### **COMMITTEE OF THE WHOLE NOVEMBER 1, 2004**

### TORONTO AND REGION CONSERVATION AUTHORITY TERRESTRIAL NATURAL HERITAGE SYSTEM STRATEGY GENERAL FILE 22.8.8

### Recommendation

The Commissioner of Planning recommends:

- 1. THAT this report BE RECEIVED for information purposes;
- 2. THAT this report BE FORWARDED to the Toronto and Region Conservation Authority as input into the Toronto Region Terrestrial Natural Heritage System Strategy; and
- 3. THAT Staff report back to the Committee of the Whole on the progress of the Strategy, as necessary.

### **Purpose**

The Toronto and Region Conservation Authority (TRCA) has prepared a new strategy addressing terrestrial natural heritage protection and management. This report provides details of the strategy, so that comments can be forwarded to the TRCA for input into the strategy.

### **Background - Analysis and Options**

At the Committee of the Whole Working Session on September 28, 2004, the Toronto and Region Conservation Authority presented their new strategy addressing terrestrial natural heritage protection and management called the "Toronto and Region Terrestrial Natural Heritage System Strategy" (TNHSS). The TNHSS protects and enhances the terrestrial natural heritage system by increasing the amount and quality of forest and wetland habitats within the TRCA's jurisdiction.

The TRCA initiated the TNHSS in 2001, collecting the baseline data for the strategy, which continued through 2002 with modeling and target setting, and throughout 2003 and 2004 with the strategy development, and finally with the release of the draft strategy in April 2004. Planning Staff have been involved in the previous phases of the strategy by providing technical peer review, and has participated in consultation sessions once the strategy was released.

The TNHSS uses ecological criteria to identify an expanded and targeted land base for inclusion into a natural heritage system. The TRCA has targeted 30% natural cover for the Toronto Region, whereas currently, the existing natural cover for the Toronto Region is 17%. In order to achieve the targeted 30% natural cover, the strategy identifies a target Terrestrial Natural Heritage System which is comprised of existing natural cover, and potential natural cover. The strategy also identifies how and where a land base for potential natural cover can be secured to achieve the goal of 30% natural cover.

Achieving the target terrestrial natural heritage system would involve the protection of all existing natural cover and providing the adequate land for an expanded system beyond the natural cover, as identified in the TNHSS, which would either be targeted for restoration and enhancement or allowed to restore naturally. Lands that are not currently under natural cover, but have been identified through this strategy as "potential natural cover", are to be added to the system.

The TNHSS recognizes that the current extent of natural cover in the landscape has proven to not be adequate for achieving a healthy terrestrial natural heritage system. The TNHSS does not limit the definition of the terrestrial natural heritage system to existing natural habitats, but rather sets out to conserve an appropriate land base, which defines what a terrestrial natural heritage

system should look like, as a minimum, to allow for natural heritage system functions and processes. This strategy moves away from protecting what are "significant" terrestrial natural heritage features, and suggests, that in such a rapidly urbanizing area, all terrestrial natural heritage features are significant. The strategy suggests that the protection of only significant resources would have the unintended effect of allowing species to become threatened or rare, leading to perpetual crisis management. The fundamental flaw in these approaches is that they focus on special features, and not broader environmental functions. The protected areas are often too small, have too little buffer, and are not connected to other natural heritage features.

### **Quality and Quantity Targets**

The THNSS has targeted 30% overall natural cover for the Toronto Region, almost doubling existing natural conditions. This means that 30% of the total land area within the Toronto Region is proposed to contain terrestrial natural heritage features (wetlands, forested lands, coastal communities, and habitat for species of conservation concern). The quantity target of 30% has been determined in order to achieve quality targets for the Toronto Region; that is 30% has been determined to be the amount of natural cover necessary for natural systems to function so that they will support a defined level of biodiversity.

In order to achieve the 30% targets for the TNHSS, the TRCA has broken down targets by watershed and by municipality. Currently, the TRCA has estimated that Vaughan has 15.17% natural cover. Vaughan is expected to achieve a 30.18% natural cover through the implementation of this strategy, resulting in a 50% increase in natural cover in Vaughan.

The distribution of the targeted or "potential cover" is generally skewed to the northern municipalities in the Toronto Region. For example, Toronto currently has 7.96% natural cover, and has been targeted for 13.90%, whereas King Township currently has 25.85% natural cover, and is targeted for 57.88% natural cover. The inequitable distribution of the natural cover increase is skewed towards the north, as the southern municipalities contain primarily urban or urbanizing lands, offering little to no opportunity for achieving a land base required to establish the target cover.

