-715602-26741, to fund the Cooksville Creek - Special Policy Area Study for the year 2001.
3. That a copy of this report titled "Cooksville Creek - Special

Policy Area Study" dated September 11, 2001 from the Commissioner of Planning and Building be forwarded by the City Clerk to the Credit Valley Conservation, the Region of Peel, Ministry of Natural Resources and the Ministry of Municipal Affairs and Housing."

**COMMENTS:**

The consulting firm, Philips Engineering Ltd. in conjunction with B.G.D. Consulting Inc., Parish Geomorphic Inc. and Davis & Co., was retained to carry out the Cooksville Special Policy Area Study (SPA). The technical findings have been completed by the consulting team.

The technical findings are contained in a report titled *Special Policy Area Study for the Cooksville Creek Floodplain* dated April, 2003 (attached under separate cover). Attached as Exhibit 1 to this report is the background information and a summary of the consultant's findings. The findings and recommendations of the consultants have been accepted by the members of the steering committee.

The CVC on March 20, 2003 considered the report and passed the following resolution:

"36/03

RESOLVED THAT the report entitled "Cooksville Creek-Recent Studies, Cooksville Creek Flood Remediation Plan (May 2002), Special Policy Area Study for the Cooksville Creek Floodplain (February 2003) be received.

THAT the findings and recommendations be endorsed for future implementation to ensure the long term protection and enhancement of Cooksville Creek as well as protection to existing residents."

The following is a summary of the consultant's recommendations.

### **1. Former Inglis Property - Lakeshore Road East**

This site is located north of Lakeshore Road East, south of the Canadian National Railway and includes the vacant former Inglis site on the east side of the Cooksville Creek and the industrial lands on the west side of the creek. The lands are designated "Business Employment" in both *City Plan* and the City Council - adopted *Mississauga Plan*. The lands are zoned "M1-Industrial". The east parcel is 5.3 ha (13 ac) in size and the west parcel is 5.5 ha (14ac.) in size.

This site has tableland on both the west and east side of Cooksville Creek but it does not have flood free access. The SPA study has suggested two possible options: either enlarging the culvert under Lakeshore Road East; or raising the road profile of Lakeshore Road East at either end of the site with a compensating lowering within the centre zone, between the two parcels of land. If these options are pursued, it is possible to have approximately 4.4 ha (10.8 ac.) of developable land west of the Cooksville Creek and 3.6 ha (8.8 ac.) on the east side based on maintaining the one-zone policy standard, an 85.9 m (281 ft.) erosion standard and a 30 m (98 ft.) setback from the rail lands. Therefore, neither a two-zone nor an SPA policy area was recommended for this site.

### **2. Consulate Property Camilla Road - North of the QEW**

This 1.3 ha (3.2 ac.) vacant site is located north of the North Service Road, west of Camilla Road. The lands are designated "Other Commercial" by the *Cooksville District Plan - Munden - Park Area* due to the fact that OPA 69 to *City Plan*, which proposed designating the lands as "High Density II", was

appealed by the CVC and MMAH. The City Council - adopted *Mississauga Plan* recognizes the appeal of OPA 69. The lands are zoned "R3".

Although it was OPA 69 which triggered the SPA study, surrounding lands were also examined. There is a large area between the 100-year floodline and the Regional Floodline that would be subject to shallow flooding (< 0.6 m or 24 in.). If the culvert under the QEW was upgraded, it would remove the floodplain designation for most of the lands. The culvert upgrade will be costly, likely in excess of \$4.5 million but could be financed through an agreement among the City, the Provincial Ministry of Transportation (MTO) and benefiting landowners to share the cost of construction. As an interim solution, however, a two-zone policy area could be put in place for the lands between the 100-year and the Regional Floodlines. (This includes the Consulate site as well as surrounding lands.)

A two-zone policy area approach would require, as a condition of development, the provision of flood free access roadway (ie. North Service Road) as well as the elevation of the development site above what would 'normally' be done to raise buildings and the lowest openings would have to be above the current Regional flood elevation. The properties that would remain in the floodway would have a very restrictive framework applied to them with respect to additions or new structures. An Official Plan amendment and Zoning By-law amendment would be required to designate the site and others for an interim two-zone floodplain management area.

In order to implement the consultant's recommendations, City staff should initiate an Official Plan amendment to the Cooksville District Policies and a Zoning By-law amendment to designate the area as being subject to two-zone policy area for an interim period until the culvert upgrades are in place.

