5. Environment

5.0 Preamble

A healthy and sustainable environment represents a balance between human activities and natural features and functions. In order to attain this balance, Council will enhance the quality of Windsor's natural environment and manage development in a manner that recognizes the environment as the basis of a safe, caring and diverse community and a vibrant economy.

This chapter of the Official Plan provides goals, objectives and policies for the environmental designations identified on Schedule B: Greenway System; Schedule C: Development Constraint Areas; Schedule K: Source Water Protection Areas and should be read in conjunction with the other parts of this Plan.

5.1 Goals

In keeping with the Strategic Directions, Council's environment goals are to achieve:

HEALTHY & SUSTAINABLE	5.1.1	A healthy and sustainable natural environment.
COOPERATION & COORDINATION	5.1.2	Cooperation and coordination among all stakeholders to maintain a flourishing natural environment.
ENVIRONMENTAL AWARENESS	5.1.3	An awareness, appreciation, and responsibility for the natural environment and its functions and features.
COMPATIBLE DEVELOPMENT	5.1.4	Development that is compatible with environmental functions and features.
REDUCE POLLUTION	5.1.5	The reduction of pollution.

5.2 General Policies

SCHEDULE B:	
GREENWAY	
SYSTEM	

5.2.1 The following environmental quality designations shall be identified on Schedule B: Greenway System:

(a) Natural Heritage;

- (b) Waterfront Recreation;
- (c) Community and Regional Parks;
- (d) Waterway Corridors;
- (e) Recreationways; and
- (f) Linkages.

SCHEDULE C: DEVELOPMENT CONSTRAINT AREAS 5.2.2 The following environmental management designations shall be identified on Schedule C: Development Constraint Areas:

- (a) Natural Heritage;
- (b) Environmental Policy Area A and B;
- (c) Candidate Natural Heritage Sites;
- (d) Aggregate Resource Sites;
- (e) Mineral Mining Sites;
- (f) Airport Operating Area;
- (g) Floodplain Areas;
- (h) Shoreline and Floodprone Areas;
- (i) Known or Suspected Waste Disposal Sites;
- (j) Pollution Control Plants; and
- (k) Rail Yards. (amended by OMB order 1485 11/01/2002)

5.3 Environmental Quality

5.3.1 Objectives

ECOSYSTEM HEALTH	5.3.1.1	To provide a means to maintain and improve ecosystem functions and processes within an urban area.
NATURAL RESOURCES	5.3.1.2	To protect, conserve and improve the quality and quantity of Windsor's natural features and functions.

PROTECT BIOLOGICAL DIVERSITY	5.3.1.3	To protect biological diversity and the habitats of endangered, threatened and vulnerable species.
INCREASE NATURALIZED HABITAT	5.3.1.4	To increase the quantity and quality of naturalized habitat.
INTEGRATE CONSIDERATIONS	5.3.1.5	To integrate environmental, social, and economic considerations in growth and development matters.
PROTECT BENEFITS	5.3.1.6	To protect the visual, aesthetic and recreational benefits of the natural environment.
LINKAGES	5.3.1.7	To establish recreational and natural linkages between open space areas and natural areas.
URBAN FORESTRY	5.3.1.8	To guide urban forestry within Windsor.
WATER QUALITY	5.3.1.9	To improve the water quality of watercourses within Windsor.
WATERSHED PLANNING	5.3.1.10	To integrate water related resource management strategies and land use planning processes through watershed planning.
AIR QUALITY	5.3.1.11	To improve atmospheric air quality through the planning process.

5.3.2 Greenway System Policies

The Greenway System is based on the belief that the quality of life within Windsor will be enhanced by the establishment of a linked and continuous network of "green" land uses. This planned network of natural environment and recreational elements will provide a means to establish Windsor as a healthy and liveable city.

GREENWAY SYSTEM DEFINITION	5.3.2.1	For the purpose of this Plan, the Greenway System is a planned network of natural environment and recreational elements.
GREENWAY SYSTEM COMPONENTS	5.3.2.2	The specific components of the Greenway System designated on Schedule B: Greenway System consist of the following:

(a) lands designated as Natural Heritage on Schedule D: Land Use and described in the Land Use chapter of this Plan;

- (b) lands designated as Waterfront Recreation on Schedule D: Land Use and Schedule E: City Centre Planning District and described in the Land Use chapter of this Plan;
- (c) Community and Regional Parks as described in the Land Use chapter of this Plan;
- (d) Waterway Corridors which consist of the Detroit River, Lake St. Clair, Little River, Turkey Creek (Grand Marais Drain) and their tributaries;
- (e) Recreationways as described in the Transportation chapter of this Plan; and
- (f) Linkages which are potential natural and/or recreational corridors between lands designated as Community and Regional Parks, Natural Heritage, Waterfront Recreation and/or Waterway Corridors.

NEIGHBOURHOOD 5.3.2.3 PARKS

Notwithstanding policy 5.3.2.2, Neighbourhood Parks as described in section 6.7.3 of this Plan and Environmental Policy Areas as described in section 5.3.4 of this Plan may be considered to be a part of the Greenway System and be identified in a secondary plan or guideline plan.

EXPAND 5.3.2.4 GREENWAY SYSTEM

Council shall encourage the expansion and refinement of the Greenway System within Windsor as opportunities arise through the planning approval process or through other measures as may be appropriate.

REGIONAL 5.3.2.5 EXTENSIONS

Council, in cooperation with the Town of LaSalle, Town of Tecumseh, the Essex Region Conservation Authority and other organizations, shall encourage regional extensions of the Greenway System as opportunities arise through the planning approval process or through other measures as may be appropriate.

