



APPENDIX A ACRONYMS AND DEFINITIONS USED IN SPECIES LISTS

Species Status

COSEWIC Committee On The Status Of Endangered Wildlife In Canada

The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) assesses the national status of wild species that are considered to be at risk in Canada.

Extinct (X) A wildlife species that no longer exists.

Extirpated (XT) A wildlife species no longer existing in the wild in Canada, but occurring elsewhere.

Endangered (E) A wildlife species facing imminent extirpation or extinction.

Threatened (T) A wildlife species likely to become endangered if limiting factors are not reversed.

Special Concern (SC) A wildlife species that may become a threatened or an endangered species because of a

combination of biological characteristics and identified threats.

Not at Risk (NAR) A wildlife species that has been evaluated and found to be not at risk of extinction given the

current circumstances.

Data Deficient (DD) A category that applies when the available information is insufficient (a) to resolve a wildlife

species' eligibility for assessment or (b) to permit an assessment of the wildlife species' risk of

extinction.

COSSARO/OMNR Committee On The Status Of Species At Risk In Ontario/Ontario Ministry Of Natural

Resources

The Committee on the Status of Species at Risk in Ontario (COSSARO)/Ontario Ministry of Natural Resources (OMNR)

assesses the provincial status of wild species that are considered to be at risk in Ontario.

Extinct (EXT) A species that no longer exists anywhere.

Extirpated (EXP) A species that no longer exists in the wild in Ontario but still occurs elsewhere.

Endangered (Regulated) A species facing imminent extinction or extirpation in Ontario which has be regulated under

(END–R) Ontario's *Endangered Species Act*.

Endangered (END) A species facing imminent extinction or extirpation in Ontario which is a candidate for regulation

under Ontario's Endangered Species Act.

Threatened (THR) A species that is at risk of becoming endangered in Ontario if limiting factors are not reversed.

Special Concern (SC) A species with characteristics that make it sensitive to human activities or natural events.

Not at Risk (NAR) A species that has been evaluated and found to be not at risk.

Data Deficient (DD) A species for which there is insufficient information for a provincial status recommendation.

Species Rank

GRANK Global Rank

Global ranks are assigned by a consensus of the network of Conservation Data Centres, scientific experts, and The Nature Conservatory to designate a rarity rank based on the range-wide status of a species, subspecies or variety.

The most important factors considered in assigning global ranks are the total number of known, extant sites world-wide, and the degree to which they are potentially or actively threatened with destruction. Other criteria include the number of known populations considered to be securely protected, the size of the various populations, and the ability of the taxon to persist at its known sites. The taxonomic distinctness of each taxon has also been considered. Hybrids, introduced species, and taxonomically dubious species, subspecies and varieties have not been included.

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G1	Extremely rare; usually 5 or fewer occurrences in the overall range or very few remaining individuals; or because of some factor(s) making it especially vulnerable to extinction.
G2	Very rare; usually between 5 and 20 occurrences in the overall range or with many individuals in fewer occurrences; or because of some factor(s) making it vulnerable to extinction.
G3	Rare to uncommon; usually between 20 and 100 occurrences; may have fewer occurrences, but with a large number of individuals in some populations; may be susceptible to large-scale disturbances.
G4	Common; usually more than 100 occurrences; usually not susceptible to immediate threats.
G5	Very common; demonstrably secure under present conditions.
GH	Historic, no records in the past 20 years.
GU	Status uncertain, often because of low search effort or cryptic nature of the species; more data needed.
GX	Globally extinct. No recent records despite specific searches.
?	Denotes inexact numeric rank (i.e. G4?).
G	A "G" (or "T") followed by a blank space means that the NHIC has not yet obtained the Global Rank from The Nature Conservancy.
G?	Unranked, or, if following a ranking, rank tentatively assigned (e.g. G3?).
Q	Denotes that the taxonomic status of the species, subspecies, or variety is questionable.
T	Denotes that the rank applies to a subspecies or variety.

SRANK Provincial Rank

Provincial (or Sub-national) ranks are used by the Ontario Ministry of Natural Resources Natural Heritage Information Centre (NHIC) to set protection priorities for rare species and natural communities. These ranks are not legal designations. Provincial ranks are assigned in a manner similar to that described for global ranks, but consider only those factors within the political boundaries of Ontario. By comparing the global and provincial ranks, the status, rarity, and the urgency of conservation needs can be ascertained. The NHIC evaluates provincial ranks on a continual basis and produces updated lists at least annually.

can be ascertained	d. The NHIC evaluates provincial ranks on a continual basis and produces updated lists at least annually.
S1	Critically imperilled in Ontario because of extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation.
S2	Imperilled in Ontario because of rarity due to very restricted range, very few populations (often 20 or fewer occurences) steep declines or other factors making it very vulnerable to extirpation.
S3	Vulnerable in Ontario due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.
S4	Apparently Secure—Uncommon but not rare; some cause for long-term concern due to declines or other factors.
S5	Secure—Common, widespread, and abundant in Ontario.
SX	Presumed Extirpated – Species or community is believed to be extirpated from Ontario.
SH	Possibly Extirpated – Species or community occurred historically in Ontario and there is some possibility that it may be rediscovered.
SNR	Unranked—Conservation status in Ontario not yet assessed
SU	Unrankable—Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
SNA	Not Applicable —A conservation status rank is not applicable because the species is not a suitable target for conservation activities.
S#S#	Range Rank —A numeric range rank (e.g., S2S3) is used to indicate any range of uncertainty about the status of the species or community. Ranges cannot skip more than one rank (e.g., SU is used rather than S1S4).

Species Regulated by Statute

Schedule 1

SARA Species at Risk Act

The Canada *Species at Risk Act* provides a framework for actions across Canada to ensure the survival of wildlife species and the protection of our natural heritage. It sets out how to decide which species are a priority for action and what to do to protect a species. It identifies ways governments, organizations and individuals can work together, and it establishes penalties for a failure to obey the law. Regulated species are listed in Schedules 1, 2 and 3 of the Act.

SARA (1)	Species that are currently covered under the Act.
Schedule 2 SARA (2)	Species that are endangered or threatened that have not been re-assessed by COSEWIC for inclusion on Schedule 1.
Schedule 3 SARA (3)	Species that are of special concern that have not yet been re-assessed by COSEWIC for inclusion on Schedule 1.

ESA Endangered Species Act

The Ontario *Endangered Species Act* provides for the conservation, protection, restoration and propagation of species of fauna and flora of the Province of Ontario that are threatened with extinction. Regulated species are listed in Ontario Regulation 338.

Schedule 1 ESA (1)	The species of fauna listed in Schedule 1 are declared to be threatened with extinction.
Schedule 2 ESA (2)	The species of flora listed in Schedule 2 are declared to be threatened with extinction.

FWCA Fish and Wildlife Conservation Act

The Ontario *Fish* and *Wildlife Conservation Act* enables the Ministry of Natural Resources to protect and manage a broad range of fish and wildlife species. Regulated fish and wildlife are listed as furbearing (F), game (G) or protected (P) in schedules to the Act.