### Toronto Region Terrestrial Natural Heritage

The TNHSS is a strategy for the entire Toronto Region as defined by the TRCA's jurisdiction. The Toronto Region consists of the area within the City of Toronto, the Regional Municipalities of York, Durham and Peel, and the Counties of Simcoe and Dufferin. The area encompasses 9 watersheds in the TRCA's jurisdiction, including the Humber and Don, within the City of Vaughan.

For the purpose of better reflecting the Toronto Region's land use diversity, the strategy divides the Region into 4 terrestrial natural heritage planning zones. Each zone has a combination of physical, land use and development characteristics that will require different types of management approach to achieve the target Terrestrial Natural Heritage System. The four zones are the Urban Zone, the Urbanizing Zone, the Rural Zone, and the Oak Ridges Moraine/ Niagara Escarpment Zone.

The Urban Zone in Vaughan comprises all of the lands within the existing urban fabric, recognizing the historic development in the communities of Woodbridge, Maple, Thornhill, Concord, and Kleinburg, and the Industrial areas. The Urban Zone designation in the TNHSS recognizes that there is little room for expansion of the terrestrial system, given that the majority of lands within this zone are already developed, and that protection of the terrestrial system is largely confined to valley systems protected through the development process. The ability to achieve the target system in the Urban Zone will be through redevelopment opportunities. Staff will be working with the TRCA to determine the accuracy of the existing cover shown in the Urban Zone, in addition to the boundaries of the zone.

The Urbanizing Zone in Vaughan consists of all urban designated lands in OPA 600, including the communities of Carrville and Vellore, and other urban designations in Kleinburg, Maple, and the employment lands. The lands within this zone have been previously designated for urban uses and offer limited opportunity to achieve the target system. The ability to achieve the target system will be through redevelopment over the longer term. Staff will be working with the TRCA to determine the accuracy of the existing cover shown in the Urbanizing Zone, in addition to the boundaries of the zone. The data within the Urbanizing Zone will be fine-tuned through further discussions with TRCA staff. Opportunities to achieve some of the target system within the Urbanizing Zone are limited, and may be achievable through the review of development plans in process within valley and stream corridors requiring restoration, and within the approved buffers in approved plans of subdivision.

The Rural Zone in Vaughan consists of the rural and agricultural portions of the City, which are not designated for urban uses. This area in Vaughan is currently subject to the *Greenbelt Protection Act*. To the extent that rural uses continue, most of the existing natural cover will remain. In this zone, the primary means to achieve the target system are through land securement and stewardship initiatives. Should development be proposed for these lands in the future, they may be subject to the TNHSS. Staff will be working with TRCA to determine the accuracy of the existing cover shown in the Rural Zone, in addition to the boundaries of the zone.

The Oak Ridges Moraine/Niagara Escarpment Zone in Vaughan consists of the area within the eastern portion of the City, which is protected by the Oak Ridges Moraine Conservation Act and Plan. The majority of the target lands within the Toronto Region are located within this zone. The strategy will focus on achieving increasing amounts of interior forest habitat.

### **Implementation**

The TNHSS provides for the implementation of the strategy through the municipal planning process, where Official Plans would be amended to reflect this strategy, in order to facilitate land acquisition and securement; public land management and restoration; and private land stewardship, education and restoration. Implementation mechanisms may be common to each of the 4 planning zones, while some may be appropriate in certain zones.

The proposed Official Plan policies are included in this report as Attachment #2. Staff comments on the proposed Official Plan policies are discussed below.

### Comments on the Strategy

Staff have reviewed the draft of the TNHSS and offer the following comments for consideration.

### Accuracy of Data

The TNHSS contains several layers of data which forms the model that the TRCA used to develop the strategy. These layers include the 4 planning zones (Urban, Urbanizing, Rural, and Oak Ridges Moraine), and existing cover data.

The boundaries of the 4 planning zones is not accurate based on current official plan designations. There are some areas of the City mapped as urbanizing, when they are designated for rural uses, while, others are mapped as rural when they are designated for urban uses. These inaccuracies should be corrected so that accurate information is used to develop the strategy.

