3. ENVIRONMENT CONSERVATION STRATEGY

3.1 PURPOSE

The Environment Conservation Strategy is intended to ensure that environmental sustainability is considered as a major factor in the future planning of the municipality, and particularly in the assessment of any proposed changes in the community. Environmental sustainability refers to the preservation and enhancement of the natural environment, including surface and groundwater systems, natural habitats (i.e. aquatic, wetland and terrestrial), landforms (including the Oak Ridges Moraine), natural area corridors and the establishment of linkages between natural features.

To implement this direction, the Environment Conservation Strategy establishes policies which recognize the Town's location in the Oak Ridges Moraine and the Rouge Park North Management Plan Study Area, as well as establishing a Greenlands System for the community in accordance with the recommendations of the Town's Natural Features and Greenlands Study and the Oak Ridges Moraine Conservation Plan. The Strategy also provides policies with respect to environmental control measures, floodplain areas, and the development of a resource management plan as a basis for community action with respect to environment conservation and the Oak Ridges Moraine Conservation Plan.

3.2 OAK RIDGES MORAINE

3.2.1 Oak Ridges Moraine Conservation Plan

The Oak Ridges Moraine is an irregular ridge which stretches 160 km from the Trent River to the Niagara Escarpment. It divides the watersheds draining south into western Lake Ontario from those draining north into Georgian Bay, Lake Simcoe and the Trent River System. The Moraine has a unique concentration of environmental, geological and hydrological features that make its ecosystem vital to south-central Ontario.

The Oak Ridges Moraine Conservation Plan (Moraine Plan) was established in April 2002 by the Province of Ontario as an ecologically based plan to provide land use and resource management direction for the land and water within the Moraine. The Province's vision for the Moraine is that of a continuous band of green rolling hills that provides form and structure to south-central Ontario, while protecting the ecological and hydrological features and functions that support the health and wellbeing of the Region's residents and ecosystems.

The Town's planning decisions must conform to the *Oak Ridges Moraine Conservation Plan*. This Official Plan has been amended to bring it into conformity with the Moraine Plan.

3.2.2 Oak Ridges Moraine Conservation Plan Objectives

Planning decisions in the Oak Ridges Moraine Conservation Plan Area (Moraine Plan Area) shall reflect the objectives of the *Oak Ridges Moraine Conservation Plan* which are found in Section 4 of the *Oak Ridges Moraine Conservation Act, 2001* (See Appendix ORM Objectives).

3.2.3 Oak Ridges Moraine Planning Framework

Figure 1 and Schedules "A", "A-1", "B", "B-1", "E", "H", "I", "J" and "K" of this Plan identify the lands in Whitchurch-Stouffville which are located within the Moraine and described as the "Oak Ridges Moraine Plan Area". This section of the Plan provides general policies which apply to all lands in the Oak Ridges Moraine. In addition, Schedules "A" and "B"

designate the lands within the Moraine in the following designations, for which policies are found in Section 4, Land Use Strategy:

- i) ORM Natural Core Area;
- ii) ORM Natural Linkage Area;
- iii) ORM Countryside Area; and,
- iv) ORM Hamlet Area.

Definitions for terms applicable to lands in the Moraine are found in Section 9.5 of the Official Plan.

The appendices also include excerpts from the *Oak Ridges Moraine Conservation Act* and the *Oak Ridges Moraine Conservation Plan* which are referenced in the text of the Official Plan. These appendices are intended to assist in the interpretation of the policies of the Official Plan which are related to the Moraine.

3.2.4 Existing Uses

Notwithstanding any other policies of this Plan, uses, buildings and structures, existing prior to November 15, 2001, are permitted to continue within the Oak Ridges Moraine Conservation Plan Area. Changes to existing uses shall conform with the policies in Part I Sections 6, 7, 8 and 9 of the *Oak Ridges Moraine Conservation Plan* (See Appendix ORM I to the Official Plan). Notwithstanding the foregoing:

- i) expansions to existing buildings and structures that legally existed as of November 15, 2001 may be permitted without amendment to the Zoning By-law provided that the addition does not intrude into any area identified as Areas of Natural or Scientific Interest, Kettle Lakes, Wetlands, Woodlands, Streams or Minimum Vegetation Protection Zones on Schedule "H" and the expansion complies with all the other applicable policies of this Plan and the regulations of the Zoning By-law; and,
- ii) new accessory uses, buildings and structures, including swimming pools, related to single dwellings may be permitted in accordance with the regulations of the Zoning By-law and provided that the use, building or structure does not intrude

into any area identified as Areas of Natural or Scientific Interest, Kettle Lakes, Wetlands, Woodlands, Streams or Minimum Vegetation Protection Zones on Schedule "H".

3.2.5 <u>Transportation, Infrastructure and Utilities</u>

Transportation, infrastructure and utilities are to be prohibited in all land use designations on Schedules "A" and "B" and/or key natural heritage features and hydrologically sensitive features unless the requirements of Section 41 of the Oak Ridges Moraine Conservation Plan have been addressed to the satisfaction of the applicable approval authority, such as the Region of York or the Town of Whitchurch-Stouffville.

The Town shall ensure that the Section 41 requirements, including the determination of need and no reasonable alternatives, are met through Environmental Assessment Act, Planning Act, Condominium Act, and Local Improvement Act approval processes or other applicable approval processes.

3.2.6 <u>Low-Intensity Recreational Uses</u>

Low-intensity recreational uses shall be permitted in all designations in the Oak Ridges Moraine Plan Area subject to the applicable provisions of Section 37 of the Moraine Plan. For reference purposes, the relevant policies (Section 37 of the Moraine Plan) are found in Appendix ORM IV to the Official Plan.

3.2.7 Recreational Trail

A recreational trail system is to be established throughout the entire area which is the subject of the Moraine Plan. Where this trail is located in the Town of Whitchurch-Stouffville, it may be permitted in any part of the Town subject to the provisions of Section 39 of the Moraine Plan. Further, the Town shall encourage the linkage of any trails in the Town to the Oak Ridges Moraine trail system. For reference purposes, the relevant policies (Section 39 of the Moraine Plan) are found in Appendix ORM IV to the Official Plan.

3.2.8 Archaeological Activities

Archaeological activities shall be permitted in all designations in the Oak Ridges Moraine Plan Area in accordance with the directions of the Moraine Plan.