DETERMINING 5.3.2.6 EXACT BOUNDARIES

Council shall determine the exact physical boundaries of the Greenway System within Windsor on an area or site specific basis as a part of the planning approval process having regard to the following:

- (a) natural features and functions on the site or in the area;
- (b) existing and/or proposed land use designations and zoning;

- (c) the current use or activity on the property;
- (d) any boundaries between the existing Greenway System and a new site or area;
- (e) property ownership;
- (f) the location of future Linkages and/or Recreationways; and
- (g) any relevant studies or reports.

INCORPORATE 5.3.2.7 INTO OTHER PLANNING DOCUMENTS

The exact physical boundaries of the Greenway System within Windsor will be incorporated into other planning documents such as secondary plans, guideline plans and plans of subdivision, where appropriate.

PRIVATE OWNERSHIP

5.3.2.8

The designation of the Greenway System does not infer a commitment to purchase areas that are not currently under public ownership, nor is it implied that such areas under private ownership are available for public use.

PROTECTION 5.3.2.9 METHODS

Lands identified as part of the Greenway System may be protected by the Municipality through:

- (a) conveyance or dedication as a part of the planning process;
- (b) purchase of all or part of the identified area;
- (c) partnership arrangements with the Essex Region Conservation Authority and other organizations and groups;
- (d) the conservation of all or part of the identified area as a condition of planning approval;
- the arrangement of leases with private property owners to provide for the protection and appropriate management of all or part of the identified area;
- (f) an exchange of lands;
- (g) donations, gifts, or bequests from individuals or corporations;
- (h) conservation easements:

		(i) the use of land stewardships agreements and techniques (refer to the Procedures chapter of this Plan); and
		(j) other measures as may be appropriate.
PUBLIC ACCESS	5.3.2.10	Public access to elements of the Greenway System will be established by the Municipality, where appropriate.
RECREATIONWAYS	5.3.2.11	The Recreationways designated on Schedule B: Greenway System will provide for recreational movement within the Greenway System and are further described in section 7.2.3 of this Plan.
LINKAGES	5.3.2.12	Council will endeavour to establish Linkages between the areas designated as Waterway Corridors, Natural Heritage, Community and Regional Parks and Waterfront Recreation on Schedule B: Greenway System.
WATERWAY CORRIDORS	5.3.2.13	Council will encourage the enhancement of Waterway Corridors by:
		(a) using the other provisions of this Plan related to water quality, floodplain and floodprone areas and stormwater management;
		(b) retaining and enhancing vegetation adjacent to a watercourse;
		(c) ensuring the protection of watercourses during construction in accordance with federal and provincial legislation, polices and guidelines; and
		(d) other methods as may be appropriate.
NATURALIZE	5.3.2.14	Council shall encourage the naturalization of those components of the Greenway System that are deficient in existing natural cover.
EER REQUIREMENT	5.3.2.15	Council may require an Environmental Evaluation Report (EER), or other suitable study, for lands proposed for development or infrastructure undertakings within or adjacent to the Greenway System (refer to the Procedures chapter of this Plan).

PORT OF WINDSOR

5.3.2.16

Council will have regard to the existing and future operations of the Port of Windsor when considering the development and/or expansion of the Greenway System adjacent to the Detroit River and Lake St. Clair.

5.3.3 Natural Heritage Policies

Lands identified as Natural Heritage provide for the protection and conservation of Windsor's most environmentally significant and sensitive natural areas, including provincially designated areas of natural and scientific interest (ANSI) and wetlands.

NATURAL HERITAGE DESIGNATION	5.3.3.1	Lands designated as Natural Heritage appear on Schedules B: Greenway System, C: Development Constraints and D: Land Use.
REFER TO LAND USE CHAPTER	5.3.3.2	The policies which establish the permitted uses, ancillary uses, evaluation criteria, protection and conservation of lands designated as Natural Heritage are further described in the Land Use Chapter of this Plan.

5.3.4 Environmental Policy Area Policies

ENVIRONMENTAL
POLICY AREA
DEFINITION

5.3.4.1

For the purpose of this Plan, an Environmental Policy Area (EPA) is an environmentally significant and/or sensitive natural area which may be able to tolerate appropriately designed development. Environmental Policy Areas are further classified as follows:

- (a) Environmental Policy Area A may be partially developed provided that the development conserves the significant natural features and/or functions; and
- (b) Environmental Policy Area B may be developed provided the significant natural features are incorporated as a part of the development.

EPA A LAND USE DESIGNATION

5.3.4.2

Council shall evaluate development proposals within the developable portion of an Environmental Policy Area A according to the other provisions of this chapter and the land use designation(s) of the site on Schedule D: Land Use.

EPA B LAND USE DESIGNATION

5.3.4.3 Council shall evaluate development proposals within an Environmental Policy Area B according to the other protein charter and the land was designation(s) of the site or

Environmental Policy Area B according to the other provisions of this chapter and the land use designation(s) of the site on Schedule D: Land Use.

EVALUATION CRITERIA

5.3.4.4

Council shall designate an Environmental Policy Area A or B according to an assessment of the land's environmental significance and sensitivity based on the evaluation of the following criteria:

- (a) the biophysical characteristics of the area serve one or more ecological functions such as providing a migratory stop-over, linking other natural areas and serving a hydrological function;
- (b) the area exhibits a high degree of biological diversity at the species, community or structural level;
- (c) the area contains natural communities which are poorly represented from a local perspective, or are rare from a provincial or national perspective;
- (d) the area provided habitat for species which are vulnerable, threatened or endangered from a national, provincial or regional perspective;
- (e) the area is of sufficient size (at least one hectare) to enable biological communities and species to sustain themselves in a healthy state;
- (f) the area is representative of at least one community and/or habitat of the natural landscape of Windsor that is not adequately represented in existing protected areas;
- (g) the area is in a relatively natural condition and exhibits low levels of disturbance from intrusions such as infrastructure corridors, development and exotic species;
- (h) the area contains earth science features which are poorly represented from a local perspective, or are rare from a provincial or national perspective; and,
- (i) the area is of visual, aesthetic or recreational importance to the city, its planning districts, neighbourhoods and streetscapes.