FWCA (F)	Furbearing mammals (Schedule 1).
FWCA (G)	Game mammals (Schedule 2), birds (Schedule 3), reptiles (Schedule 4) and amphibians (Schedule 5)
FWCA (SP)	Specially protected mammals (Schedule 6), birds (raptors) (Schedule 7), birds (other than raptors) (Schedule 8), reptiles (Schedule 9), amphibians (Schedule 10) and invertebrates (Schedule 11).

MBCA Migratory Birds Convention Act

The Canada *Migratory Birds Convention Act* implements the Convention by protecting and conserving migratory birds — as populations and individual birds — and their nests. Article 1 identifies the migratory game birds, migratory insectivorous birds and other migratory nongame birds regulated by the Act.

FA Fisheries Act

The Canada *Fisheries Act* enables the Department of Fisheries and Oceans to protect and manage fish and fish habitat. Fish includes: parts of fish; shellfish, crustaceans, marine animals and any parts of shellfish, crustaceans or marine animals; and, the eggs, sperm, spawn, larvae, spat and juvenile stages of fish, shellfish, crustaceans and marine animals.

PA Planning Act

The Ontario *Planning Act* legislates land use planning and development within the province. The *Provincial Policy Statement* is issued under the authority of Section 3 of the *Planning Act*. It provides direction on matters of provincial interest related to land use planning and development, and promotes the provincial "policy-led" planning system. The PPS enables the Province to protect significant natural heritage features and areas including the significant habitat of endangered and threatened species.



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	Scientific Name	Common Name	COSEWIC	COSSARO	Grank	Srank	Local Status	Legal Status
	EQUISETACEAE	HORSETAIL FAMILY						
	Equisetum arvense	field horsetail			G5	S5	С	
	Equisetum hyemale ssp.	scouring-rush			G5T5	S5	С	
	Equisetum laevigatum	smooth scouring-rush			G5	S4	VU	
	Equisetum pratense	meadow horsetail			G5	S5	?	
	Equisetum variegatum ssp. variegatum	variegated horsetail			G5T	S5	R2	
	OPHIOGLOSSACEAE	ADDER'S TONGUE FAMILY						
	Botrychium dissectum	cut-leaved grape fern			G5	S5	С	
	OSMUNDACEAE	ROYAL FERN FAMILY						
	Osmunda claytoniana	interrupted fern			G5	S5	U	
	Osmunda regalis var. spectabilis	royal fern			G5T5	S5	U	
	DENNSTAEDTIACEAE	BRACKEN FERN FAMILY						
	Pteridium aquilinum var. latiusculum	eastern bracken-fern			G5T5	S5	U	
	THELYPTERIDACEAE	MARSH FERN						
	Thelypteris noveboracensis	New York fern			G5	S4S 5	R5	
	Thelypteris palustris var. pubescens	marsh fern			G5T5	S5	С	
	DRYOPTERIDACEAE	WOOD FERN FAMILY						
	Athyrium filix-femina var. angustum	northern lady fern			G5T5	S5	С	
	Dryopteris carthusiana	spinulose wood fern			G5	S5	С	
	Matteuccia struthiopteris var. pensylvanica	ostrich fern			G5T5	S5	R3	
	Onoclea sensibilis	sensitive fern			G5	S5	С	
	PINACEAE	PINE FAMILY						
*	Picea abies	Norway spruce			G?	SE3	?	
	Picea glauca	white spruce			G5	S5	?	
*	Picea pungens	Colorado spruce			G5	SE1	?	
*	Pinus nigra	Austrian pine			G?	SE2	?	
	Pinus strobus	eastern white pine			G5	S5	R1	
*	Pinus sylvestris	scotch pine			G?	SE5	?	
	CUPRESSACEAE	CEDAR FAMILY						
	Juniperus communis	common juniper			G5	S5	R4	
	Juniperus virginiana	eastern red cedar			G5	S5	С	
	Thuja occidentalis	eastern white cedar			G5	S5	?	

	Scientific Name	Common Name	COSEWIC	COSSARO	Grank	Srank	Local Status	Legal Status
	TAXACEAE	YEW FAMILY						
*	Taxus cuspidata	Japanese yew				SE	?	
	MAGNOLIACEAE	MAGNOLIA FAMILY						
*	Magnolia soulangeana	saucer magnolia				SE	?	
	LAURACEAE	LAUREL FAMILY						
	Sassafras albidum	sassafras			G5	S4	С	
	RANUNCULACEAE	BUTTERCUP FAMILY						
	Actaea pachypoda	white baneberry			G5	S5	С	
	Anemone americana	round-lobed hepatica			G?	S5	R5	
	Anemone canadensis	Canada anemone			G5	S5	С	
	Anemone cylindrica	thimbleweed			G5	S4	VU	
	Anemone quinquefolia var.	wood anemone			G5	S5	С	
	quinquefolia							
	<i>Anemone virginiana</i> v a r.	thimbleweed			G5T5	S5	С	
	virginiana	wild as house in a			05	0.5		
	Aquilegia canadensis	wild columbine			G5	S5	С	
*	Ranunculus abortivus	kidney-leaf buttercup			G5	S5	C	
	Ranunculus acris	tall buttercup			G5	SE5	lvu	
	Ranunculus hispidus var. caricetorum	swamp buttercup			G5T5	S5	С	
	Ranunculus recurvatus var. recurvatus	hooked buttercup			G5	S5	VU	
	Ranunculus sceleratus var. sceleratus	cursed buttercup			G5T5	SU	С	
	Thalictrum dasycarpum	purple meadow-rue			G5	S4?	С	
	Thalictrum dioicum	early meadow-rue			G5	S5	С	
	Thalictrum pubescens	tall meadow-rue			G5	S5	?	
	Thalictrum revolutum	waxy meadow-rue			G5	S2	R2	
	BERBERIDACEAE	BARBERRY FAMILY						
*	Berberis thunbergii	Japanese barberry			G?	SE5	lu	
*	Berberis vulgaris	common barberry			G?	SE5	?	
	Podophyllum peltatum	may-apple			G5	S5	С	
	MENISPERMACEAE	MOONSEED FAMILY						
	Menispermum canadense	moonseed			G5	S4	С	
	PAPAVERACEAE	POPPY FAMILY						
*	Chelidonium majus	celandine			G?	SE5	lr	
	PLATANACEAE	PLANE-TREE FAMILY						
	Platanus occidentalis	sycamore			G5	S4	С	
	HAMAMELIDACEAE	WITCH-HAZEL FAMILY						