The existing cover information presented in the strategy was based on 1999 orthophotography, and field work completed throughout 2001. Since 1999 and 2001, there have been changes in the existing cover within Vaughan as a result of the approval of development applications, or construction related to previously approved applications. As a result, the "existing cover" layer of information is not accurate. This information needs to be refined to recognize existing

development approvals. The accuracy of this information is critical to the strategy, as it is used to assess current conditions in Vaughan, and in the Humber and Don watersheds, in addition to determining the percentage of current natural cover, and potential cover. Fine-tuning of the mapping will alter the percentage of existing cover, and therefore the potential natural cover may change.

The Urbanizing Zone, which is the zone where lands have been designated for urban development, and where development approvals may have been granted, but construction has not yet commenced, or where development approvals are pending, include areas where potential natural cover has been mapped in areas where development approvals have taken place. This presents a situation where potential cover has been mapped, in order to achieve the 30.18% natural cover target, but where this cover could not be implemented as a result of development approvals. It would be more appropriate to fine-tune the area of potential cover within the Urbanizing Zone to areas where restoration will be occurring, and where ecological buffers have been approved.

It is recommended that the TRCA and City staff work together to achieve accurate information to form the strategy. City staff may also be of assistance in focusing areas where potential cover may be achievable in the Urban and Urbanizing Zones.

### Connection to Provincial and Regional Initiatives

Currently, the Provincial Government is working on a number of initiatives which the TRCA would benefit from partnering with, in order to receive Provincial support for the TNHSS.

Currently, the Provincial Policy Statement, which provides guidance for Planning in Ontario is under review and a draft PPS has been released for comment. The PPS provides policies for Natural Heritage protection. The City's comments on the PPS to the Province has been, in the area of Natural Heritage Protection, that the PPS should include policies allowing the determination of natural heritage feature protection at a local level, which would enable local municipalities to protect features that do not meet the Provincial criteria as a "significant" feature. Provincial support for the TNHSS through the PPS would assist municipalities in implementing the TNHSS through the municipal planning process. Without Provincial support, implementing through the planning process becomes challenging.

The Provincial strategy on Greenbelt Protection should also provide an avenue for some of the natural heritage protection policies, as with the Oak Ridges Moraine Conservation Act and Plan. Connection to these Provincial initiatives is key in coordinating and concentrating efforts in natural heritage protection without overlapping and potentially conflicting policies in each individual plan. Without this coordination, there is potential for a situation of multiple natural heritage planning regimes within the City.

York Region's Official Plan has also targeted 25% forest cover for York Region's total land area. This target is being implemented through the Region's Official Plan, and through the Regional Greening Strategy.

It is recommended that there be a coordination of efforts at the Provincial and Regional levels with natural heritage protection for the TNHSS both to provide strength to the policy for implementation through the municipal planning process, and in order to provide consistency in approach to avoid potential conflict.

### Official Plan Policies

The TNHSS provides draft official plan policies for the implementation of the strategy through the municipal planning process. The draft official plan policies have been summarized and commented on in Attachment #2.

In summary of the comments on the draft official plan policies, there should be sufficient flexibility within the official plan policies of the TNHSS so that the implementation of the strategy can reflect local planning policies, and differences in official plan administration.

In addition to official plan policies for implementation of the strategy, there should be clear implementation guidelines which would remove some of the ambiguity from the policies. For example, the policies require that a natural heritage study is required for certain applications. Terms of reference for the preparation of a natural heritage study should be provided.

### <u>Implementation</u>

It is suggested in the TNHSS that the strategy be implemented through a number of mechanisms, such as through inclusion into municipal planning documents. The strategy does not suggest a time line for implementation or a clear plan for implementation.

It is recommended that the TNHSS be considered for implementation into Vaughan's Official Plans at the time of comprehensive official plan reviews, rather than a stand alone official plan amendment at this time to implement the strategy. It is also recommended that strategies for implementation through other TRCA initiatives occur concurrently, such as the TRCA Acquisition Program, and any planting, naturalization, and watershed strategies.

### Consultation

The TRCA has had several consultation sessions throughout the strategy process, on the science of the strategy, and in the background preparation for the strategy, and most recently, on the draft strategy.

It is recommended that there be continuing consultation sessions focusing on the policy and planning portions of the strategy focusing on implementation.

### Relationship to Vaughan Vision 2007

This report is consistent with the priorities previously set by Council and the necessary resources have been allocated and approved. This initiative is consistent with the priorities established in Section 4.6.2 in encouraging the preservation of significant natural areas, and in Section 5.3 in strengthening Vaughan's relationship with other government authorities and agencies.