3.2.9 <u>Development Review</u>

All development and site alteration in the area within the Oak Ridges Moraine on Schedules "A" and "B" shall be subject to the provisions of the *Oak Ridges Moraine Conservation Plan*. For reference purposes the policies of Moraine Plan are found in Appendices ORM I, ORM II, ORM III and ORM IV to the Official Plan.

The following policies and Schedules "H", "I" and "J" outline some key directions of the policies in Part III of the Moraine Plan. However, in assessing applications for development, the Town will not rely on these directions, but rather on the Moraine Conservation Plan itself, and Part III of the Conservation Plan will be reviewed in its entirety:

i) Table 3.1 Key Natural Heritage Features, Hydrologically Sensitive Features and Areas of Natural Scientific Interest (Earth Science) Minimum Areas of Influence and Minimum Vegetation Protection Zones.

This Table establishes the minimum area of influence and minimum vegetation protection zones which relate to key natural heritage features and hydrologically sensitive features which are referenced in the following sections and are shown on Schedules "F3" and "H" of this Plan. Where Key Natural Heritage Features and Hydrologically Sensitive Features are not shown on the above schedules these shall be determined during the development application process, with the assistance of the technical guidelines that have been prepared by the Province of Ontario for the Oak Ridges Moraine.

Settlement Areas, as designated in the Oak Ridges Moraine Conservation Plan, that are within the Ballantrae-Musselman Lake and Community of Stouffville Secondary Planning Areas, which were designated on or before April 22, 2002, and shown on Schedules "F3" and "H", where the Secondary Plan, Official Plan or Zoning By-law or Master Environmental Servicing or Functional Servicing Plans are approved based on environmental studies that have been identified Minimum Vegetation Protection Zones that are different from those identified in

the Oak Ridges Moraine Conservation Plan, then the standards established within those plans shall prevail.

ii) Connectivity

Every application for development or site alteration shall identify planning, design and construction practices that ensure that no building or other site alterations impede the movement of plants and animals among key natural heritage features, hydrologically sensitive features and adjacent land within the ORM Natural Core Area and Natural Linkage Areas designated on Schedules "A" and "B".

iii) Key Natural Heritage Features

All development and site alteration will be prohibited in key natural heritage features and the related minimum vegetation protection zone with the exception of certain limited uses specified in Section 22(2) of the Moraine Plan (See Appendix ORM III). An application for development or site alteration in the minimum area of influence shall be accompanied by a natural heritage evaluation in accordance with the provisions of Part III, Section 23 of the *Oak Ridges Moraine Conservation Plan* (See Appendix ORM III). Development or site alteration may also be prohibited in the minimum area of influence based on the results of the natural heritage evaluation which may establish a greater minimum vegetation protection zone.

Key natural heritage features include wetlands; significant portions of the habitat of endangered, rare and threatened species; fish habitat; areas of natural and scientific interest (life science); significant valleylands; significant woodlands; significant wildlife habitat and sand barrens, savannahs and tallgrass prairies. These, together with the minimum vegetation protection zone, are identified on Schedule "H" to this Plan with the exception of significant valleylands, significant wildlife habitat and the habitat of endangered, rare and threatened species. These features are to be identified using criteria established by the Province. Fish habitat on the Oak Ridges Moraine includes, but is not limited to, all hydrologically sensitive features with surface water characteristics.

Schedules "F3" and "H" are based on mapping provided by the Province of Ontario. No amendment will be required to the Schedules where minor changes

are proposed based on studies carried out in accordance with the provisions of the Oak Ridges Moraine Conservation Plan.

Notwithstanding the foregoing, any changes to Schedules "F3" and "H" which affect the boundary of an area of natural and scientific interest (life science), provincially significant wetlands, habitat of endangered, rare and threatened species or fish habitat will only be made after confirmation by the District Office of the Ministry of Natural Resources and in the case of fish habitat, with the Department of Fisheries and Oceans or its delegate or through new information provided by the Province.

In addition, where any changes are made to features, the revised mapping will be circulated to the Province, the Region and the applicable Conservation Authority.

iv) Hydrologically Sensitive Features

All development and site alteration will be prohibited within hydrologically sensitive features and the related minimum vegetation protection zone with the exception of the list of uses specified in Section 26(2) of the Moraine Plan (See Appendix ORM III). An application for development or site alteration in the minimum area of influence shall be accompanied by a hydrological evaluation in accordance with Section 26(3) of the *Oak Ridges Moraine Conservation Plan* (See Appendix ORM III). Development or site alteration may also be prohibited in the minimum area of influence based on the results of the natural heritage evaluation which may establish a greater minimum vegetation protection zone.

Hydrologically sensitive features include permanent and intermittent streams, wetlands, kettle lakes and seepage areas and springs. These, together with the minimum vegetation protection zone, are identified on Schedules "F3" and "H" to this Plan with the exception of seepage areas and springs. These features are to be identified using criteria established by the Province.

Schedules "F3" and "H" are based on mapping provided by the Province of Ontario. No amendment will be required to the Schedules where minor changes are proposed which involve scale of mapping issues based on studies carried out in accordance with the provisions of the *Oak Ridges Moraine Conservation Plan*.

Notwithstanding the foregoing, any changes to Schedules "F3" and "H" which affects the boundary of an area of natural and scientific interest (life science) provincially significant wetlands, will only be made after confirmation by the District Office of the Ministry of Natural Resources and in the case of fish habitat, with the Department of Fisheries and Oceans or its delegate or through new information provided by the Province.

In addition, where any changes are made to features, the revised mapping will be circulated to the Province, the Region and the applicable Conservation Authority.

v) Areas of High Aquifer Vulnerability

The following uses, with the exception of existing uses permitted by Section 6(1) of the *Oak Ridges Moraine Conservation Plan*, (See Appendix ORM I) will be prohibited in Areas of High Aquifer Vulnerability identified on Schedule "I" to this Plan:

- a) Generation and storage of hazardous waste or liquid industrial waste;
- b) Waste disposal sites and facilities, organic soil conditioning sites and snow storage and disposal facilities;
- c) Underground and above-ground storage tanks that are not equipped with an approved secondary containment device; and,
- d) Storage of a contaminant listed in Schedule 3 (Severely Toxic Contaminants) to Regulation 347 of the Revised Regulations of Ontario,199 (See Appendix ORM Reg.347 to this Plan).