APPENDIX B
LIST OF VASCULAR PLANTS LOCATED IN THE AREA OF INVESTIGATION

Scientific Name Common Name Scientific Name Cose Witch-hazel G5 S5	Cocal Status	Legal Status
Hamamelis virginiana witch-hazel G5 S5	_	
ULMACEAE ELM FAMILY		
Celtis occidentalis common hackberry G5 S4	С	
Ulmus americana white elm G5? S5	С	
* Ulmus glabra Scotch elm G? SE1	?	
* Ulmus pumila Siberian elm G? SE3	lvu	
Ulmus rubra slippery elm G5 S5	С	
MORACEAE MULBERRY FAMILY		
* Morus alba white mulberry G? SE5	lc	
URTICACEAE NETTLE FAMILY		
Boehmeria cylindrica false nettle G5 S5	С	
Pilea pumila dwarf clearweed G5 S5	С	
* Urtica dioica ssp. dioica European stinging nettle G5T? SE2	?	
JUGLANDACEAE WALNUT FAMILY		
Carya cordiformis bitternut hickory G5 S5	С	
Carya glabra pignut hickory G5 S3	VU	
Carya laciniosa big shellbark hickory G5 S3	С	
Carya ovata var. ovata shagbark hickory G5 S5	С	
Juglans cinerea butternut END END G3G4 S3?	С	SARA (1), PA
Juglans nigra black walnut G5 S4	С	
* Juglans regia English walnut G? SE1	?	
FAGACEAE BEECH FAMILY		
Quercus alba white oak G5 S5	С	
Quercus bicolor swamp white oak G5 S4	С	
Quercus macrocarpa bur oak G5 S5	С	
Quercus palustris pin oak G5 S3	С	
Quercus rubra red oak G5 S5	С	
Quercus shumardii shumard oak SC SC G5 S3	U	SARA (3)
Quercus velutina black oak G5 S4	С	
BETULACEAE BIRCH FAMILY		
Betula papyrifera white birch G5 S5	lr	
* Betula pendula European weeping birch G? SE4	?	
Carpinus caroliniana ssp. blue beech G5T S5	С	
Corylus americana American hazel G5 S5	С	
Corylus cornuta ssp. cornuta beaked hazel G5T S5	?	
Ostrya virginiana ironwood G5 S5	С	
PHYTOLACCACEAE POKEWEED FAMILY		

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	Scientific Name	Common Name	COSEWIC	COSSARO	Grank	Srank	Local Status	Legal Status
	Phytolacca americana	pokeweed			G5	S4	С	
	NYCTAGINACEAE	FOUR-O-CLOCK FAMILY						
	Mirabilis nyctaginea	wild four-o'clock			G5	S4	lc	
	CHENOPODIACEAE	GOOSEFOOT FAMILY						
*	Chenopodium album var. album	lamb's quarters			G5T5	SE5	lc	
*	Salsola kali	Russian thistle			G?	SE1	lc	
	Suaeda calceoliformis	western seablite			G5	S2	?	
	CARYOPHYLLACEAE	PINK FAMILY						
*	Cerastium semidecandrum	small chickweed			G?	SE5	lr	
*	Dianthus armeria	deptford pink			G?	SE5	lc	
*	Lychnis coronaria	mullein pink			G?	SE3	?	
*	Saponaria officinalis	bouncing-bet			G?	SE5	lc	
*	Silene latifolia	bladder campion			G?	SE5	lu	
*	Stellaria media	common chickweed			G?	SE5	lc	
	POLYGONACEAE	SMARTWEED FAMILY						
*	Polygonum convolvulus	black bindweed			G?	SE5	lc	
*	Polygonum cuspidatum	Japanese knotweed			G?	SE4	lr	
*	Polygonum hydropiper	water-pepper			G5	SE5	С	
	Polygonum lapathifolium	pale smartweed			G5	S5	С	
	Polygonum pensylvanicum	Pennsylvania smartweed			G5	S5	С	
*	Polygonum persicaria	lady's-thumb			G?	SE5	lc	
	Polygonum punctatum	water smartweed			G5	S5	С	
	Polygonum virginianum	Virginia knotweed			G5	S4	С	
*	Rumex acetosella ssp. acetosella	sheep sorrel			G5T	SE	lc	
*	Rumex crispus	curly-leaf dock			G?	SE5	lc	
	GUTTIFERAE	ST. JOHN'S-WORT FAMILY	1					
*	Hypericum perforatum	common St. John's-wort	1		G?	SE5	lc	
	Hypericum punctatum	corymbed St. John's-wort	1		G5	S5	С	
	TILIACEAE	LINDEN FAMILY	1					
	Tilia americana	American basswood	1		G5	S5	С	
	MALVACEAE	MALLOW FAMILY	1					
*	Abutilon theophrasti	velvet-leaf	1		G?	SE5	lc	
*	Hibiscus syriacus	Rose-of-Shraon			-		lr	
*	Hibiscus trionum	flower-of-an-hour			G?	SE4	lu	
*	Malva neglecta	cheeses			G?	SE5	lr Ir	
	VIOLACEAE	VIOLET FAMILY						
	Viola blanda	sweet white violet			G4G5	S4S	R2	

	Scientific Name	Common Name	COSEWIC	COSSARO	Grank	Srank	Local Status	Legal Status
					0.5	5		
	Viola pubescens	downy yellow violet			G5	S5	C	
	Viola sagittata var. sagittata	arrow-leaved violet			G5T5	S4	R4	
	Viola sororia	woolly blue violet			G5	S5	С	
*	SALICACEAE	WILLOW FAMILY			0.5	055		
*	Populus alba	silver poplar			G5	SE5	lr	
	Populus balsamifera ssp. balsamifera	balsam poplar			G5T5	S5	R2	
	Populus deltoides ssp. deltoides	eastern cottonwood			G5T5	SU	С	
	Populus grandidentata	large-tooth aspen			G5	S5	U	
	Populus tremuloides	trembling aspen			G5	S5	С	
*	Salix alba	white willow			G5	SE4	lr	
	Salix amygdaloides	peach-leaved willow			G5	S5	С	
	Salix bebbiana	long-beaked willow			G5	S5	VU	
	Salix discolor	pussy willow			G5	S5	С	
	Salix eriocephala	Missouri willow			G5	S5	С	
	Salix exigua	sandbar willow			G5	S5	С	
	Salix humilis	prairie willow			G5	S5	R4	
	Salix lucida	shining willow			G5	S5	R1	
*	Salix matsudana	corkscrew willow					lr	
	Salix nigra	black willow			G5	S4?	U	
	Salix petiolaris	slender willow			G5	S5	R1	
*	Salix X rubens	hybrid crack willow			HYB	SE4	lr	
*	Salix X sepulcralis	weeping willow			HYB	SE2	?	
	BRASSICACEAE	MUSTARD FAMILY						
*	Alliaria petiolata	garlic mustard			G5	SE5	lc	
*	Barbarea vulgaris	yellow rocket			G?	SE5	lc	
*	Berteroa incana	hoary alyssum			G?	SE5	lu	
*	Brassica nigra	black mustard			G?	SE5	?	
*	Capsella bursa-pastoris	shepherd's purse			G?	SE5	lc	
	Cardamine douglassii	purple cress			G5	S4	С	
*	Erysimum cheiranthoides ssp. cheiranthoides	wormseed mustard				SE5	lc	
*	Hesperis matronalis	dame's rocket			G4G5	SE5	lu	
*	Lepidium campestre	field cress			G?	SE5	lc	
*	Rorippa sylvestris	creeping yellow-cress			G5	SE5	lvu	
*	Sisymbrium altissimum	tall tumble-mustard			G?	SE5	lvu	
*	Thlaspi arvense	field penny-cress			G?	SE5	lc	