NATURAL HERITAGE	5.3.4.5	Council may amend this Plan to redesignate an Environmental Policy Area A or B to Natural Heritage in accordance with the provisions of section 6.8 of this Plan.
DEVELOPMENT PROPOSALS WITHIN AN EPA A OR B	5.3.4.6	Proponents of development or infrastructure undertakings within an Environmental Policy Area A or B shall be required to complete an Environmental Evaluation Report or other suitable study to the satisfaction of the Municipality in accordance with the Procedures chapter of this Plan.
ADJACENT LANDS	5.3.4.7	The Municipality may require proponents of development on lands adjacent to an Environmental Policy Area A or B to complete an Environmental Evaluation Report or other suitable study to the satisfaction of the Municipality in accordance with the Procedures chapter of this Plan. The identification of adjacent lands subject to this requirement will be determined by the Municipality on a site-specific basis, with regard to provincial legislation, policies and appropriate guidelines, and in accordance with policy 10.2.5.4 of this Plan.
INCREASE AWARENESS	5.3.4.8	Council, in cooperation with other public agencies, will make the public aware of the value and significance of lands designated as Environmental Policy Areas and Natural Heritage through educational programmes, outreach activities and stewardship.

5.3.5 Candidate Natural Heritage Sites Policies

CNHS DEFINITION	5.3.5.1	For the purpose of this Plan, a Candidate Natural Heritage Site is land characterized by potentially significant and/or sensitive environmental features or functions.
REDESIGNATION	5.3.5.2	Council may amend this Plan to redesignate a Candidate Natural Heritage Site to an Environmental Policy Area A or B in accordance with section 5.3.4 of this Plan and/or Natural Heritage in accordance with section 6.8 of this Plan.
EER REQUIRED WITHIN OR ADJACENT	5.3.5.3	Proponents of development or infrastructure undertakings within or adjacent to a Candidate Natural Heritage Site may be required by the Municipality to successfully complete an Environmental Evaluation Report or other suitable study to determine:

(a) the environmental significance and sensitivity of the site;

- (b) if, where and under what conditions development may be permitted; and
- (c) other issues, as appropriate, in accordance with the Procedures chapter of this Plan.

		1
FRAGMENTED OWNERSHIP AREAS	5.3.5.4	Where there is fragmented ownership within a Candidate Natural Heritage Site that inhibits the coordinated study of the site, the Municipality may undertake an Environmental Evaluation Report or other suitable study in accordance with the Procedures chapter of this Plan to determine the factors provided for in policy 5.3.5.3.
Cost Recovery	5.3.5.5	Council may assess and recover costs for the Environmental Evaluation Report or other suitable study undertaken in accordance with policy 5.3.5.4 as development occurs.
UNAFFECTED LANDS	5.3.5.6	The requirements of policy 5.3.5.3 shall not apply to lands used in accordance with the Zoning By-law.
New Sites	5.3.5.7	Council may designate a Candidate Natural Heritage Site following the completion of a watershed/subwatershed plan, or other suitable study (refer to the Procedures chapter of this Plan).

5.3.6 Urban Forestry Policies

PROTECT TREES	5.3.6.1	Council will recognize and encourage the protection of trees as essential to the health and welfare of the community and the natural environment.
URBAN FOREST	5.3.6.2	Council will recognize that a diversity of trees contribute to the distinctive character of neighbourhoods and promotes the planting of species which further enhance this character.
DIVERSITY OF TREES	5.3.6.3	Council will encourage the planting of trees on public and private property, in particular those species most tolerant of Windsor's climatic conditions and those less susceptible to disease.
NATIVE TREES	5.3.6.4	Council will encourage the planting of native tree species associated with the Carolinian forest region.

TREED CORRIDORS	5.3.6.5	Council will encourage the planting of trees along watercourses and Linkages to reduce flooding and erosion and to improve natural habitat.
CREATE & ENHANCE	5.3.6.6	The Municipality will create, maintain and enhance treed areas along infrastructure rights-of-way and in public open spaces.
Conservation PLAN	5.3.6.7	Council may require proponents of development and infrastructure undertakings to submit an inventory of trees on site and prepare and implement a tree conservation and replacement plan.
PREVENT DAMAGE	5.3.6.8	The Municipality will endeavour to protect trees on public and private lands from damage by mechanical equipment during construction and maintenance activities by developing guidelines and standards to protect trees from damage associated with construction and maintenance operations.
TREE Inventory	5.3.6.9	The Municipality will maintain a city-wide inventory of trees along public rights-of-way as the basis to monitor the effectiveness of urban forestry policies and practices.
TREE RELOCATION	5.3.6.10	The Municipality will encourage the relocation and transplanting of trees to municipal lands in situations where trees would have been lost due to development activities.
STREET TREES	5.3.6.11	The Municipality will maintain the character of its mature tree- lined streets by replacing any tree within the public right-of-way requiring removal with a new tree planted as close as practical to the location of the original.
TREE BY-LAW	5.3.6.12	Council will consider the adoption of a by-law to foster the conservation of trees and/or woodlots.
	5.3.7 Atmos	spheric Air Quality Policies
PUBLIC INVOLVEMENT	5.3.7.1	Council, in cooperation with other agencies, will actively encourage public participation, information and education to foster awareness of atmospheric change and of local initiatives to reduce atmospheric air pollution.
REDUCE AIR POLLUTION	5.3.7.2	Council will contribute to the reduction of air pollution by using the following land use planning approaches:

- (a) increasing opportunities for non-automotive transportation modes including walking, cycling and public transportation in accordance with the Infrastructure chapter of this Plan;
- (b) regulating development which has the potential to increase atmospheric pollution in accordance with the Land Use chapter of this Plan;
- (c) improving energy conservation in accordance with the Urban Design chapter of this Plan;
- (d) locating compatible residential, commercial and employment uses in a manner that reduces distance and vehicle trips as outlined in the Land Use chapter of this Plan; and
- (e) protecting and improving trees and natural areas.