### Conclusion

The TRCA has prepared a draft Terrestrial Natural Heritage System Strategy which targets 30% natural cover for the Toronto Region. The strategy sets out to conserve an appropriate land base to achieve 30% natural cover across the TRCA's jurisdiction. Lands in existing natural cover have been identified for protection, in addition to lands determined to be appropriate for "potential natural cover" which are proposed to be protected and restored to one of four natural cover types.

The strategy is proposed to be implemented through a variety of mechanisms, most fundamentally, recognized in local and regional official plans, to be implemented through the development process. Coordination and connection to Provincial Initiatives is recommend in order to gather Provincial support for the strategy through the PPS review, the Greenbelt Initiative and

The Places to Grow Strategy. Continued consultation with City Staff is also recommended in order to achieve accurate base data and to provide support for implementation.

### **Attachments**

- 1. Proposed Target System Map for Vaughan
- 2. Draft Official Plan Policies with staff comments

### Report prepared by:

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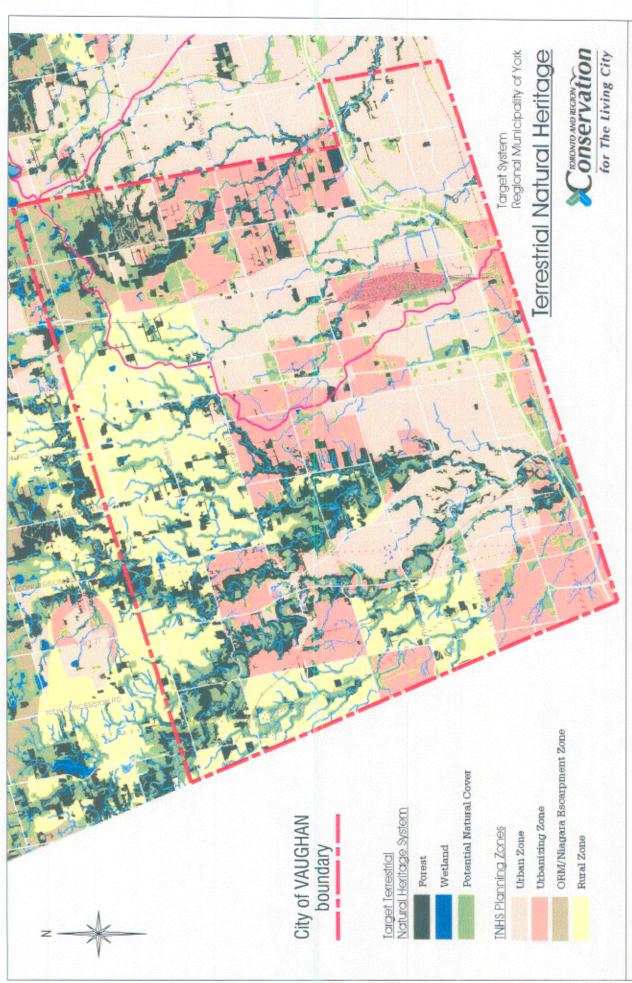
Respectfully submitted,

JOHN ZIPAY Commissioner of Planning

MARCO RAMUNNO
Director of Development Planning

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Community Planning Department