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	Scientific Name	Common Name	COSEWIC	COSSARO	Grank	Srank	Local Status	Legal Status
	ERICACEAE	HEATH FAMILY	Ì					
	Vaccinium pallidum	pale blueberry			G5	S4	С	
	PYROLACEAE	WINTERGREEN FAMILY						
	Pyrola elliptica	shinleaf			G5	S5	R3	
	PRIMULACEAE	PRIMROSE FAMILY						
	Lysimachia ciliata	fringed loosestrife			G5	S5	С	
*	Lysimachia nummularia	moneywort			G?	SE5	lc	
	Lysimachia quadriflora	four-flowered loosestrife			G5?	S4	R4	
	Lysimachia quadrifolia	whorled loosestrife			G5	S4	R4	
	GROSSULARIACEAE	GOOSEBERRY FAMILY						
	Ribes americanum	wild black currant			G5	S5	С	
	Ribes cynosbati	prickly gooseberry			G5	S5	С	
	Ribes hirtellum	smooth gooseberry			G5	S5	R3	
*	Ribes rubrum	red currant			G4G5	SE5	?	
	SAXIFRAGACEAE	SAXIFRAGE FAMILY						
	Penthorum sedoides	ditch stonecrop			G5	S5	С	
	ROSACEAE	ROSE FAMILY						
	Agrimonia gryposepala	tall hairy agrimony			G5	S5	С	
	Agrimonia parviflora	many-flowered agrimony			G5	S3	С	
	Amelanchier arborea	downy juneberry			G5	S5	U	
	Amelanchier laevis	smooth juneberry			G4G5 Q	S5	VU	
	Aronia melanocarpa	black chokeberry			G5	S5	U	
	Crataegus crus-galli	cockspur thorn			G5	S5	С	
	Crataegus mollis	downy thorn			G5	S5	R1	
*	Crataegus monogyna	English hawthorn			G5	SE5	lr	
	Crataegus punctata	large-fruited thorn			G5	S5	С	
	Fragaria virginiana ssp. virginiana	scarlet strawberry			G5T5	SU	С	
	Geum aleppicum	yellow avens			G5T5	S5	R3	
	Geum canadense	white avens			G5	S5	С	
	Geum vernum	spring avens			G5	S3	С	
*	Malus baccata	Siberian crabapple			G?	SE1	?	
	Malus coronaria	narrow-leaved crabapple			G5	S4	С	
*	Malus pumila	common crabapple			G5	SE5	lr	
	Physocarpus opulifolius	ninebark			G5	S5	R2	
	Potentilla anserina ssp. anserina	silverweed				S5	С	
	Potentilla canadensis	common cinquefoil			G5	SU	?	

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	Scientific Name	Common Name	COSEWIC	COSSARO	Grank	Srank	Local Status	Legal Status
	Potentilla norvegica ssp. norvegica	cinquefoil			G5T?	SU	lc	
*	Potentilla recta	rough-fruited cinquefoil			G?	SE5	lc	
	Potentilla simplex	old-field cinquefoil			G5	S5	С	
*	Prunus avium	sweet cherry			G?	SE4	lr	
*	Prunus cerasus	sour cherry			G?	SE1	lr	
	Prunus pensylvanica	pin cherry			G5	S5	R1	
	Prunus serotina	black cherry			G5	S5	С	
	Prunus virginiana ssp. virginiana	choke cherry			G5T5	S5	С	
*	Prunus virginiana var. Schubert	Schubert Chokecherry					?	
*	Pyrus communis	common pear			G5	SE4	lr	
	Rosa acicularis ssp. sayi	prickly rose			G5T5	S5	?	
	Rosa blanda	smooth rose			G5	S5	С	
	Rosa carolina	swamp rose			G5	S4	С	
*	Rosa multiflora	multiflora rose			G?	SE4	lc	
	Rosa palustris	marsh rose			G5	S5	С	
*	Rosa rubiginosa	sweetbrier rose				SE4	lu	
	Rosa setigera	prairie rose	SC	SC	G5	S3	С	SARA (1)
	Rubus allegheniensis	common blackberry			G5	S5	С	
	Rubus canadensis	smooth blackberry			G5	S4?	?	
	Rubus flagellaris	prickly raspberry			G5	S4	С	
	Rubus hispidus	trailing blackberry			G5	S4S 5	С	
	Rubus idaeus ssp. melanolasius	wild red raspberry			G5T5	S5	С	
	Rubus occidentalis	thimble-berry			G5	S5	С	
*	Sorbaria sorbifolia	false spiraea			G5	SE4	?	
*	Sorbus aucuparia	European mountain-ash			G5	SE4	lr	
	Spiraea alba	narrow-leaved meadow-sweet			G5	S5	С	
*	Spiraea prunifolia	bridal-wreath spiraea			G5	SE1	?	
	Spiraea tomentosa	tomentose meadow-sweet			G5	S4S 5	R4	
	FABACEAE	PEA FAMILY						
	Amphicarpaea bracteata	hog peanut			G5	S5	С	
	Apios americana	groundnut			G5	S5	С	
	Baptisia tinctoria	wild indigo			G5	S2	R5	
*	Caragana arborescens	Siberian pea tree			G?	SE1	?	
	Cercis canadensis	Canadian redbud			G5	SX	Rh	

APPENDIX B
LIST OF VASCULAR PLANTS LOCATED IN THE AREA OF INVESTIGATION

	Scientific Name	Common Name	COSEWIC	COSSARO	Grank	Srank	Local Status	Legal Status
*	Coronilla varia	variable crown-vetch			G?	SE5	lu	
	Desmodium canadense	Canadian tick-trefoil			G5	S4	С	
	Desmodium glutinosum	pointed-leaved tick-trefoil			G5	S4	U	
	Gleditsia triacanthos	honey locust			G5	S2	U	
	Gymnocladus dioicus	Kentucky coffee-tree	THR	THR	G5	S2	VU	SARA (1), PA
*	Lathyrus latifolius	everlasting pea			G?	SE4	lvu	
	Lathyrus ochroleucus	cream-coloured vetchling			G4G5	S4	R1	
	Lathyrus palustris	marsh vetchling			G5	S5	U	
*	Lathyrus tuberosus	tuberous vetchling			G?	SE3	lr	
	Lespedeza capitata	round-headed bush-clover			G5	S4	R3	
*	Lotus corniculatus	bird's-foot trefoil			G?	SE5	lc	
*	Medicago lupulina	black medick			G?	SE5	lc	
*	Medicago sativa ssp. sativa	alfalfa			G?T?	SE5	lvu	
*	Melilotus alba	white sweet-clover			G?	SE5	lc	
*	Melilotus officinalis	yellow sweet-clover			G?	SE5	lc	
*	Robinia pseudo-acacia	black locust			G5	SE5	lu	
*	Trifolium aureum	yellow clover			G?	SE5	lr	
*	Trifolium hybridum ssp. elegans	alsike clover				SE5	lr	
*	Trifolium pratense	red clover			G?	SE5	lu	
*	Trifolium repens	white clover			G?	SE5	lu	
*	Vicia cracca	tufted vetch			G?	SE5	lr	
	ELAEAGNACEAE	OLEASTER FAMILY						
*	Elaeagnus angustifolia	Russian olive			G?	SE3	lr	
*	Elaeagnus umbellata	Russian olive			G?	SE3	lr	
	LYTHRACEAE	LOOSESTRIFE FAMILY						
	Lythrum alatum	wing-angled loosestrife			G5	S3	С	
*	Lythrum salicaria	purple loosestrife			G5	SE5	lc	
	ONAGRACEAE	EVENING-PRIMROSE FAMILY						
	Circaea lutetiana ssp. canadensis	yellowish enchanter's nightshade			G5T5	S5	С	
	Epilobium ciliatum ssp. ciliatum	ciliate willow-herb			G5T?	S5	R1	
*	Epilobium hirsutum	great hairy willow-herb			G?	SE5	lc	
	Gaura biennis	biennial gaura			G5	S2	U	
	Ludwigia alternifolia	rattle-box			G5	S1	R3	
	Ludwigia polycarpa	many-fruited false loosestrife			G4	S2	J	
	Oenothera biennis	common evening-primrose			G5	S5	С	