5.3.8 Water Quality Policies

The following policies should be read in conjunction with section 7.3.4 of this Plan.

HABITAT ENHANCEMENT	5.3.8.1	Council, in cooperation with owners of riparian lands, private organizations and public agencies, will support the strategic placement of habitat enhancement elements in and along watercourses to provide for the spawning, feeding, and nesting of aquatic related species.
IMPROVE WATERCOURSES	5.3.8.2	Council will work with property owners, public agencies, and other interested groups to maintain watercourses free from litter, refuse, and other debris in order to augment the flow and flushing ability of waterways and to improve aquatic habitat.
OTHER AGENCIES	5.3.8.3	Council will support the actions undertaken by other public agencies and organizations to remediate polluted surface and ground water.
Constructed Wetlands	5.3.8.4	Council, in cooperation with property owners, local organizations and public agencies, will support the creation of constructed wetlands, where appropriate.
WATER QUALITY	5.3.8.5	Council will support efforts to improve the water quality of the Detroit River, Lake St. Clair, Turkey Creek and Little River.

WATERSHED PLAN

5.3.8.6

Council may authorize the preparation and implementation of a watershed or subwatershed plan in accordance with the Procedures Chapter of this Plan to assist in improving water quality.

5.3.9 Source Water Protection

(added by OPA #190 – 02/10/25- B/L23-2025)

Source water protection policies have been adopted under the Essex Region Source Protection Plan (2015; as amended); which implements the Clean Water Act, 2006 directive to ensure that source drinking water is protected for existing and future sources of municipal drinking water. Source Water Protection Areas are identified by the approved Essex Region Source Protection Plan and mapped on Schedule K: Source Water Protection Areas of this plan.

Source Water Protection Areas consist of vulnerable areas identified as 'Intake Protection Zones (IPZs), Highly Vulnerable Aquifers (HVAs) and Significant Groundwater Recharge Areas (SGRAs). The City of Windsor has no HVAs. These areas are significant in that they contribute or are in close proximity to municipal drinking water intakes which are vulnerable to contamination and incompatible land uses.

All municipal decisions under the Planning Act or Condominium Act within identified source water protection areas must conform to the applicable policies in an approved Source Protection Plan.

OBJECTIVES

5.3.9.1

To protect the quality and supply of existing and future drinking water sources.

The City will implement Source Protection Plans under the provisions of the *Clean Water Act*, and this Plan will be amended, as required, to conform with relevant policies set out in the Source Protection Plan.

GENERAL POLICIES 5.3.9.2

Within areas identified in an approved Source Protection Plan any use or activity that is, or would be, a significant drinking water threat may be managed or otherwise restricted by Source Protection Plan Policies.

Intake Protection Zones (IPZs) and Events Based Areas 5.3.9.3

Intake Protection Zones are areas of land and water, where runoff from streams or drainage systems, in conjunction with currents in lakes and rivers, could directly impact on the source water at the municipal drinking water intakes. Intake Protection Zones include Event Based Areas (EBA) where modeling has demonstrated that a spill from a specific activity can or could cause deterioration to the raw water quality at the drinking water system.

GROUNDWATER 5.3.9.4

The City of Windsor recognizes a relationship between groundwater in terms of recharge and discharge functions.

Groundwater and surface water is not confined to municipal boundaries. As such, the City will collaborate with local

municipalities, and the relevant Source Protection Authorities as required to ensure the effective management of water resources.

Source Water 5.3.9.5
PROTECTION
AUTHORITY

The City of Windsor shall collaborate with the Source Protection Authority in the monitoring and implementation of the Source Protection Plan.

Where required by policies in an approved Source Protection Plan, all applicable development applications or proposed land use changes within an Intake Protection Zone area shall be screened in keeping with the Source water protection plan policies and/or the Written Direction when provided by the Risk Management Official to satisfy the Source water protection plan policies.

Source Water 5.3.9.6 IMPACT ASSESSMENTS

The City of Windsor may require additional assessments and/or risk management plans to be prepared by a qualified professional as part of any development or site alteration application that is, or would be, a significant drinking water threat to identify, assess and mitigate any potential impacts within the Source Water Protection Areas.

5.4 Environmental Management

5.4.1 Objectives

SUSTAINABLE RESOURCES 5.4.1.1 To ensure the long-term sustainability of environmental resources.

AGGREGATE & MINING SITES	5.4.1.2	To recognize the importance of aggregate resource operations and mineral mining industries to Windsor's economy.
MINIMIZE ENVIRONMENTAL IMPACTS	5.4.1.3	To minimize any adverse environmental impacts caused by the development and operation of aggregate resource, wayside pits and quarries, portable asphalt plants and mineral mining sites.
REHABILITATION	5.4.1.4	To rehabilitate and restore abandoned aggregate resource extraction, mineral mining and contaminated sites to land uses compatible with the surrounding area.
Noise Attenuation	5.4.1.5	To protect the residents of Windsor from unacceptable levels of noise which may negatively impact their health and well being.
FLOODPLAINS & SHORELINES	5.4.1.6	To protect human life and property located within and adjacent to floodplains and shorelines.
POLLUTION CONTROL PLANTS	5.4.1.7	To ensure that development is compatible with the operation of pollution control plants.