In addition, the Town shall encourage restrictions on haulage routes for the transportation of chemicals and volatile materials in such areas.

Schedule "I" is based on mapping provided by the Province of Ontario and for greater accuracy reference should be made to Reference Map for Ontario Regulation 140/02 (*Oak Ridges Moraine Conservation Plan*) made under the *Oak Ridges Moraine Conservation Act*, 2001 dated March 2002.

vi) Landform Conservation Areas

An application for development or site alteration in any area identified as a Landform Conservation Area Category 1 or 2 on Schedule "J" to this Plan shall identify planning, design and construction practices in conformity with the policies for the applicable Landform Conservation Area Category that will keep disturbance of landform character to a minimum in accordance with the provisions of Section 30 of the Oak Ridges Moraine Conservation Plan (See Appendix ORM III). With the exception that Sections 30(5), (6) and (10) do not apply to mineral aggregate operations.

In addition, an application for development or site alteration with respect to land in an area of natural and scientific interest (earth science) or the related minimum area of influence (See Table 3.1) shall be accompanied by an earth science heritage evaluation that:

- a) identifies planning, design and construction practices that will ensure protection of the geological or geomorphological attributes for which the area of natural and scientific interest was identified; and,
- b) determines whether a minimum vegetation protection zone is required, and if so, specifies the dimensions of that zone and provides for the maintenance and, where possible, improvement or restoration of natural self-sustaining vegetation within it.

An application for development or site alteration with respect to land in a landform conservation area (Category 1) shall:

- c) Maintain significant landform features such as steep slopes, kames, kettles, ravines and ridges in their natural undisturbed form;
- d) Limit the portion of the net developable area of the site that is disturbed to not more than 25% of the total area of the site; and,
- e) Limit the portion of the net developable area of the site that has impervious surfaces to not more than 15% of the total area of the site.

An application for development or site alteration with respect to land in a landform conservation area (Category 2) shall:

- f) Maintain significant landform features such as steep slopes, kames, kettles, ravines and ridges in their natural undisturbed form;
- g) Limit the portion of the net developable area of the site that is disturbed to not more than 50% of the total area of the site; and,
- h) Limit the portion of the net developable area of the site that has impervious surfaces to not more than 20% of the total area of the site.

vii) Major Development

Notwithstanding any other provisions of this Plan, in the *Oak Ridges Moraine Plan Area*, major development as defined by the Moraine Plan is subject to a number of requirements in addition to those for other development. These include additional requirements with respect to landform conservation (Section 30(8) of the Moraine Plan); stormwater management (Section 45) and sewage and water services (Section 43). (See Appendices ORM III and ORM IV.)

In addition, an application commenced prior to April 23, 2007 shall be subject to the provisions of Section 24(8) of the Moraine Plan, while new major development is prohibited after April 23, 2007 in accordance with the provisions of Section 24(4) of the Moraine Plan (See Appendix ORM III) unless:

- a) the watershed plan for the relevant watershed has been completed;
- b) the major development conforms to the watershed plan; and,
- c) a water budget and conservation plan, prepared in accordance with Section 25 of the Moraine Plan and demonstrating that the water supply required for the major development is sustainable, has been completed.

TABLE 3.1 KEY NATURAL HERITAGE FEATURES HYDROLOGICALLY SENSITIVE FEATURES AND AREAS OF NATURAL AND SCIENTIFIC INTEREST (EARTH SCIENCE) MINIMUM AREAS OF INFLUENCE AND MINIMUM VEGETATION PROTECTION ZONES

Item	Feature	Minimum Area of Influence (Section 21 ORMCP*)	Minimum Vegetation Protection Zone (Sections 21, 23, 26(4), 30(12) of ORMCP
1.	Wetlands	All land within 120 m of any part of feature	All land within 30 m of any part of feature, subject to clause 23(1)(d) of ORMCP if a natural heritage evaluation is required.
2.	Significant portions of habitat of endangered, rare and threatened species	All land within 120 m of any part of feature	As determined by a natural heritage evaluation carried out under Section 23 of ORMCP
3.	Fish habitat	All land within 120 m of any part of feature	All land within 30 m of any part of feature, subject to clause 23(1)(d) of ORMCP if a natural heritage evaluation is required
4.	Areas of natural and scientific interest (life science)	All land within 120 m of any part of feature	As determined by a natural heritage evaluation carried out under Section 23 of ORMCP
5.	Areas of natural and scientific interest (earth science)	All lands within 50 m of any part of feature	As determined by an earth science heritage evaluation carried out under subsection 30(12) of ORMCP
6.	Significant valleylands	All land within 120 m of stable top of bank	All land within 30 m of stable top of bank, subject to clause 23(1)(d) of ORMCP if a natural heritage evaluation is required
7.	Significant woodlands	All land within 120 m of any part of feature	All land within 30 m of the base of outermost tree trunks within the woodland, subject to clause 23(1)(d) of ORMCP if a natural heritage evaluation is required
8.	Significant wildlife habitat	All land within 120 m of any part of feature	As determined by a natural heritage evaluation carried out under Section 23 of ORMCP
9.	Sand barrens, savannahs and tallgrass prairies	All land within 120 m of any part of feature	All land within 30 m of any part of features, subject to clause 23(1)(d) of ORMCP if a natural heritage evaluation is required
10.	Kettle lakes	All land within 120 m of the surface catchment area	All land within the surface catchment area or within 30 m of any part of feature, whichever is greater, subject to clause 26(4)(c) of ORMCP if a hydrological evaluation is required
11.	Permanent and intermittent streams	All land within 120 m of meander belt	All land within 30 m of meander belt, subject to clause 26(4)(c) of ORMCP and subsection 26(5) if a hydrological evaluation is required
12.	Seepage areas and springs	All land within 120 m of any part of feature	All land within 30 m of any part of feature, subject to clause 26(4)(c) and subsection 26(5) of ORMCP if a hydrological evaluation is required

Note: ORMCP means the Oak Ridges Moraine Conservation Plan

3.3 ROUGE PARK NORTH MANAGEMENT PLAN AREA

3.3.1 Purpose

A major portion of the southern part of the Town is located in the Rouge River watershed. The Province of Ontario announced its intention to establish a significant park along the Rouge River in 1990, and in May, 1994 the Rouge Park Management Plan for the lands south of Steeles Ave. was released. However, the Rouge Park North Management Plan for the lands north of Steeles, including the portion of the watershed in the Town of Whitchurch-Stouffville, has not been finalized. The policies of this section provide direction regarding lands in the Rouge Park North Management Plan Area until such time as the Plan is approved, as well as following its approval.