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	Scientific Name	Common Name	COSEWIC	COSSARO	Grank	Srank	Local Status	Legal Status
	Oenothera perennis	perennial evening-primrose			G5	S4S 5	R1	
Ì	CORNACEAE	DOGWOOD FAMILY						
	Cornus amomum ssp. obliqua	silky dogwood			G5T?	S5	С	
	Cornus drummondii	Drummond's dogwood			G5	S4	С	
	Cornus foemina ssp. racemosa	gray dogwood			G5T5?	S5	С	
	Cornus rugosa	round-leaved dogwood			G5	S5	?	
	Cornus stolonifera	red-osier dogwood			G5	S5	С	
	NYSSACEAE	SOUR GUM FAMILY						
	Nyssa sylvatica	black gum			G5	S3	U	
	SANTALACEAE	SANDALWOOD FAMILY						
	Comandra umbellata	bastard toad-flax			G5	S5	С	
	CELASTRACEAE	STAFF-TREE FAMILY						
*	Celastrus orbiculatus	Oriental bittersweet			G?	SE2	?	
	Celastrus scandens	climbing bittersweet			G5	S5	С	
*	Euonymus alata	winged spindle tree			G?	SE2	lr	
*	Euonymus europaea	spindle tree			G?	SE2	lr	
	Euonymus obovata	running strawberry-bush			G5	S5	С	
	EUPHORBIACEAE	SPURGE FAMILY						
	Acalypha virginica var. rhomboidea	three-seeded mercury			G5T5	S5	С	
*	Chamaesyce maculata	spotted spurge			G5?	SE5	lc	
	Euphorbia corollata	flowering spurge			G5	S4	VU	
	RHAMNACEAE	BUCKTHORN FAMILY						
*	Rhamnus cathartica	common buckthorn			G?	SE5	lvu	
*	Rhamnus frangula	glossy buckthorn			G?	SE5	lr	
	VITACEAE	GRAPE FAMILY			_			
	Parthenocissus inserta	inserted Virginia-creeper			G5	S5	С	
	Parthenocissus quinquefolia	five-leaved Virginia-creeper			G5	S4?	С	
	Vitis aestivalis	summer grape			G5	S4	U	
	Vitis labrusca	fox grape			G5	S1	R1/ Ir	
	Vitis riparia	riverbank grape			G5	S5	С	
	POLYGALACEAE	MILKWORT FAMILY						
	Polygala sanguinea	blood-red milkwort			G5	S4	R4	
	Polygala verticillata	whorled milkwort			G5	S4	VU	
	HIPPOCASTANACEAE	BUCKEYE FAMILY						

APPENDIX B
LIST OF VASCULAR PLANTS LOCATED IN THE AREA OF INVESTIGATION

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	Scientific Name	Common Name	COSEWIC	COSSARO	Grank	Srank	Local Status	Legal Status
*	Aesculus hippocastanum	horse chestnut			G?	SE2	Ir	
	ACERACEAE	MAPLE FAMILY						
	Acer negundo	Manitoba maple			G5	S5	С	
*	Acer platanoides	Norway maple			G?	SE5	lu	
	Acer rubrum	red maple			G5	S5	С	
	Acer saccharinum	silver maple			G5	S5	С	
	Acer saccharum ssp. saccharum	sugar maple			G5T5	S5	С	
	Acer X freemanii	freeman's maple			HYB	S5?	R?	
	ANACARDIACEAE	SUMAC FAMILY						
	Rhus glabra	smooth sumac			G5	S5	U	
	Rhus radicans	poison-ivy			G5	S5	С	
	Rhus rydbergii	western poison-ivy			G5T	S5	С	
	Rhus typhina	staghorn sumac			G5	S5	С	
	SIMAROUBACEAE	AILANTHUS FAMILY						
*	Ailanthus altissima	tree-of-heaven			G?	SE5	lr	
	RUTACEAE	RUE FAMILY						
	Zanthoxylum americanum	American prickly-ash			G5	S5	С	
	OXALIDACEAE	WOOD SORREL FAMILY						
	Oxalis stricta	upright yellow wood-sorrel			G5	S5	С	
	GERANIACEAE	GERANIUM FAMILY						
	Geranium maculatum	spotted crane's-bill			G5	S5	С	
	BALSAMINACEAE	TOUCH-ME-NOT FAMILY						
	Impatiens capensis	spotted touch-me-not			G5	S5	С	
	ARALIACEAE	GINSENG FAMILY						
	Aralia nudicaulis	wild sarsaparilla			G5	S5	С	
	APIACEAE	PARSLEY FAMILY						
	Angelica atropurpurea	dark-purple alexanders			G5	S5	R1	
	Cicuta maculata	spotted water-hemlock			G5	S5	С	
*	Daucus carota	wild carrot			G?	SE5	lc	
	Heracleum lanatum	cow-parsnip			G5	S5	R5	
	Oxypolis rigidior	cowbane			G5	S2	U	
*	Pastinaca sativa	wild parsnip			G?	SE5	lu	
	Sanicula canadensis var. canadensis	Canada snakeroot			G5T5	S4	С	
	Sanicula marilandica	black snakeroot			G5	S5	С	
	Sium suave	hemlock water-parsnip			G5	S5	С	
	GENTIANACEAE	GENTIAN FAMILY						
*	Centaurium erythraea	erythraea-like centaury			G?	SE2	lr	