5.4.2 Aggregate Resource Sites Policies

AGGREGATE RESOURCE SITES DEFINITION	5.4.2.1	For the purpose of this Plan, Aggregate Resource Sites are areas where aggregate extraction and/or operations are taking place, or where there is a high potential for aggregate extraction to occur due to the quantity and quality of the mineral deposits.
LAND USE DESIGNATION	5.4.2.2	Council shall permit existing Aggregate Resource Sites as an interim land use. As such, Aggregate Resource Sites are designated on Schedule D: Land Use for their ultimate intended land use.
INCOMPATIBLE LAND USES	5.4.2.3	Council shall protect Aggregate Resource Sites from incompatible adjacent land uses except where it can be shown that:

- (a) resource extraction and/or operations would not be feasible;
- (b) the proposed use or development serves a greater long term interest to the public than does aggregate extraction and/or operations;
- (c) the proposed use or development would not significantly preclude or hinder future extraction and/or operations; and

(d)	the proposed use or development would not be in keeping
	with provincial legislation, policy or appropriate
	guidelines.

SEPARATION DISTANCES

5.4.2.4

Council shall require sensitive land uses to be separated and/or buffered from Aggregate Resource Sites in accordance with provincial legislation, policies and appropriate guidelines.

NEW SITES

5.4.2.5

Council may permit new Aggregate Resource Sites in any land use designation on Schedule D: Land Use without requiring an amendment to this Plan provided:

- (a) the use is in keeping with provincial legislation, policies and appropriate guidelines; and
- (b) the proponent mitigates potential negative impacts of the extraction and/or operation on surrounding and/or sensitive land uses.

REHABILITATION !

5.4.2.6

Council shall require Aggregate Resource Sites be rehabilitated and restored in keeping with the land use designation(s) identified on Schedule D: Land Use.

5.4.3 Mineral Mining Sites Policies

MINERAL MINING SITES DEFINITION

5.4.3.1

For the purpose of this Plan, Mineral Mining Sites are mining operations and associated facilities, or past producing mines with remaining mineral potential that have not been permanently rehabilitated and restored to another land use.

INCOMPATIBLE LAND USES

5.4.3.2

Council shall protect Mineral Mining Sites from incompatible adjacent land uses except where it can be shown that:

- (a) mineral mining would not be feasible;
- (b) the proposed use or development serves a greater long term interest to the public than does mineral mining; and
- (c) the proposed use or development would not significantly preclude or hinder future mining.

SEPARATION DISTANCES	5.4.3.3	Council shall require sensitive land uses to be separated and/or buffered from Mineral Mining Sites in accordance with provincial legislation, policies and appropriate guidelines.
REHABILITATION	5.4.3.4	Council shall require Mineral Mining Sites to be rehabilitated after mining and related activities have ceased in accordance with relevant provincial legislation, policies and appropriate guidelines.
MINING WELLS	5.4.3.5	Upon cessation of production from mining wells, the mining wells and the associated facilities shall be plugged and rehabilitated to allow for the development of the uses designated on Schedule D: Land Use of this Plan.
SALT SOLUTION MINING	5.4.3.6	Council shall require that proponents of development within or immediately adjacent to the Mineral Mining Area designated on Schedule C: Development Constraint Areas where there is known present or past underground salt or salt solution mining activity to successfully complete a geo-technical study prepared by a qualified professional to confirm that the site is suitable for the proposed development.

5.4.4 Wayside Pits and Quarries and Portable Asphalt Plants Policies

DEFINITION	5.4.4.1	Wayside Pits and Quarries and Portable Asphalt Plants shall be defined in accordance with provincial policy.	
NEW PITS, QUARRIES & PORTABLE ASPHALT PLANTS	5.4.4.2	Asphal	I may permit Wayside Pits and Quarries and Portable t Plants in any land use designation on Schedule D: Land thout requiring an amendment to this Plan provided:
		(a)	the use is in keeping with provincial legislation, policies and appropriate guidelines; and
		(b)	the proponent mitigates potential negative impacts of the extraction and/or operation on surrounding and/or sensitive land uses.

5.4.5 Noise and Vibration Policies

REGARD FOR 5.4.5.1 Noise & VIBRATION Council shall require the proponent of development in proximity to existing or proposed sources of noise and vibration, or the proponent of development that may be a source of noise or vibration, to evaluate the potential negative impacts of such noise and vibration on the proposed future land use. In determining the exact distances for the application of this policy, the Municipality shall have regard to provincial legislation, policies and appropriate guidelines.

(Amended by OPA 43 – 06/13/2006 – OMB Order 1695)

REQUIRE STUDY 5.4.5.2

If a proposed development is expected to be subject to noise or vibration, or to cause noise or vibration, the proponent shall be required to complete a noise and/or vibration study to the satisfaction of the Municipality to support the feasibility of the proposal in accordance with the Procedures chapter of this Plan. (Amended by OPA 43 – 06/13/2006 – OMB Order 1695)

ABATEMENT 5.4.5.3 MEASURES

Abatement measures may include one or more of the following, depending on the physical characteristics of the specific location and the source of the noise and/or vibration:

- (a) increased setbacks from the noise or vibration source;
- (b) sound barriers such as landscaped berms, walls, buildings, and fences;
- (c) building design, including specific attention to height, massing, internal layout and fenestration;
- (d) building construction, including materials for acoustical and/or vibration insulation, glaze or ventilation;
- (e) registered notice on title of possible excessive noise and/or vibration, and:
- (f) any other appropriate attenuation measures.

IMPLEMENTATION 5.4.5.4

Council shall require that appropriate noise and/or vibration abatement measures be implemented by the proponent as a condition of development approval.