# **Attachment**

October 7, 2004 Not to Scale

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**Target System** 

Proposed

PROPOSED POLICY	STAFF COMMENT
Policy 1  The TNHS consists of Existing Natural Cover, as shown on the Target TNH System Map. The Terrestrial Natural Heritage System will be protected and restored.	There is an expectation that the City's official plan would have a schedule showing the existing and target system. The accuracy of the system data needs to be addressed.
<ul> <li>If the lands in the Terrestrial Natural Heritage System also fall into one or more of the following, they may not be removed from the system: <ul> <li>a) Lands that have been designated as natural heritage features and areas in the regional or local official plan in accordance with the Provincial Policy Statement.</li> <li>b) Lands that have not been so designated, but have been identified as natural heritage features and areas in accordance with the Provincial Policy Statement by a study recognized or accepted by the regional or local municipality or by a natural heritage study.</li> <li>c) Lands adjacent to natural heritage features and areas, if the regional or local municipality or a natural heritage features and areas, if the regional or local municipality or a natural heritage features and revelopment or site alteration of those adjacent lands would cause negative impacts as described in the Provincial Policy Statement.</li> <li>d) Key natural heritage features and minimum vegetation protection zones as described in the Oak Ridges Moraine Conservation Plan.</li> <li>e) Any area that would merit evaluation as a wetland or wetland complex in accordance with the criteria in the Southern Ontario Wetland Evaluation System (Ministry of Natural Resources).</li> <li>f) Regionally significant Life Science Areas of Natural and Scientific Interest (ANSIs) identified by the Ministry of Natural Cover in the urban zone.</li> <li>g) Environmentally Significant Areas identified by the TRCA.</li> <li>h) Existing Natural Cover in the urban zone.</li> </ul> </li> </ul>	This policy provides that in addition to being within the TRCA identified system, that they cannot be removed from the system if they also fall into another category. This policy is consistent with the City's existing Official Plan policies which protect these features.
With the exception of any activity permitted in Policy 8, development and site alteration must maintain an undeveloped separation buffer from Existing Natural Cover, based on a Natural Heritage Study, which is the greater of:  10 metres;  14 the Minimum Vegetation Protection Zone, as prescribed in the ORM Conservation Plan;  15 the buffer distances recommended in the Provincial Natural Heritage Reference Manual; or  16 the buffer distance required to achieve no negative impacts to adjacent natural cover.	This policy provides for a buffer to be applied in addition to the target system. Clarification is required to determine if target system is included in buffer, or if buffer from target system is required.  Policies maintain consistency with ORMCP but provides for greater distance from moraine features if target system plus buffer is achieved.

PROPOSED POLICY	STAFF COMMENT
Policy 4  TRCA may from time to time change or refine the boundaries of the Terrestrial Natural Heritage System shown on	Allows for fine-tuning of system definition. This policy is consistent with the City's
the target system map, as follows:	the fine-tuning of natural features.  However, there should be an additional
<ul> <li>a) boundaries may be more precisely defined in a zoning by-law or on a registered plan of subdivision, or a registered site plan, that TRCA and the local municipality agree to.</li> <li>b) Boundaries may be precisely defined in a registered plan of survey, that TRCA and the local municipality</li> </ul>	policy reflecting how natural features should be defined; i.e., greater of dripline of vegetation, wetland evaluation,
may agree to.  c) Boundaries may be refined when lands are removed from or added to the terrestrial natural heritage system in accordance with Policy 5.	floodline, stable slope limits, etc.
Policy 5	Allows for removal/alteration from the system. A definition for zone is not
increase to local landscape analysis values, lands may be added to or removed from the <i>Terrestrial Natural Heritage System</i> only if one of the conditions (a) through (d) is met and the hierarchy of conditions (a) through (d)	provided, and should be for clarification purposes.
is respected. The applicant, the regional and local municipalities and TRCA agree to the removal of lands from the Terrestrial Natural Heritage System, and the addition to the system of lands:	Allows flexibility in implementation; the further away you get from the site of
<ul> <li>a) on the same site that are at least equal in area, so that the lands added abut other portions of the system.</li> <li>b) not on the same site but that are at least 1.5 times the size of the area removed and are in the same zone</li> </ul>	removal, the more that is required to be replaced, providing incentives for
and the same watershed as the <i>site</i> , so that the lands added abut other portions of the system.  c) not on the same <i>site</i> but that are at least twice the size of the area removed and are in the same <i>zone</i> as	protection in the original location.
the site, so that the lands added abut other portions of the system.  d) not on the same site but that are at least three times the size of the area removed and are in the same zone as the site.	Terms of reference for a natural heritage study should be prepared for implementation of this policy.
Policy 6	Consistent with the City's current official
New development and site alteration will not be permitted in Existing Natural Cover within the Target Terrestrial Natural Heritage System.	system/ natural features.
Policy 7	New development is restricted from
New development will not be permitted in Potential Natural Cover. Site Alteration will not be permitted in Potential Natural Cover, except in accordance with a natural heritage restoration plan approved by the TRCA.	Site alteration (grading) may be permitted.

# PROPOSED POLICY

### Policy 8

Despite Policies 6 and 7, the following uses are permitted within Existing and Potential Natural Cover.