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	Scientific Name	Common Name	COSEWIC	COSSARO	Grank	Srank	Local Status	Legal Status
	Gentiana andrewsii	closed gentian			G4	S4	U	
	Gentianopsis crinita	fringed gentian				S5	R4	
	APOCYNACEAE	DOGBANE FAMILY						
	Apocynum androsaemifolium ssp. androsaemifolium	spreading dogbane			G5T5	S5	U	
	Apocynum cannabinum var. cannabinum	Indian hemp			G5T	S5	С	
*	Vinca minor	periwinkle			G?	SE5	lr	
	ASCLEPIADACEAE	MILKWEED FAMILY						
	Asclepias incarnata ssp. incarnata	swamp milkweed			G5T5	S5	O	
	Asclepias purpurascens	purple milkweed			G4G5	S2	R5	
	Asclepias sullivantii	Sullivant's milkweed			G5	S2	?	
	Asclepias syriaca	common milkweed			G5	S5	С	
	Asclepias tuberosa	butterfly-weed			G5?	S4	U	
*	Cynanchum nigrum	black swallow-wort			G?	SE?	?	
*	Cynanchum rossicum	swallow-wort			G?	SE5	?	
	SOLANACEAE	POTATO FAMILY						
*	Lycopersicon esculentum	tomato			G?	SE2	?	
	Physalis heterophylla	clammy ground-cherry			G5	S4	С	
	Physalis virginiana	Virginia ground-cherry			G5	SU	R1	
*	Solanum carolinense	horse nettle			G5	SE3	lu	
*	Solanum dulcamara	bitter nightshade			G?	SE5	lc	
*	Solanum tuberosum	potato			G?	SE1	?	
	CONVOLVULACEAE	MORNING-GLORY FAMILY						
	Calystegia sepium ssp. angulatum	hedge bindweed			G4G5 T?	SU	С	
	Calystegia spithamaea ssp. Spithamaea	low bindweed			G4G5 T4T5	S4S 5	?	
*	Convolvulus arvensis	field bindweed			G?	SE5	lc	
	Cuscuta sp.	dodder					?	
	BORAGINACEAE	BORAGE FAMILY						
*	Cynoglossum officinale	hound's-tongue			G?	SE5	lr	
*	Echium vulgare	blueweed			G?	SE5	lr	
	Hackelia deflexa	spurred stickweed			G5	S5	?	
	Hackelia virginiana	Virginia stickweed			G5	S5	С	
	Lithospermum caroliniense var. croceum	plains puccoon			G4G5 T4T5	S3	R2	
	PHRYMACEAE	LOPSEED FAMILY						
	Phryma leptostachya	lopseed			G5	S4S	С	

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	Scientific Name	Common Name	COSEWIC	COSSARO	Grank	Srank	Local Status	Legal Status
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	VERBENACEAE	VERVAIN FAMILY						
	Verbena hastata	blue vervain			G5	S5	С	
	Verbena stricta	hoary vervain			G5	S4	R2	
	Verbena urticifolia	white vervain			G5	S5	С	
	LAMIACEAE	MINT FAMILY						
	Clinopodium vulgare	wild basil			G5	S5	U	
	Collinsonia canadensis	stoneroot			G5	S4	С	
*	Glechoma hederacea	creeping Charlie			G?	SE5	lc	
*	Lamium amplexicaule	henbit			G?	SE3	lr	
*	Leonurus cardiaca ssp. cardiaca	common motherwort			G?T?	SE5	lc	
	Lycopus americanus	cut-leaved water-horehound			G5	S5	С	
	Lycopus uniflorus	northern water-horehound			G5	S5	U	
	<i>Mentha arvensis</i> ssp. borealis	American wild mint			G5T5	S5	С	
*	Mentha X piperita	pepper mint			HYB	SE4	lvu	
	Monarda fistulosa	wild bergamot			G5	S5	С	
*	Nepeta cataria	catnip			G?	SE5	lc	
	Physostegia virginiana ssp. virginiana	Virginia false dragonhead			G5T?	S4	R5	
*	Prunella vulgaris ssp. vulgaris	common heal-all			G5T?	SE3	С	
	Pycnanthemum verticillatum var. pilosum	hairy mountain-mint			G5T5	S1	R4	
	Pycnanthemum virginianum	Virginia mountain-mint			G5	S4	С	
	Scutellaria lateriflora	mad-dog skullcap			G5	S5	С	
	Stachys hispida	rough hedge-nettle			G4Q	S4S 5	С	
*	Stachys palustris	hedge-nettle			G5	SE5	?	
	PLANTAGINACEAE	PLANTAIN FAMILY						
*	Plantago lanceolata	ribgrass			G5	SE5	lc	
*	Plantago major	common plantain			G5	SE5	lvu	
	OLEACEAE	OLIVE FAMILY						
*	Forsythia viridissima	golden-bells			G?	SE2	?	
	Fraxinus americana	white ash			G5	S5	С	
	Fraxinus nigra	black ash			G5	S5	С	
	Fraxinus pennsylvanica	red ash			G5	S5	С	
	Fraxinus profunda	pumpkin ash			G4	S2	VU	
*	Ligustrum vulgare	common privet			G?	SE5	lvu	

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	Scientific Name	Common Name	COSEWIC	COSSARO	Grank	Srank	Local Status	Legal Status
*	Syringa vulgaris	common lilac			G?	SE5	lr	
	SCROPHULARIACEAE	FIGWORT FAMILY						
	Agalinis purpurea	large purple agalinis			G5	S1	R5	
	Agalinis tenuifolia var. macrophylla	slender-leaved agalinis			G4G5 Q	S1?	VU	
	Aureolaria flava	yellow false foxglove			G5	S3	R5	
	Aureolaria pedicularia	fern-leaved false foxglove			G5	S3	R1	
*	Linaria vulgaris	butter-and-eggs			G?	SE5	lc	
	Mimulus ringens	square-stemmed monkey-flower			G5	S5	С	
	Pedicularis lanceolata	swamp wood-betony			G5	S4	VU	
	Penstemon digitalis	foxglove beard-tongue			G5	S4S 5	VU	
*	Verbascum blattaria	moth mullein			G?	SE5	lc	
*	Verbascum thapsus	common mullein			G?	SE5	lc	
	Veronicastrum virginicum	Virginia culver's-root			G4	S2	R4	
	BIGNONIACEAE	TRUMPET-CREEPER FAMILY						
	Campsis radicans	trumpet creeper			G5	S2	R5/ Ir	
*	Catalpa bignonioides	common catalpa			G4G5	SE1	?	
*	Catalpa speciosa	northern catalpa			GU	SE1	?	
	CAMPANULACEAE	BLUEBELL FAMILY						
*	Campanula rapunculoides	creeping bellflower			G?	SE5	С	
	Lobelia inflata	Indian tobacco			G5	S5	U	
	Lobelia siphilitica	great lobelia			G5	S5	С	
	Lobelia spicata	pale-spiked lobelia			G5	S4	VU	
	RUBIACEAE	MADDER FAMILY						
	Cephalanthus occidentalis	eastern buttonbush			G5	S5	С	
	Galium aparine	cleavers			G5	S5	С	
	Galium asprellum	rough bedstraw			G5	S5	R3	
	Galium circaezans	white wild licorice			G5	S5	С	
*	Galium mollugo	white bedstraw			G?	SE5	?	
	Galium palustre	marsh bedstraw			G5	S5	R4	
	Galium pilosum var. pilosum	hairy bedstraw			G5T?	S3	R3	
	Galium trifidum ssp. trifidum	small bedstraw			G5T5	S5	R5	
	Galium triflorum	sweet-scented bedstraw			G5	S5	С	
	CAPRIFOLIACEAE	HONEYSUCKLE FAMILY						
	Diervilla lonicera	bush honeysuckle			G5	S5	R1	
	Lonicera canadensis	American fly honeysuckle			G5	S5	R1	
	Lonicera dioica	glaucous honeysuckle			G5	S5	С	