AIRPORT 5.4.5.5
OPERATING
AREA
DEFINITION

For the purpose of this Plan, the Airport Operating Area includes those lands within the Noise Exposure Forecast and Noise Exposure Projection contours approved by the federal government and extended to the nearest right-of-way.

REFER TO TRANSPORTATION CHAPTER	5.4.5.6	Council shall evaluate a proposed development within the Airport Operating Area designated on Schedule C: Development Constraint Areas in accordance with the Transportation chapter of this Plan.
RAIL YARD DEFINITION	5.4.5.7	For the purpose of this Plan, Rail Yard includes the lands associated with a designated rail yard. (amended by OMB order 1485 – 11/01/2002)
REFER TO TRANSPORTATION CHAPTER	5.4.5.8	Council shall evaluate a proposed development adjacent to a Rail Yard designated on Schedule C: Development Constraints, in accordance with the Transportation chapter of this Plan. (amended by OMB order $1485 - 11/01/2002$)

5.4.6 Floodplain Areas Policies

The following policies apply to lands within the Floodplain Areas designated on Schedule C: Development Constraint Areas and should be read in conjunction with the Infrastructure chapter of this Plan. Floodplains contain both a floodway (where flood depths and velocities are the greatest) and a flood fringe.

works and facilities related to flood and erosion control.

FLOODPLAIN BOUNDARIES	5.4.6.1	The Floodplain Areas subject to the following policies were determined in consultation with the Essex Region Conservation Authority and follow the general boundaries shown on Schedule C: Development Constraint Areas.
FLOODWAY	5.4.6.2	Council will prohibit new development within the floodway of inland watercourses. The Municipality, in consultation with the Essex Region Conservation Authority, will identify the floodway on a site-specific basis and may include it in secondary plans and/or the zoning by-law as appropriate.
DEVELOPMENT WITHIN FLOODPLAIN	5.4.6.3	Council will prohibit buildings or structures in Floodplain Areas except: (a) in accordance with policies set out below; and

(b)

DEVELOPMENT CRITERIA	5.4.6.4	Council may permit development in a floodplain in recognized flood fringe areas outside of the floodway, including behind flood control dykes (so as to address the matter of the potential failure of protective works) provided:	
		(a) sufficient information accompanies the application to show that the proposed development and its occupants will be protected from the effects of a Regulatory Flood;	
		(b) the potential upstream and downstream impacts of the development proposal will not significantly affect the hydrology or hydraulics of the floodplain; and	
		(c) that adequate floodproofing measures, determined in consultation with the Essex Region Conservation Authority, are incorporated in the development.	
MINOR ADDITIONS	5.4.6.5	Council may permit renovations, minor additions and alterations to existing buildings or structures in the floodplain provided:	
		(a) no adverse affects on the hydraulic characteristics of flood flows are created; and	
		(b) such renovations, additions or alterations are generally flood proofed to the Regulatory Flood elevation with reductions as determined appropriate and feasible.	
REPLACEMENT OF STRUCTURES	5.4.6.6	Council will require that structures which are replaced due to fire or unusual loss to be flood proofed to the Regulatory Flood elevation as appropriate.	
MUNICIPAL WORKS	5.4.6.7	The City will consult with the Essex Region Conservation Authority to determine the necessary design requirements to mitigate against any adverse impacts of flooding prior to undertaking municipal works on or adjacent to the floodplain.	
HAZARDOUS SUBSTANCES	5.4.6.8	Council will not permit development and/or uses primarily associated with substances of a chemical, hazardous or toxic nature, which would pose a threat to public safety if damaged as a result of flooding or the failure of flood proofing measures, in the floodplain.	
INSTITUTIONAL USES	5.4.6.9	Council will not permit the development of Institutional uses in the floodplain unless adequate flood proofing measures are implemented to ensure public safety in the event of flooding.	

EMERGENCY SERVICES

5.4.6.10 Council will not permit emergency services such as police, fire or ambulance stations in a floodplain unless adequate flood proofing measures are implemented to ensure that the delivery of such services would occur in the event of flooding.

5.4.7 Shoreline and Floodprone Areas Policies

The following policies apply to lands within the Lake St. Clair and Detroit River Shoreline and Floodprone Areas designated on Schedule C: Development Constraint Areas and should be read in conjunction with the Infrastructure chapter of this Plan.

GENERAL BOUNDARIES

5.4.7.1

The Shoreline and Floodprone Areas subject to the following policies were determined in consultation with the Essex Region Conservation Authority and follow the general boundaries shown on Schedule C: Development Constraint Areas.

DEVELOPMENT REQUIREMENTS

5.4.7.2 Council may permit development in a floodprone area provided:

- (a) the effects of the proposal on wave and current patterns, water flows and levels, and water quality are considered by the Municipality, in consultation with the Essex Region Conservation Authority and/or federal or provincial governments, to be acceptable;
- (b) that adequate floodproofing measures, determined in consultation with the Essex Region Conservation Authority, are incorporated in the development;
- (c) that the development be set back an appropriate distance from the shoreline. The setbacks for development will be determined in consultation with the Essex Region Conservation Authority on a site specific basis and may be incorporated into secondary plans and/or the zoning by-law as appropriate. When determining such setbacks, consideration will be given to:
 - (i) the type of shoreline;
 - (ii) bank stability;
 - (iii) angle of bank slope;
 - (iv) degree of erosion protection, and;

(v) other relevant aspects.