Transportation and Works staff have met with senior MTO staff regarding cost sharing the culvert under the Q.E.W. The Ministry

has identified that the existing culvert is in good condition with an anticipated life expectancy in excess of 25 years. The MTO, however, has agreed to review the advantage to them in having the culvert replaced earlier with an upgraded structure which would eliminate potential flooding of the Q.E.W. The MTO noted, however, that this condition exists at other locations along the Q.E.W.

The MTO is also reviewing Provincial funding programs which would be used to fund this project, given that the cost may be split among the Province, City and benefitting developers (ie., there is a benefit to all three parties). At this time there is no agreement on the percentage share the Province may be willing to consider.

Transportation and Works is currently reviewing the feasibility of twinning the existing culvert with the MTO in order to reduce the cost.

As the details of any potential cost sharing with the Province are unknown at this time, as well as a detailed cost estimate as a condition of approving two-zone development on the Consulate property, the developer must enter into an agreement with the City and post appropriate securities for the future upgrade of the culvert.

If development proceeds under interim the two-zone policy framework, prior to the culvert upgrades, the proponents will still be required to flood proof the buildings which will be an extra cost that will be redundant if the culvert is upgraded.

The lands are also subject to a shallow spill potential from Cooksville Creek upstream of Camilla Road. As part of any development approval, the landowner will have to accurately establish spill flow mechanics both across the site and back to the creek and address this issue prior to proceeding.

### **3. F & F Construction - Camilla Road**

This 2.6 ha (6.4 ac.) vacant site is located on the west side of Camilla Road, south of the Queensway. The land use designations in the *Cooksville District Plan - Munden- Park Area* are "Greenbelt" and "Residential Low Density I". The land use designations were deferred in *City Plan* and proposed to be "Greenbelt" and "Residential Low Density I" in the City Council - adopted *Mississauga Plan*. The lands are zoned "R3".

There are no structural options available to relieve the flooding on site. There is virtually no difference between the 100-year and Regional Storm Floodlines. Therefore, a two-zone approach would be of little benefit. The site currently has flood free access to Camilla Road and tableland outside the floodplain.

The consultant recommends that a SPA not be pursued for this site and, further, that the one-zone policy in the official plan continue to be the applicable floodplain standard.

### **4. Humenik Lands - Shepard Avenue**

These lands are located on both sides of Shepard Avenue and are occupied by residential detached dwellings. The total land holdings including Shepard Avenue are approximately 8.8 ha (22 ac) in size. The land use designation was deferred in *City Plan*. The City Council - adopted *Mississauga Plan* designates the lands as "Residential - Medium Density I" and "Residential Low Density I". The Official Plan policies that apply are

contained in OPA 151 to the *Township of Toronto Planning Area now Official Plan of the City of Mississauga*, dated 1963. The land use is "Residential Multiple Family" which is undefined in the plan but would permit a range of housing types. The lands are zoned "R1". Although the landowner has expressed a desire to redevelop the lands for high density, no application has been filed.

The location of the 100-year and the Regional Storm Floodlines are very close. Although virtually all the lands are within the floodplain, most would be subject to shallow flooding. These lands have been approved for channelization by the CVC in 1997; but the landowner has not fulfilled the requirements imposed by the CVC decision to undertake the works. The study has provided options for the landowner to pursue all of which have costs and benefits.

It is possible to undertake cut and fill and channelization works in order to facilitate development. However, the works would need to incorporate the stable creek characteristics, (the ability for the channel to meander as opposed to a straight channel) and incorporate balancing flood storage. To achieve these conditions, a 72 m (236 ft.) meandering wide parcel centred on the existing creek alignment is required through the property. This would leave approximately 8.6 ha (21.2 ac.) for development. The straight line corridor option would be much wider 95 m (311 ft.). With either option, the land outside the channel would require filling to raise them to the Regulatory flood level.

Although the City and the CVC do not support channelization and cut and fill in order to facilitate development, this circumstance is unique. The area is developed, with 30 homes within the floodplain and the channelization works would remove these homes from the floodplain and the associated risk. Therefore, consideration has been given to this option. From a hazard

perspective, it is preferable to resolve the flooding hazard rather than considering relaxing the policy through a SPA.

The study also identifies the possibility of implementing a two-zone policy area due to the fact that the lands are subject to wide spread shallow flooding which would be considered the flood fringe. Under this scenario, flood free access would still need to be addressed.

At this point, which option will be pursued will depend on the development scenario put forward by the landowner and the detailed studies accompanying the application. Depending on the details associated with future development plans for the area it may also be possible to do a hybrid of channelization and two-zone management.