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*	Lonicera maackii	amur honeysuckle			G?	SE2	lr	
*	Lonicera tatarica	Tartarian honeysuckle			G?	SE5	lu	
	Sambucus canadensis	common elderberry			G5	S5	С	
	Sambucus racemosa ssp. pubens	red-berried elderberry			G5T5	S5	R4	
*	Symphoricarpos occidentalis	wolfberry			G5	SE3	?	
	Viburnum acerifolium	maple-leaved viburnum			G5	S5	С	
*	Viburnum lantana	bending wayfaring-tree			G?	SE2	?	
	Viburnum lentago	nannyberry			G5	S5	С	
*	Viburnum macrocephalum	Snowball Viburnum					?	
*	Viburnum opulus	guelder rose			G5	SE4	?	
	Viburnum rafinesquianum	downy arrow-wood			G5	S5	С	
	Viburnum recognitum	southern arrow-wood			G5	S4	R1	
	DIPSACACEAE	TEASEL FAMILY						
*	Dipsacus fullonum ssp. sylvestris	wild teasel			G?T?	SE5	lc	
	ASTERACEAE	ASTER FAMILY						
*	Achillea millefolium ssp. millefolium	common yarrow			G5T?	SE?	С	
	Ambrosia artemisiifolia	common ragweed			G5	S5	С	
	Ambrosia trifida	giant ragweed			G5	S5	С	
	Anaphalis margaritacea	pearly everlasting			G5	S5	R1?	
	Antennaria neglecta	field pussytoes			G5	S5	R2	
	Antennaria parlinii ssp. fallax	Parlin's pussytoes			G4G5 T?	SU	С	
*	Arctium lappa	great burdock			G?	SE5	lr	
*	Arctium minus ssp. minus	common burdock			G?T?	SE5	lc	
*	Artemisia vulgaris	common mugwort			G?	SE5	lr	
	Aster cordifolius	heart-leaved aster			G5	S5	U	
	Aster ericoides ssp. ericoides	white heath aster			G5T?	S5	С	
	Aster laevis var. laevis	smooth blue aster			G5T?	S5	U	
	Aster lanceolatus ssp. lanceolatus	tall white aster			G5T?	S5	С	
	Aster lateriflorus var. lateriflorus	calico aster			G5T5	S5	С	
	Aster macrophyllus	large-leaved aster			G5	S5	С	
	Aster novae-angliae	New England aster			G5	S5	С	
	Aster oolentangiensis	sky blue aster			G5	S4	R4	
	Aster pilosus var. pilosus	hairy aster			G5T?	S5	С	

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	Aster praealtus var. praealtus	willow aster	THR	THR	G5T?	S2	R2	SARA (1), PA
	Aster shortii	short's aster	NAR	NAR	G4G5	S4	U	
*	Aster subulatus var. subulatus	annual saltmarsh aster			G5	SE2	lr	
	Aster umbellatus var. umbellatus	flat-top white aster			G5T?	S5	R3	
	Aster urophyllus	arrow-leaved aster			G4	S4	С	
	Bidens frondosa	devil's beggar-ticks			G5	S5	С	
	Bidens tripartita	European beggar-ticks			G5	S5	С	
*	Centaurea maculosa	spotted knapweed			G?	SE5	lvu	
*	Chrysanthemum leucanthemum	ox-eye daisy			G?	SE5	lc	
*	Cichorium intybus	chicory			G?	SE5	lc	
*	Cirsium arvense	Canada thistle			G?	SE5	lc	
	Cirsium discolor	field thistle			G5	S4	U	
*	Cirsium vulgare	bull thistle			G5	SE5	lc	
	Conyza canadensis	horseweed			G5	S5	С	
	Coreopsis tripteris	tall tickseed			G5	S2	U	
	Erechtites hieracifolia	fire-weed			G5	S5	С	
	Erigeron annuus	daisy fleabane			G5	S5	С	
	Erigeron philadelphicus ssp. philadelphicus	Philadelphia fleabane			G5T5	S5	С	
	Erigeron strigosus	daisy fleabane			G5	S5	С	
	Eupatorium altissimum	tall joe-pyeweed			G5	S1	R3/ lu	
	Eupatorium maculatum ssp. maculatum	spotted joe-pye-weed			G5T5	S5	С	
	Eupatorium perfoliatum	perfoliate thoroughwort			G5	S5	С	
	Eupatorium purpureum var. purpureum	purple joe-pye-weed			G5T?	S3	VU	
	Euthamia graminifolia	flat-topped bushy goldenrod			G5	S5	С	
	Euthamia gymnospermoides	viscid bushy goldenrod			G5	S1	R3	
	Helenium autumnale	common sneezeweed			G5	S5	U	
*	Helenium flexuosum	purple-headed sneezeweed			G5	SE2	?	
	Helianthus divaricatus	rough woodland sunflower			G5	S5	С	
	Helianthus giganteus	tall wild sunflower			G5	S5	С	
*	Helianthus tuberosus	Jerusalem artichoke			G5	SE5	lu	
*	Hieracium aurantiacum	devil's paintbrush			G?	SE5	lr	

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*	Hieracium caespitosum ssp. caespitosum	field hawkweed				SE5	lu	
	Hieracium scabrum	rough hawkweed			G5	S4	VU	
	Krigia biflora var. biflora	two-flowered Cynthia			G5	S2	U	
	Lactuca biennis	biennial lettuce			G5	S5	VU	
	Lactuca canadensis	tall lettuce			G5	S5	С	
*	Lactuca serriola	prickly lettuce			G?	SE5	lc	
	Liatris aspera var. intermedia	rough blazing star			G4G5 T?	S2	R2	
	Liatris spicata	spiked blazing star	THR	THR	G5	S2	R5	SARA (1), PA
*	Matricaria matricarioides	pineapple-weed			G5	SE5	lu	
	Prenanthes alba	white rattlesnake-root			G5	S5	С	
	Prenanthes racemosa ssp. racemosa	glaucous white rattlesnake-root			G5T?	SU	R4	
	Ratibida pinnata	gray-headed coneflower			G5	S2S 3	U	
*	Rudbeckia fulgida	orange coneflower			G5	S1	?	
	Rudbeckia hirta	black-eyed Susan			G5	S5	С	
	Senecio aureus	golden groundsel			G5	S5	VU	
	Silphium terebinthinaceum var. terebinthinaceum	prairie dock			G4G5 T4T5	S1	VU	
	Solidago altissima var. altissima	tall goldenrod				S5	С	
	Solidago caesia	blue-stem goldenrod			G5	S5	С	
	Solidago canadensis	Canada goldenrod			G5	S5	С	
	Solidago gigantea	giant goldenrod			G5	S5	VU	
	Solidago juncea	early goldenrod			G5	S5	U	
	Solidago nemoralis ssp. nemoralis	gray goldenrod			G5T5	S5	С	
	Solidago ohioensis	Ohio goldenrod			G4	S4	?	
	Solidago riddellii	Riddell's goldenrod	SC	SC	G5	S3	VU	SARA (1)
	Solidago rigida ssp. rigida	stiff-leaved goldenrod			G5T5	S3	U	, ,
	Solidago rugosa ssp. rugosa	rough goldenrod			G5T?	S5	С	
*	Solidago sempervirens	seaside goldenrod			G5	SE2	lvu	
*	Sonchus arvensis ssp. arvensis	field sow-thistle			G?T?	SE5	lc	
*	Sonchus asper ssp. asper	spiny-leaved sow-thistle			G?T?	SE5	lu	
*	Sonchus oleraceus	common sow-thistle			G?	SE5	lvu	
*	Tanacetum vulgare	common tansy			G?	SE5	lr	