ALTERATIONS OR OTHER WORKS 5.4.7.3

Any alterations and other related works within Shoreline and Floodprone Areas will be evaluated based on the following:

- (a) the potential negative impact of the proposal on the natural features and functions of the area, including fish habitat;
- (b) any proposed measures to mitigate potential negative environmental impacts;
- (c) the potential negative impacts upon archaeological resources in accordance with the Heritage chapter of this Plan;
- (d) the effects of the proposal on wave and current patterns, water flows and levels, and water quality are considered by the Municipality, in consultation with the Essex Region Conservation Authority and/or federal or provincial governments, to be acceptable;
- (e) the extent to which the proposal provides for maintaining the desirable natural features and functions, and;
- (f) how the site layout and project design relate to the adjacent land uses.

5.4.8 Potentially Contaminated Sites Policies

POTENTIALLY
CONTAMINATED
SITES
DEFINITION

5.4.8.1

For the purpose of this Plan, Potentially Contaminated Sites include lands, buildings and/or structures where it is reasonable to suspect that substances, either individually or collectively, are present which may pose a danger to public health, safety and/or the environment.

(Deleted by OPA#77, March 28, 2011, By-law 66-2011)

DETERMINING
NEED FOR A
STUDY

5.4.8.2

Council shall not approve development applications on a Potentially Contaminated Site until the site has been assessed and/or remediated in a manner consistent with federal and provincial legislation, policies and appropriate guidelines and the policies of this Plan. Accordingly, at the time of submission, the proponent of development of a Potentially Contaminated Site shall be required to demonstrate that development is feasible having regard to the other provisions of this Plan and the following: (Deleted by OPA#77, March 28, 2011, By-law 66-2011)

- (a) when the planning application involves the division of landfor residential purposes or lands associated with a former industrial or commercial use the Municipality shall requirethe proponent to follow the environmental site assessment process outlined in policy 5.4.8.3; and
- (b) when the planning application involves anything other than that outlined in (a) above, the Municipality may require the proponent to follow the environmental site assessment process outlined in policy 5.4.8.3 where there is a reasonable expectation that the site may be contaminated.

ENVIRONMENTAL SITE ASSESSMENT 5.4.8.3

When an environmental site assessment is required by this Plan, it shall be prepared by a qualified professional having regard to federal and provincial legislation, policies and appropriate guidelines. The process of preparing an environmental site assessment may involve as many as four phases, which are summarized as follows:

(Deleted by OPA#77, March 28, 2011, By-law 66-2011)

- (a) a Phase I site assessment where the proponent is required to gather information to identify actual or potential contamination related to current or historical land use of the site;
- (b) a Phase II sampling and analysis where the proponent is required to confirm and delineate the presence or absence of contamination found or suspected from the Phase 1 site assessment;
- (c) a Phase III site clean up where the proponent is required to:
 - (i) stage 1 develop a Remediation Action Plan; and
 - (ii) stage 2 implement the Remedial Action Plan to clean up or remediate the contamination found on the property to federal and/or provincial policies and guidelines; and
- (d) a Phase IV verification and documentation of the clean up.

REVIEW PROCEDURE When an environmental site assessment is completed, it shall be reviewed as follows:

(Deleted by OPA#77, March 28, 2011, By-law 66-2011)

5.4.8.4

- (a) if a Phase I environmental site assessment does not find or suspect contamination, the qualified professional who prepared the report shall be required to sign and submit a statement to the Municipality confirming that no further environmental site assessment is required prior to the scheduling of a Public Meeting under the Planning Act; or
- (b) if a Phase I environmental site assessment finds or suspectscontamination the proponent shall be required to prepare a Phase II environmental site assessment. If the Phase IIenvironmental site assessment concludes that a Phase IIIenvironmental site assessment is not required, the qualifiedprofessional who prepared the report shall be required to:
 - (i) sign and submit a statement to the Municipality confirming that no further environmental site assessment is required; and
 - (ii) submit the environmental site assessment to the Municipality for review and, where appropriate, concurrence by an independent peer reviewer prior to the scheduling of a Public Meeting under the Planning Act; or
- if a Phase II environmental site assessment confirms the need for a Phase III environmental site assessment, the proponent shall be required to prepare a Phase III stage 1 Remedial Action Plan. The Phase III stage 1 Remedial Action Plan shall be prepared by a qualified professional and submitted for review by the Municipality and concurrence by an independent peer reviewer prior to the approval of the planning application; and
- (d) when a Phase III stage 2 environmental site assessment and Phase IV environmental site assessment are completed, the qualified professional who completed the environmental site assessment shall:
 - (i) sign and submit a statement to the Municipality confirming that the site is suitable for the proposed development; and

(ii) submit—all documentation covering implementation to the Municipality for review and concurrence by an independent peer reviewer prior to the issuance of the Building Permit.

PEER REVIEW 5.4.8.5

Where an independent peer review is required in accordance with policy 5.4.8.4, the proponent shall be required to pay for the review.

(Deleted by OPA#77, March 28, 2011, By-law 66-2011)

POTENTIALLY 5.4.8.1
CONTAMINATED
SITES
DEFINITION

For the purpose of this Plan, Potentially Contaminated Sites are sites where the environmental condition of the property or properties may have potential for adverse effects on human health, ecological health or the natural environment. In order to prevent these adverse effects, prior to permitting development on these properties, it is important to identify these properties and ensure that they are suitable or have been made suitable for the proposed land use(s) in accordance with provincial legislation, regulations and standards.

(Added by OPA#77, March 28, 2011, By-law 66-2011)

AVAILABLE 5.4.8.2 INFORMATION

While the identification of potentially contaminated sites is important in the planning application review process, the policies in this section should not be interpreted as a commitment on the part of the City to identify all contaminated sites. Rather, these policies should be regarded as an effort by the municipality to responsibly utilize available information in the planning application review process to help ensure that development takes place only on sites where the environmental conditions are suitable for the proposed use of the site.