3.3.2 Permitted Uses, Buildings and Structures

The permitted uses, buildings and structures in the Rouge Park North Management Plan Area designation on Schedule "A" and Schedule "A-1" shall be those in the relevant land use designations on Schedule "B", subject to the policies of this section and the other policies of this Plan.

3.3.3 Rouge Park North Management Plan

The Town of Whitchurch-Stouffville will cooperate with the Province and the Rouge Park Alliance in the establishment of Rouge Park North in the Town and the completion of a detailed management plan for Rouge Park North. When the Rouge Park Alliance approves and/or endorses the Rouge Park North Management Plan, the Town will consider an amendment to this Plan if necessary to implement the provisions of the approved Plan.

3.3.4 **Development Applications**

3.3.4.1

Until such time as the Rouge Park North Management Plan is approved and/or endorsed by the Rouge Park Alliance, applications for land use change in Rouge Park North Management Area as designated on Schedule "A" and Schedule "A-1" shall only be considered in accordance with all the other policies of this Plan, and if consistent with the principles set out in Rouge Park Management Plan, 1994.

3.3.4.2

When the Rouge Park North Management Plan is approved and/or endorsed by the Rouge Park Alliance, applications for land use change in the Rouge Park North Management Area as designated on Schedule "A" and Schedule "A-1" shall only be considered in accordance with all the other policies of this Plan, and if consistent with the policies of the Rouge Park North Management Plan.

3.4 GREENLANDS SYSTEM

3.4.1 General

3.4.1.1 **Purpose**

The policies of this section, together with the designations on Schedule "A", Greenlands System, establish a Greenlands system for the Town of Whitchurch-Stouffville for the area outside of the Oak Ridges Moraine Area. Within the Oak Ridges Moraine Area the Greenlands System is established by the policies of the Moraine Plan and the related policies of this Plan, particularly Section 3.2. The Greenlands System includes significant natural features which have an important environmental function.

3.4.1.2 Private Lands

The inclusion of private lands in the Greenlands System does not imply that the lands will be purchased by a public agency or that they are free or open to the public.

3.4.1.3 Relationship to Regional Greenlands System

The Whitchurch-Stouffville Greenlands System is intended to support and be consistent with the Region of York's Official Plan and the York Regional Greenlands strategy. However, the Greenlands provisions of the Town's Official Plan prevail over the provisions of the Regional Official Plan in the event of any conflict.

3.4.1.4 Trails System

A system of environmentally sustainable recreational trails shall be planned to link key features of the Greenlands System, together with the Town's Park System and, the Trans-Canada, Oak Ridges Moraine and the Rouge Park Trail Systems in a manner compatible with the protection of the lands in the Greenlands System. The trails system shall be planned in accordance with a Master Plan developed by

the Town, and in cooperation with the Region of York and adjacent municipalities. The proposed trail system shall be planned to include the lands in the Moraine Plan Area which are the subject of the policies in Section 3.2 of this Plan. However, all trails in the Moraine Plan Area shall be subject to the policies of the Moraine Plan.

3.4.1.5 Natural Corridor Linkages

The Town will encourage, where it considers appropriate, the creation of natural corridor linkages between natural features that will assist in creating and/or restoring a linked natural heritage system for the Town. The Town may also encourage the enhancement and restoration of areas around natural heritage features that will assist in minimizing the amount of edge or to rehabilitate areas that may have degraded over time.

Mod. #2 Region of York

3.4.2 Significant Environmental Area

3.4.2.1 **Purpose**

The Significant Environmental Area designation recognizes:

- i) a variety of features possessing significant attributes or environmental functions, which in many instances have been deemed to be of Provincial Regional or Local Significance, including: Areas of Natural and Scientific Interest (ANSI's), locally and Provincially Significant Wetlands, significant portions of the habitat of threatened and endangered species, Environmentally Significant Areas (ESA's), and significant wildlife habitat. In some cases, these areas consist of a complex unit containing a variety of wetlands that may be separated by forest conditions or relatively open areas; and,
- ii) all valley and stream corridors as defined in Section 9.5 of the Plan that contain streams which flow for most if not all of the year. They are fed by groundwater discharges and are generally considered to support coldwater fish species, particularly in their upper reaches.

3.4.2.2 Permitted Uses, Buildings and Structures

- i) The permitted uses of land within the areas designated Significant Environmental Area on Schedules "A" and "B" shall be conservation, enhancement and preservation of the natural environment, and passive recreational uses such as nature viewing and pedestrian trails which will have no negative impact on the natural environmental features and ecological functions of the area, including no net loss of fish habitat, where applicable.
- ii) The only exceptions to the provisions of Section 3.4.2.2 i) are the following uses and facilities:
 - a) development or land disturbance for required stream bank erosion protection and fish, wildlife and conservation management provided that any required reconstruction of a watercourse is completed in a way which creates a natural appearing stream environment with variable side slopes, landscaping and a meandering channel; and,
 - existing roads and related utilities or modifications to such facilities which shall be permitted to cross the Significant Environmental Area designation in the general area of the road designations on Schedule "B".

However, such uses shall only be permitted by the Town, in consultation with the appropriate Conservation Authority, where they are being carried out by a public agency or provided that prior to approving the location/construction of such uses, an Environmental Impact Study (EIS) or, where required a Class Environmental Assessment, shall be carried out by qualified consultants, demonstrating:

- c) the need for such a use or facility; and,
- d) that there is no negative impact on the functions and features of the Significant Environmental Area during both the construction and postdevelopment phases. Where an EIS is required, the Town shall carry out a peer review of the study, at the cost of the applicant, as part of the basis for evaluating conformity with the policies of this Plan.

iii) Notwithstanding any other provisions of this section, where historic development and recreation uses, including golf course uses, are located in the Significant Environmental Area designation or buffer areas at the date of adoption of this Plan, such uses shall continue to be permitted. In addition, redevelopment of such lands may be permitted where there is no negative impact on the functions and features of the Significant Environmental Area during the construction and post-development phases, and where the Town is satisfied that the redevelopment restores and enhances environmental features wherever feasible. Further, where an EIS is required, the Town shall carry out a peer review of the study, at the cost of the applicant, as part of the basis for evaluating conformity with the policies of this Plan.