- Fish and wildlife management p a
- Conservation and flood or erosion control projects (not including stormwater management facilities) only if they have been demonstrated to be necessary in the public interest after all alternatives have been
- Reconstruction, repair, or maintenance of an exiting drain approved under the Drainage Act. 0
- Agricultural uses as defined in the Provincial Policy Statement, on lands whose existing use is agricultural 0
- Restoration of natural cover in accordance with a natural heritage restoration plan approved by the 6
- Forest Management, only in accordance with:
- a tree bylaw under the Municipal Act or the Forestry Act, or
- a previously approved managed forest plan prepared by a registered professional forester, or
- a natural heritage restoration plan approved by the TRCA.
- Low-intensity recreational uses that have minimal impact on the natural environment, require very little and unserviced camping on public and institutional land; and accessory small scale structures such as terrain modification, including but not limited to non-motorized trail uses, natural heritage appreciation, trails, boardwalks, footbridges, fences, docks, and picnic facilities; all of which are permitted only in accordance with a natural heritage restoration plan approved by the TRCA. 6
  - The following uses as permitted by the local official plan:
    - existing uses, buildings or structures, and
- construction and use of a single dwelling on an existing lot, if not enough of the lot is outside of the terrestrial natural heritage system to allow the dwelling to be located outside the system in accordance with the official plan.

surfaces, any removal of natural, self-sustaining vegetation, or any site alteration in previously unaltered areas, However, if these uses require any expansion of building footprints, driveways, parking, or other impervious they are only permitted in accordance with a natural heritage compensation plan approved by the TRCA.

- A change in use to a similar use, where the change
  - is permitted by the official plan, and **≘**≘
- contributes to the ecological integrity of the Terrestrial Natural Heritage System, to the satisfaction of the TRCA.

### STAFF COMMENT

cover areas be zoned according to these official plan, would require that the lands within the existing and potential natural To include these policies within the permitted uses.

uses are difficult to translate into a zoning Doesn't the demonstration of need fall on Some terminology within these permitted need for a conservation, flood or erosion by-law. For example, demonstration of the TRCA to determine (or approved permitted as of right in the zoning? control project. Should they not be Class EA for those works)?

i) The definition for ecological integrity is with the definition provided. This should very subjective, and difficult to quantify be clarified

## PROPOSED POLICY

### Policy 9

Policies 1 though 8 apply to the development of transportation, infrastructure, and utilities, with the following modifications.

- and 5, removal must first be justified through an approved environmental assessment process under the Before the lands are removed from the terrestrial natural heritage system in accordance with Policies 4 Environmental Assessment Act, that has had due regard to the policies of this Strategy and to the following principles:
  - where in the opinion of the TRCA the undertaking could have a substantial impact on the ecological integrity of the terrestrial natural heritage system, seriously considering alternatives to the undertaking including a do-nothing option.
    - minimizing the aggregate number of crossings of a valley or other feature, minimize the width of crossings, ## 2 2 B
      - minimize the total area of land removed from the system,
- minimize the impact of the removal of those lands on the ecological integrity of the system,
  - minimize any remaining impacts or project construction and operation after mitigating measures have been taken, on adjacent system lands,
- maintaining natural connections between adjacent system lands, including viable opportunities for wildlife movement. 1

If, as a part of the environmental assessment, the proponent undertakes a natural heritage study, no further work will be required as part of Policy 5, to the extent that the environmental assessment work meets the natural heritage study requirements of Policy 5.

- Where removal of lands has been justified through Policy 9(a), Policy 2 does not apply to the removal.
- 'n Where the removal of lands has been justified through Policy 9 (a) and carried out under Policies 4 and Policy 3 does not apply to the development of transportation, infrastructure and utilities in the removed
- Municipal Class Environmental Assessment requirements within lands to be removed, TRCA's agreement Where a private sector applicant is proposing a local road, water, and sewer crossing not subject to will also be subject to the best efforts to adhere to the following principles: 6
  - minimizing the aggregate number of crossings of a valley or other feature,
    - minimize the width of crossings,
- minimize the total area of land removed from the system,
- minimize the impact of the removal of those lands on the ecological integrity of the system, SEE
  - minimize any remaining impacts or project construction and operation after mitigating measures have been taken, on adjacent system lands, 3
    - maintaining natural connections between adjacent system lands, including viable opportunities for wildlife movement. 3
- Stormwater management facilities and green infrastructure may be considered in Potential Natural Cover in accordance with a natural heritage restoration plan approved by the TRCA and subject to other normal study required approvals. 0

### STAFF COMMENT

transportation, infrastructure, and utilities Permits removal/alteration to system for if it meets parameters. Clarification: are SWM ponds considered to be transportation, infrastructure, and utilities?

Can an official plan amendment policy stipulate the requirements of an environmental assessment?