(Added by OPA#77, March 28, 2011, By-law 66-2011)

Previous Land 5.4.8.3 Use

The City will require applicants to document previous uses of a property or properties that are subject of a planning application and/or properties that may adversely impact a property or properties that are subject of a planning application in order to assist in the determination of the potential for site contamination. (Added by OPA#77, March 28, 2011, By-law 66-2011)

RESIDENTIAL DEVELOPMENT

5.4.8.4

When a planning application involves the subdivision of land for residential purposes, the City may require an affidavit from a qualified person as defined by provincial legislation and regulations, confirming that a Phase 1 ESA has been completed or, where the subject land is identified as a potentially contaminated site, a Record of Site Condition has been filed in accordance with Ontario Regulation 153/04, as amended from time to time. (Added by OPA#77, March 28, 2011, By-law 66-2011)

MANDATORY FILING OF A RECORD OF SITE CONDITION

5.4.8.5

Where a change to a more sensitive property use (as defined in Ontario Regulation 153/04) is proposed, a mandatory filing of a Record of Site Condition is triggered in accordance with provincial legislation. The Record of Site Condition must be filed prior to the issuance of a building permit.

(Added by OPA#77, March 28, 2011, By-law 66-2011)

ADDITIONAL RECORD OF SITE CONDITION REQUIREMENTS

5.4.8.6

Where the City determines that there is a proposed change in land use to a more sensitive use on a property or properties that have been identified through the City's planning application review process as "potentially contaminated", the City will:

(Added by OPA#77, March 28, 2011, By-law 66-2011)

- (a) Require as a condition of planning approval, written verification to the satisfaction of the City from a qualified person as defined by provincial legislation and regulations, that the property or properties in question are suitable or have been made suitable for the proposed use in accordance with provincial legislation, regulations and standards, including where required by the City, or provincial legislation and/or regulations the:
 - (i) filing of a Record of Site Condition (RSC) signed by a qualified person in the Environmental Site Registry;
 - (ii) submission to the City of a Declaration signed by the qualified person acknowledging that the City may rely on the statements in the RSC; and,
 - (iii) submission to the City of written acknowledgement from the Ministry of Environment specifying the date that the RSC was filed in the Environmental Site Registry.

- (b) Establish conditions of planning approval for all planning applications to ensure receipt of satisfactory verification of suitable environmental site condition as per Policy 5.4.8.5; and,
- (c) Where applicable, utilize the holding provisions of the Planning Act to ensure that satisfactory verification of suitable environmental site condition is received as per Policy 5.4.8.6 (a).

REVIEW OF REPORTS

5.4.8.7

The City reserves the right to require as a condition of planning approval, submission and review of some or all of the environmental site assessment reports prepared in support of a Record of Site Condition.

(Added by OPA#77, March 28, 2011, By-law 66-2011)

PEER REVIEW 5.4.8.8

Where the City determines that an independent peer review of environmental site assessment reports is required, the proponent shall be required to pay for this peer review.

(Added by OPA#77, March 28, 2011, By-law 66-2011)

DEEDED LAND 5.4.8.9

Where the City is deeded land for public highways, road widenings, parks, stormwater management, easements, or for any other purpose, the City may require, as a condition of transfer, satisfactory verification of environmental site condition as per Policies 5.4.8.6 to 5.4.8.8.

(Added by OPA#77, March 28, 2011, By-law 66-2011)

5.4.9 Waste Disposal Sites Policies

KNOWN SITES

5.4.9.1

Schedule C: Development Constraint Areas identifies the location of all Known or Suspected Waste Disposal Sites within Windsor and adjacent municipalities within approximately 500 metres of the municipal boundary.

DISPOSAL SITE 5.4.9.2 REPORT

Council shall require proponents of development within 500 metres of a Known or Suspected Waste Disposal Site to prepare a report in accordance with provincial legislation, policy and appropriate guidelines to demonstrate the site is suitable for development.

RESTRICT DEVELOPMENT	5.4.9.3	Council shall prohibit residential, commercial, employment, mixed use and institutional development within 30 metres of a known waste disposal site and restrict development within 500 metres of a known or suspected waste disposal site if the site has any adverse environmental effects or poses a risk to public health and safety.
DEVELOPMENT APPROVALS	5.4.9.4	Where development is proposed on a waste disposal site, an official plan amendment, zoning by-law amendment, or building permit will not be adopted or granted until applicable approvals from the province are obtained.
	5.4.10 Pollu	ition Control Plant Policies
POLLUTION CONTROL PLANTS DEFINITION	The following chapter of this 5.4.10.1	g policies should be read in conjunction with the Infrastructure s Plan. For the purpose of this Plan, a Pollution Control Plant refers to sewage treatment facilities and associated uses.
SCHEDULE C: DEVELOPMENT CONSTRAINT AREAS	5.4.10.2	The Lou Romano Water Reclamation Plant and the Little River Pollution Control Plant and any known Pollution Control Plant within approximately 300 metres of the municipal boundary are identified on Schedule C: Development Constraint Areas.
PROHIBIT INCOMPATIBLE DEVELOPMENT	5.4.10.3	Council shall prohibit residential, commercial, mixed use and institutional development within 300 metres of a Pollution Control Plant. The 300 metre distance shall be measured from the property line of the Pollution Control Plant to the property line of the proposed development.
COMPATIBLE DEVELOPMENT	5.4.10.4	Council may permit Industrial or Open Space uses within 300 metres of a Pollution Control Plant:
		(a) in accordance with provincial legislation, policy, and appropriate guidelines; and
		(b) where the proponent demonstrates that the development is feasible given the operations of the plant, and in particular, the emission of odours.

Council may acquire land within 300 metres or more of the Lou

Romano Water Reclamation Plant or the Little River Pollution

Control Plant to facilitate the operation and/or expansion of the

facility.

5.4.10.5

ACQUISITION

BUFFER AREA

OF 300M