3.4.2.3 Ownership

- i) The Town shall support some form of public ownership or public access as part of public trail systems for the lands in the Significant Environmental Area designation by the municipality or other public agency at no cost. Further, where such lands are not acquired for public ownership, the Town shall encourage consolidation of the ownership of such lands and discourage further fragmentation of ownership. However, the designation does not imply that the lands will be purchased by a public agency or that they are free and open to the public.
- ii) Such lands shall not be acceptable as parkland dedication under the Planning Act.
- iii) Where the lands in the Significant Environmental Area designation are not acquired by a public agency, the Town shall seek the maintenance and enhancement of the lands through the use of stewardship agreements including the potential for public access.

3.4.2.4 Significant Environmental Area Boundaries

i) The areas included in the Significant Environmental Area designation were identified based on a general background analysis. Site specific studies shall be required to define the significance of such natural features and their importance within the Town's Greenlands System, as well as to better define the exact preservation requirements, buffer widths and boundaries where development is proposed in or abutting such lands. In addition, where development is proposed abutting a stream for which floodplain mapping is not available, such mapping shall be required to be submitted as part of any development application.

- ii) The boundaries of the lands in this designation can be refined without further amendment to this Plan subject to approval by the Town, in consultation with the appropriate Conservation Authority, of an Environmental Impact Study and/or other detailed information required by the Town. However, the Town must be satisfied through a peer review of the EIS or other information, carried out at the cost of the applicant, that the criteria in Section 3.4.2.4 iii) a) and b) can be satisfied.
- iii) The addition or deletion of any major area from the Significant Environmental Area shall require an amendment to the Plan. Such an amendment shall only be approved based on studies carried out for the applicant by qualified consultants. The studies shall be subject to a peer review carried out by the Town in consultation with the appropriate Conservation Authority at the cost of the applicant. With respect to deletions from the designation, the Town must be satisfied through the peer review of these studies that:
 - a) any environmental and/or physical hazards can be mitigated in a manner which is consistent with accepted engineering and resource management practices; and,
 - b) proposed development and related works:
 - recognizes natural ecological systems and processes and ensures that they are maintained and enhanced;
 - ii) does not result in any significant disruption of existing landforms and landscape features including vegetation, steep slopes and groundwater recharge or discharge areas;

- iii) will result in no changes to the natural quality and hydrological characteristics of any watercourses;
- iv) will result in no negative impacts on the wetland area or on its ecological functions, and/or on significant portions of the habitat of threatened or endangered species;
- v) will result in no loss of fish habitat on all streams; and,
- vi) will result in no loss of significant wildlife habitat.

3.4.3 Water Management Area

3.4.3.1 **Purpose**

The Water Management Area designation recognizes:

- i) a headwater zone which includes a broad east-west band through the centre of the Town at the headwaters of tributaries where numerous groundwater discharge springs feed the Duffins Creek and Little Rouge River systems;
- ii) major groundwater recharge areas, the main function of which is the potential to readily replenish aquifer systems and provide baseflow to local streams; and,
- iii) minor recharge areas where hummocky topography supports a variety of kettle depressions, ranging from dry potholes, to small ponds and lakes or closed bog features, some of which provide recharge to underlying aquifers or receive groundwater discharge from surrounding areas.

3.4.3.2 Permitted Uses, Buildings and Structures

The permitted uses of land within any areas designated "Water Management Area" on Schedule "A" shall be the uses permitted in the relevant land use designations on Schedule "B" to this Plan, subject to the policies of this section, in addition to all other policies of this Plan.

3.4.3.3 Stewardship

The Town shall seek the maintenance and enhancement of the lands in the Water Management Area designation through the use of stewardship agreements.

3.4.3.4 Development Applications

Development applications, other than those for agricultural uses, shall be evaluated based on an Environmental Impact Study carried out by qualified consultants. Such studies shall be evaluated by the Town through a peer review in consultation with the appropriate Conservation Authority, at the cost of the applicant. Through the peer review the Town must be satisfied that the proposed development and related works:

- i) does not result in any significant disruption of groundwater discharge or recharge areas from both a quality and quantity perspective;
- ii) will result in no changes to the natural quality and hydrological characteristics of any watercourses; and,
- iii) will result in no loss of fish habitat on all streams.

3.4.4 Major Woodland Area

3.4.4.1 **Purpose**

The Major Woodland Area designation recognizes relatively continuous blocks of forest which cover several hundreds of hectares (acres) of the rural area. They consist of relatively mature mixed and deciduous forest, that have been integrated with conifer plantations, planted several decades ago to control erosion of the predominantly sandy soils found in this area. Because of the continuity and habitat diversity of these large woodland areas, a high diversity of wildlife can be supported. Rare and uncommon species, including shy, interior forest birds (e.g. Red-shouldered Hawk) breed in these areas. Other important environmental functions associated with these areas include potentially significant groundwater recharge, particularly in the large, continuous woodland in the north central part of the Town, which replenishes aquifer systems and provides baseflow discharge to

the headwaters of local coldwater streams of the Holland River, Black River, Mount Albert Creek and Vivian Creek watersheds.

3.4.4.2 Permitted Uses, Buildings and Structures

The permitted uses of land within any areas designated "Major Woodland Area" on Schedule "A" shall be the uses permitted in the relevant land use designations on Schedule "B" to this Plan, subject to the policies of this section, in addition to all the other policies of this Plan.

3.4.4.3 Ownership

- i) Significant portions of the land in the Major Woodland Area designation form part of the Regional Forest. The Town shall work to maintain these lands in public ownership and shall support some form of public ownership or public access for public trail systems for other lands in the Major Woodland Area designation by the municipality or other public agency at no cost. However, the designation does not imply that the lands will be purchased by a public agency or that they are free and open to the public.
- Such lands shall not be acceptable as parkland dedication under the Planning Act.
- iii) Where the lands in the Major Woodland Area designation are not acquired by a public agency, the Town shall seek the maintenance and enhancement of the lands through the use of stewardship agreements, including the potential for public access.