Based on the consultant's recommendations, City staff recommend that the City Council-adopted "Residential - Low Density I" and "Residential - Medium Density I designations" should be retained. The option of requesting a redesignation for the lands is available to the landowner. It is recommended that the City impose conditions on any development approval that would require the structural works to alleviate flooding be undertaken and that an appropriate erosion setback be incorporated into the site design and zoned accordingly.

## **5. Little John Lane**

This 0.4 ha (1 ac) vacant site is located north of Dundas Street East, between Little John Lane and Kirwin Avenue. The site is designated "Retail Service Commercial" and "Greenbelt" in *City Plan* and zoned "C1" and "R3". The proposed revised commercial polices of the City Council-adopted *Mississauga Plan* designated the site "Greenbelt" and "Mainstreet Commercial". The work undertaken by the consultant indicates



that the potential exists that the area within the Regional floodline may be a significantly different that shown on the 1996 Regulatory Floodline Mapping. As part of a development application the landowner would need to confirm this with the CVC. There is no need to pursue a revised policy for this site.

### **Requirements for all sites**

Concern has been raised with respect to any potential upstream or downstream impacts as a result of implementing the recommendations in the report. Attached as Exhibit 2, is a letter from Philips Engineering addressing this issue.

None of the findings of the Philips' report relieve individual landowners from being required to undertake detailed site specific studies in support of their respective development applications. This study sets out the principles for reviewing development applications and makes a number of recommendations for options to pursue in support of development applications. However, to make a final evaluation on a development application, detailed information including building envelopes, parking layout, landscape areas, grading, geodetic surveys, hydraulic analysis and stormwater management plans will be required from individual landowners to ensure that an individual development proposal is in compliance with this report and all other policies of the City and the CVC.

The Official Plan will need to be amended to incorporate the appropriate policies in order to impose as a condition of development approval that landowners are to undertake structural improvements to ensure that the site has flood free ingress and egress and that the appropriate erosion standard is incorporated into any site development plans and zoned accordingly.

### **CONCLUSION:**

The consultants have completed the technical analysis to

determine the feasibility of structural improvements, implementing two-zone policies and/or Special Policy Area policies for the Cooksville Creek Study Area. Their findings have been accepted by the members of the technical steering committee. It is recommended by City staff that the City and CVC use the report in its review of development applications.

Resolution of the OPA 69 appeal to the Ontario Municipal Board by the CVC and the Province requires the structural improvements to the QEW culvert and the implementation of a two-zone policy framework including Zoning By-law provisions.

The City will continue its discussions with the Province with respect to the QEW culvert improvements. In the meantime, City staff should prepare a report outlining the details of an Official Plan amendment and Zoning By-law amendment to permit the use of a two-zone regulatory regime for those properties that fall within the Regulatory Floodline of the Cooksville Creek, north of the QEW to the Cooksville Creek/Camilla Road crossing. In addition, the report has to address the provisions in the Zoning By-law requiring that all habitable floor space must be above the elevation of the regulatory flood within the flood fringe of the Cooksville Creek and to prohibit development within the floodway of the Cooksville Creek. Also, the report should address the amendments required to be able to impose as a condition of development approval, that landowners are to undertake structural improvements to ensure that the site has flood free ingress and egress and that the appropriate erosion standard is incorporated into any site development plans.

**RECOMMENDATIONS:**

1. That the report titled "Special Policy Area Study for the Cooksville Creek Floodplain" dated April, 2003, prepared by Philips Engineering, be received.
2. That City staff be directed to prepare a report outlining the proposed Official Plan and Zoning By-law amendments to designate the area on the north side of the North Service Road, on the east and west sides of the Cooksville Creek (Consulate Property and others), as a two-zone policy area and further, the amendments required to impose conditions requiring landowners to undertake structural improvements to alleviate flooding risks and also prohibiting development within the erosion hazard of Cooksville Creek as a condition of development approval in accordance with the report titled "Special Policy Area Study for the Cooksville Creek Floodplain" dated April, 2003, prepared by Philips Engineering.
3. That the consultant's findings and recommendations in the report titled "Special Policy Area Study for the Cooksville Creek Floodplain" dated April, 2003, prepared by Philips Engineering, be used in the evaluation of all development applications within and adjacent to the Cooksville Creek Floodplain.

*Original Signed By:* \_\_\_\_\_  
Thomas S. Mokrzycki  
Commissioner of Planning and Building