3.4.4.4 Major Woodland Area Boundaries

i) The areas included in the Major Woodland Area designation were identified based on a general background analysis. Site specific studies shall be required to better define the exact limits, preservation requirements, vegetation composition, buffer widths and boundaries where development is proposed in or abutting such lands. However, such studies should recognize the Town's desire to encourage the protection, restoration and expansion of wooded areas wherever possible.

- ii) The boundaries of the lands in this designation can be refined without further amendment to this Plan subject to approval by the Town, in consultation with the appropriate Conservation Authority, of an Environmental Impact Study (EIS) and/or other detailed information required by the Town. However, the Town must be satisfied through a peer review of the EIS or other information to be carried out at the cost of the applicant, that the criteria in Section 3.4.4.4 iii) a) to f) can be satisfied.
- iii) Deletion of any significant area from the Major Woodland Area shall require an amendment to the Plan. Such an amendment shall only be approved based on studies carried out by the applicant by qualified consultants. The studies shall be subject to a peer review carried out by the Town at the cost of the applicant in consultation with the appropriate Conservation Authority. Through the peer review of these studies, the Town must be satisfied that the proposed development and related works:
 - a) recognizes how the Major Woodland Areas fit into the overall Greenlands System and, natural ecological systems, their functions and processes and ensures that they are maintained and enhanced;
 - b) does not result in any significant disruption of existing landforms and landscape features, including vegetation, steep slopes and groundwater recharge or discharge areas;

Mod. #3 Region of York

- c) will result in no changes to the natural quality and hydrological characteristics of any watercourses;
- d) will result in no net loss of fish habitat;
- e) will result in no loss of significant wildlife habitat; and,
- f) will result in no negative impacts on the wetland area or on its ecological functions, and/or on the significant portions of the habitat of threatened or endangered species.

Mod. #3 Region of York

3.4.4.5 Part Lot 30, Concession 9

Notwithstanding any other provisions of this Plan, the boundary of the Woodland Area designated in this area shall be determined in accordance with the provisions of Section 3.4.4.4 i) and ii) of this Plan.

3.4.5 Tableland Woodlot Area

3.4.5.1 **Purpose**

The Tableland Woodlot area designation recognizes woodlot features which are generally greater than 4 ha (10 ac.) in size and vary in composition from conifer plantations to mature mixed and deciduous stands of trees. The diversity of habitat quality, although generally considered to be of lesser value than the extensive woodland blocks found on the Oak Ridges Moraine, may provide suitable conditions to support a variety of wildlife and plant species that are common to the area. In some instances, the tableland woodlots closest to the extensive woodland areas may harbor uncommon bird species that are normally associated with the larger forest blocks.

3.4.5.2 Permitted Uses, Buildings and Structures

The permitted uses of land within any areas designated "Tableland Woodlot Area" on Schedule "A" shall be the uses permitted in the relevant land use designations on Schedule "B" to this Plan, subject to the policies of this section, in addition to all the other policies of this Plan.

3.4.5.3 Ownership

- i) The Town shall support some form of public ownership or public access for public trail systems for lands in the Tableland Woodlot Area designation by the municipality or other public agency at no cost. However, the designation does not imply that the lands will be purchased by a public agency or that they are free and open to the public.
- Such lands shall not be acceptable as parkland dedication under the Planning Act.

iii) Where the lands in the Tableland Woodlot Area designation are not acquired by a public agency, the Town shall seek the maintenance and enhancement of the lands through the use of stewardship agreements, including the potential for public access.

3.4.5.4 Tableland Woodlot Area Boundaries

- i) The areas included in the Tableland Woodlot Area designation were identified based on a general background analysis. Site specific studies shall be required to better define the exact limits, preservation requirements, vegetation composition, buffer widths and boundaries where development is proposed in or abutting such lands. However, such studies should recognize the Town's desire to encourage the protection, restoration and expansion of wooded areas wherever possible.
- ii) The boundaries of the lands in this designation can be refined without further amendment to this Plan subject to approval by the Town, in consultation with the appropriate Conservation Authority, of an Environmental Impact Study and/or other detailed information required by the Town. However, the Town must be satisfied through a peer review of the EIS or other information to be carried out at the cost of the applicant, that the criteria in Section 3.4.3.4 iii) a) to e) can be satisfied.
- iii) Deletion of any significant area from the Tableland Woodlot Area shall require an amendment to the Plan. Such an amendment shall only be approved based on studies carried out for the applicant by qualified consultants. The studies shall be subject to a peer review carried out by the Town at the cost of the applicant in consultation with the appropriate Conservation Authority. Through these studies the Town must be satisfied that the proposed development and related works:
 - a) recognizes natural ecological systems, functions, and processes and ensures that they are maintained and enhanced;
 - b) does not result in any significant disruption of existing landforms and landscape features including vegetation, steep slopes and groundwater recharge or discharge areas;

Mod. #4 Region of York

- c) will result in no changes to the natural quality and hydrological characteristics of any watercourses;
- d) will result in no loss of significant wildlife habitat;
- e) will result in no net loss of fish habitat; and,
- f) will result in no negative impacts on the wetland area or on its ecological functions, and/or on the significant portions of the habitat of threatened or endangered species.

Mod. #4 Region of York

3.4.6 Public Open Space Area

3.4.6.1 **Purpose**

The intent of the Public Open Space Area component of the Greenlands System is to provide for a full range of active and passive public recreation facilities, unlike the natural areas where any development must be restricted and recreation opportunities are necessarily limited. It includes public park and open space areas which are not included in other parts of the Greenlands System.

3.4.6.2 Permitted Uses, Buildings and Structures

The permitted uses of land within any areas designated "Public Open Space Area" on Schedule "A" are recreation and open space including related buildings and structures such as playing fields, swimming pools, arenas, concession stands, picnic areas, interpretation centres and trail systems in accordance with policies of Section 4.10.2 of this Plan.

3.4.6.3 Relationship to Greenlands System

The Public Open Space Area designation forms part of the Greenlands System designated on Schedule "A". New uses or modifications to existing uses in the Open Space Area designation shall be designed to restore and enhance the Greenlands System in accordance with the policies of Section 3 of this Plan. In particular, the Town in planning the development of new parks shall consider their role in the restoration and enhancement of the Greenlands System.

3.4.7 Environmental Buffer Area

3.4.7.1 **Purpose**

Environmental Buffer Areas shall generally be provided around lands within the Significant Environmental Area, and Tableland Woodlot Area designations:

- i) to minimize potential conflict between human activities and sensitive environmental features; and,
- ii) to ensure that there will be no negative impacts on the natural features or the ecological functions for which the lands have been designated.

3.4.7.2 Buffer Requirements

- i) Where development, other than for agricultural uses, is proposed on lands:
 - a) abutting a Significant Environmental Area (exclusive of significant wetlands or significant portions of the habitat of threatened and endangered species within which no development is permitted), and
 - b) in or abutting a Tableland Woodlot Area designation, the size and extent of environmental buffers, the form they take, and the uses permitted within the buffer area, shall be identified through an Environmental Impact Study and/or other detailed information required by the Town, in consultation with the appropriate Conservation Authority. As a minimum, an Environmental Impact Study shall be required for lands within 120 m (394 ft) of the staked edge of wetlands, 50 m (164 ft) of the staked edge of woodlands 30 m (100 ft) of the staked edge of watercourses and fish habitat and 10 m (32 ft) from the staked edge of a valley or stream corridor. Such studies shall be carried out by qualified consultants and the Town shall evaluate the appropriateness of any proposed buffer determined by an Environmental Impact Study through a peer review carried out at the cost of the applicant. The staked boundary of these features shall be determined by the Town in consultation with the Conservation Authority.

- ii) Notwithstanding any other policies of this Plan, a minimum 30 m (100 ft) vegetated buffer shall be required on each side of the staked edge of all coldwater streams, and the Town shall encourage the achievement of a 50 m (164 ft) buffer on each side of such streams, where feasible. A minimum 15 me (49 ft) vegetated buffer shall be required on the staked edge of each side of all other streams and a 10 m (32 ft) buffer shall be required on the staked edge of each side of all valley and stream corridors.
- iii) Whenever possible, environmental buffer areas shall be encouraged to be acquired by public authorities or to remain in single ownership. Further, regardless of ownership, environmental buffer areas may be included in the net development area. However, where environmental buffers remain in private ownership, they shall generally not form part of an individual lot intended for development. Where a buffer area is permitted to form part of an individual lot intended for development by the Town, in consultation with the Conservation Authority, the lot shall be of sufficient size to allow the buffer to achieve its purpose. In addition, the buffer area shall be zoned in an appropriate environmental protection zone, and the subdivider shall agree to include clauses in the agreements of purchase and sale advising prospective purchasers of the restrictions on the use of that portion of the lot.

3.4.8 Private Open Space Area

3.4.8.1 **Purpose**

There are a number of existing golf courses, other recreational facilities, cemeteries and institutional uses in the Town. In the future other large areas of private open space may be created. While these areas are not directly accessible by the public, they provide a visual open space linkage as part of the Greenlands System. In addition, there is the potential that arrangements may be made for public trails across such lands.

3.4.8.2 Relationship of Private Open Space Areas to Greenlands System

The Town will work with the owners of private open space uses to maximize the role of such uses as components of the Greenlands System by:

- i) entering into agreements or other arrangements to permit public trail access to such lands;
- ii) encouraging landowners to restore vegetation, either through planting or naturalization, and to strengthen linkages between natural features;
- iii) by providing for the potential of such connections in the design of the public trail system, where it is not immediately possible to arrange public trail access to such lands;
- iv) ensuring that new development adjacent to such lands is designed to maximize public views into such sites; and,
- v) ensuring that, where a private open space use is replaced with a non-open space use, provision is made to continue and/or enhance key parts of the open space feature and/or trail connections.

3.5 ENVIRONMENTAL MANAGEMENT

3.5.1 <u>Purpose</u>

This section of the Plan identifies the policies and criteria to be applied to protect and enhance the natural environment, including tree conservation, ground and surface water quality and quantity and floodplain management.

3.5.2 <u>Tree Conservation</u>

- i) It is the objective of the Town to maintain and enhance existing woodlands, woodlots, hedgerows and trees wherever possible, and to encourage the planting of new woodlots and trees in all areas of the Town, including the Greenlands System.
- ii) Woodlots shall be subject to the provisions of the Regional Tree By-law.
- iii) On lands where tree conservation and planting plans have not been created, or where development is not being permitted or proposed, opportunities to establish such plans will be explored as part of the Resource Management Plan described in Section 3.6.
- iv) Prior to development of any lands, a Tree Conservation and Planting Plan shall be required in accordance with the provisions of Section 7.3 vi) of this Plan.

3.5.3 Storm Water Management

- Stormwater management shall be carried out to the satisfaction of the Town, the Conservation Authority, and the Region of York on a watershed and/or subwatershed basis.
- ii) Best Management Practices to be applied shall meet or exceed Level I protection criteria (or equivalent) as outlined in the Ministry of Environment's

- "Stormwater Management Practices Planning and Design Manual, June 1994" or any update of that document.
- iii) The following criteria shall be used in establishing locations for storm drainage control facilities:
 - a) Grading shall be limited so that present catchment and subcatchment areas are maintained (i.e., surface drainage should not be diverted from one catchment to another);
 - b) Water quantity (runoff control) facilities shall be required for all lands that are subject to a Planning Act application;
 - c) Water quality control facilities shall be required for all new outfall locations, and the use of infiltration systems shall be considered wherever possible, recognizing that the opportunities may be limited where there are till soils;
 - d) Given the cold water status of the streams in the Planning Area, the effects of temperature increases from quality and quantity control ponds shall be assessed through stormwater control plans where required by the Town;
 - e) Stormwater facilities may be located in any land use designation, however, they shall not be located in lands in the Major Woodland Area or Tableland Woodlot Area designations on Schedule "A" or in the Significant Environmental Area designation without an Environmental Impact Statement approved by the Town in consultation with the Conservation Authority;
 - f) The number of facilities will be limited as much as possible to minimize future municipal costs for monitoring and maintenance;
 - g) Uncontrolled runoff from existing developed areas shall be incorporated into quantity/quality facilities for new development, wherever possible; and,

- h) Erosion and sediment controls will be of critical importance, given the cold water status of the streams and sediment control plans shall be monitored to ensure that erosion controls remain effective during the full construction period.
- iv) In addressing stormwater management, the maintenance, or possible enhancement of baseflow is an important element, given the coldwater conditions of the streams.

3.5.4 **Groundwater Management**

Significant groundwater resource areas within the Town, particularly those lands which are designated Water Management Area, have been identified as being potentially sensitive to development because of their recharge and discharge functions. Within this context, groundwater management shall be addressed through Functional Servicing Studies, where required by the Town, which shall have regard for the following issues:

- i) the effects of temporary dewatering, and of any potential long term decreases in the water table; and,
- ii) the effects on recharge of aquifer systems (quality and quantity) and baseflow to streams.

3.5.5 Flood Plain Areas

- i) Lands adjacent to stream systems which have been mapped by the Lake Simcoe and Toronto Region Conservation Authorities as being subject to flooding and/or erosion hazards have been designated as "Floodplain Area" on Schedule "A-2".
- ii) The Town shall encourage the appropriate Conservation Authority to complete and update mapping of flood prone lands for the remaining parts of the Town, and where such mapping has not been completed, shall require it to be prepared as part of any Functional Servicing Study or development application.
- iii) Development in the Floodplain Area designation shall also be subject to the policies of the Significant Environmental Area designation in Section 3.4.2. In

addition, in evaluating an application for the redesignation of lands in the Floodplain Area designation, the Town shall consult with the appropriate Conservation Authority and shall have regard to the following matters, based on the submission of engineering studies by the applicant: or where the lands are located in the Oak Ridges Moraine Plan Area the policies of the applicable designation on Schedule "B"; and,

- a) the existing environmental and/or physical hazards;
- b) the potential impacts of these hazards; and,
- the proposed methods by which these impacts may be overcome in a manner consistent with accepted engineering techniques and resource management practices.
- iv) All new development and structures within the Floodplain Area designation shall require the approval of the appropriate Conservation Authority.
- v) Notwithstanding any other policies of this subsection, within the Floodplain Area designation, minor renovations, alterations or additions to legally existing buildings and structures existing at the date of adoption of this Plan, may be permitted subject to the approval of the Town, in consultation with the appropriate Conservation Authority and where the lands are located in the Oak Ridges Moraine Plan Area, subject to the policies of Section 3.2 of this Plan.

3.5.6 <u>Significant Habitat of Endangered Species and Threatened Species, Fish</u> Habitat and Wildlife

- i) Notwithstanding any other provisions of the Plan, and regardless of the land use designation no development or site alteration shall be permitted in significant habitat of endangered species and threatened species; and in fish habitat, except in accordance with provincial or federal requirements.
- ii) Development and site alteration shall not be permitted in significant wildlife habitat or on adjacent lands to any significant habitat of endangered species and threatened species, fish habitat or significant wildlife habitat unless the ecological function of the adjacent lands has been evaluated and it has been

- demonstrated that there will be no impacts on the natural features or their ecological functions.
- iii) The Town will encourage private land stewardship, which protects and enhances the habitat of species at risk.
- iv) The Town will work with the Province, as appropriate, on the preparation of recovery strategies or management plans for species at risk.

3.6 RESOURCE MANAGEMENT PLAN

3.6.1 Purpose

The intent of the Resource Management Plan is to establish a program for the maintenance and enhancement of the Greenlands System and the directions in the Moraine Plan and water resources of the Town of Whitchurch-Stouffville which can be implemented independent of any additional development. This program is intended to be implemented by the Town and local residents, landowners and other interested groups, working with public agencies such as the Regional Municipality of York and the Conservation Authorities. In developing the Resource Management Plan, the Town will also utilize the recommendations of the Natural Features and Greenlands Study and the directions in the Moraine Plan.

It recognizes the fiscal constraints within which the Town must work and focuses on two areas:

- i) Private Resource Management Practices; and,
- ii) Public Resource Management Practices.

3.6.2 Private Resource Management Practices

The Town has limited authority to control private resource management practices. Therefore, the focus of any program must be the encouragement of voluntary action by individual landowners, although the enforcement of existing regulations and the use of existing legislation are also available tools. Actions which the Town may initiate to improve private resource management practices include:

i) Stewardship Program

The Town shall establish a stewardship program for the Town of Whitchurch-Stouffville within a well defined terms of reference and budget which may include such approaches as:

- a) use of available resources to develop and implement a program to educate property owners, including farmers, about the natural environment of the area they live in, and the manner in which they can operate their household and workplace to manage their property to reduce negative impacts on natural systems;
- establish and operate an awards program for residents, farmers, employers and landowners who implement measures for improving the environment;
- c) establish and operate demonstration programs for environmentally sound management practices on public and/or private properties;
- d) establish a program to encourage the use of stewardship agreements for private lands or the dedication of such lands to the Town or other public agency or to provide for public access as part of public trail systems; and,
- e) other related activities such as a tree planting program through local service groups.

ii) Enforcement of Existing Legislation

The Town shall review available legislation with respect to matters such as the operation of septic tanks, the dumping of fill, and the protection of trees, and work with the appropriate agencies to develop better enforcement practices.

iii) Site Plan Control

The Town shall use the site plan review process to control the quantity and quality of surface runoff on individual lots, where appropriate, to reduce the negative impacts of small new developments and to encourage appropriate tree planting and landscaping in accordance with the provisions of this Plan.

3.6.3 Public Resource Management Practices

Actions which the Town will initiate to improve its own resource management practices and the resource management practices of other public agencies, include:

i) Management Practice Audit

The Town through its Public Works Department, shall carry out an audit of its own management practices and facilities and establish a plan to minimize negative impacts on natural systems and features (e.g., road de-icing practices, street cleaning practices), particularly in groundwater recharge areas and adjacent to streams and wetlands.

ii) Other Agencies

The Town shall work with other agencies, particularly the Region of York:

- a) to seek improvements to their management practices in the Town;
- b) to introduce programs to improve the environment (e.g., tree planting programs), to enhance links between existing natural features (e.g. woodlands and wetlands) and to enhance deforested valley lands; and,
- c) to improve enforcement of regulations and legislation.

iii) Development Standards

The Town will carry out a review of its development standards with a view to revising standards which appear excessive or which have unnecessary environmental impacts (e.g., minimum road allowances).