APPENDIX B
LIST OF VASCULAR PLANTS LOCATED IN THE AREA OF INVESTIGATION

	Scientific Name	Common Name	COSEWIC	COSSARO	Grank	Srank	Local Status	Legal Status
* Tá	araxacum officinale	common dandelion			G5	SE5	lc	
* Tr	ragopogon dubius	doubtful goat's-beard			G?	SE5	lc	
Ve	ernonia gigantea*	ironweed			G5T	S3	С	
Ve	ernonica missurica*	ironweed			G4G5	S3?	?	
Xá	anthium strumarium	tumor-curing cocklebur			G5	S5	С	
Bl	UTOMACEAE	FLOWERING RUSH FAMILY						
* Bu	utomus umbellatus	flowering-rush			G5	SE5	lc	
AL	LISMATACEAE	WATER-PLANTAIN FAMILY						
All	lisma plantago-aquatica	common water-plantain			G5	SR F	С	
Sá	agittaria latifolia	broad-leaved arrowhead			G5	S5	С	
H/	YDROCHARITACEAE	FROG'S-BIT FAMILY						
El	lodea nuttallii	Nuttall's waterweed			G5	S4	R1	
Vá	allisneria americana	water-celery			G5	S5	VU	
PC	OTAMOGETONACEAE	PONDWEED FAMILY						
Po	otamogeton foliosus	leafy pondweed			G5	S5	U	
Po	otamogeton nodosus	knotty pondweed			G5	S5	R2	
Po	otamogeton sp.	pondweed					?	
N/	AJADACEAE	NAIAD FAMILY						
Ná	ajas flexilis	slender najas			G5	S5	VU	
AF	RACEAE	ARUM FAMILY						
	risaema triphyllum ssp. iphyllum	small jack-in-the-pulpit			G5T5	S5	С	
LE	EMNACEAE	DUCKWEED FAMILY						
Le	emna minor	lesser duckweed			G5	S5	С	
CO	OMMELINACEAE	SPIDERWORT FAMILY						
Tr	radescantia ohiensis	Ohio spiderwort			G5	S2	VU	
	JNCACEAE	RUSH FAMILY						
	ıncus alpinoarticulatus	Richardson's rush			G5	S5	R5	
Ju	ıncus biflorus	two-flowered rush			G5Q	S1	R3	
Ju	ıncus brachycarpus	short-fruited rush			G4G5	S1	R3	
Ju	ıncus bufonius	toad rush			G5	S5	VU	
Ju	ıncus dudleyi	Dudley's rush			G5	S5	С	
Ju	ıncus greenei	Greene's rush			G5	S3	R3	
Ju	ıncus marginatus	grass-leaved rush			G5	S2	R1	
Ju	ıncus nodosus	knotted rush			G5	S5	U	
Ju	ıncus tenuis	path rush			G5	S5	R1	
Ju	ıncus torreyi	Torrey's rush			G5	S5	С	
Lu	<i>uzula multiflora</i> ssp.	woodrush			G5T5	S5	U	

APPENDIX B
LIST OF VASCULAR PLANTS LOCATED IN THE AREA OF INVESTIGATION

Scientific Name	Common Name	COSEWIC	COSSARO	Grank	Srank	Local Status	Legal Status
multiflora							
CYPERACEAE	SEDGE FAMILY						
Carex arctata	drooping wood sedge			G5?	S5	?	
Carex bebbii	Bebb's sedge			G5	S5	С	
Carex blanda	woodland sedge			G5?	S5	С	
Carex brevior	shorter sedge			G5?	S4S 5	R4	
Carex buxbaumii	brown sedge			G5	S5	VU	
Carex cephaloidea	thin-leaved sedge			G5	S5	U	
Carex cephalophora	oval-headed sedge			G5	S5	С	
Carex foena	bronzy sedge			G5	S5	R1	
Carex granularis	meadow sedge			G5	S5	С	
Carex lacustris	lake-bank sedge			G5	S5	С	
Carex lasiocarpa	slender sedge			G5	S5	R2	
Carex normalis	larger straw sedge			G5	S4	С	
Carex pellita	woolly sedge			G5	S5	С	
Carex pensylvanica	Pennsylvania sedge			G5	S5	С	
Carex pseudo-cyperus	cypress-like sedge			G5	S5	?	
Carex radiata	radiate sedge			G4	S4	С	
Carex rosea	stellate sedge			G5	S5	С	
Carex scoparia	pointed broom sedge			G5	S5	R3	
Carex squarrosa	squarrose sedge			G4G5	S2	С	
Carex stipata	awl-fruited sedge			G5	S5	С	
Carex stricta	tussock sedge			G5	S5	С	
Carex swanii	swan's sedge			G5	S3	С	
Carex tenera	straw sedge			G5	S5	С	
Carex trichocarpa	hairy-fruited sedge			G4	S3	?	
Carex viridula ssp. viridula	greenish sedge			G5T5	S5	R4	
Carex vulpinoidea	fox sedge			G5	S5	С	
Carex woodii	wood's sedge			G4Q	S4	VU	
Cyperus esculentus	yellow nut-grass			G5	S5	С	
Cyperus odoratus	fragrant umbrella sedge			G5	S5	С	
Cyperus strigosus	straw-colored umbrella sedge			G5	S5	С	
Eleocharis erythropoda	red-footed spike-rush			G5	S5	С	
Eleocharis obtusa	blunt spike-rush			G5	S5	С	
Rhynchospora capitellata	small-headed beaked-rush			G5	S4	R3	
Scirpus atrovirens	dark-green bulrush			G5?	S5	С	
Scirpus pendulus	lined bulrush			G5	S5	С	
Scirpus validus	American great bulrush			G?	S5	U	

	Scientific Name	Common Name	COSEWIC	COSSARO	Grank	Srank	Local Status	Legal Status
	Scleria triglomerata	tall nut-rush			G5	S1	R4	
	POACEAE	GRASS FAMILY						
*	Agrostis gigantea	red-top			G4G5	SE5	lc	
	Agrostis stolonifera	redtop			G5	S5	U	
	Andropogon gerardii	big bluestem			G5	S4	U	
	Andropogon virginicus	Virginia broom-sedge			G5	S4	VU	
*	Anthoxanthum odoratum ssp. odoratum	sweet vernal grass			G?T?	SE4	?	
	Aristida purpurascens var. purpurascens	arrow-feather three-awn			G5T?	S1	R4	
*	Avena fatua	wild oats			G?	SE3	lr	
*	Bromus inermis ssp. inermis	awnless brome			G4G5 T?	SE5	lc	
*	Bromus tectorum	downy chess			G?	SE5	lu	
	Calamagrostis canadensis	blue-joint grass			G5	S5	С	
*	Dactylis glomerata	orchard grass			G?	SE5	lc	
	Danthonia spicata	poverty oat grass			G5	S5	С	
*	Digitaria ischaemum	small crabgrass			G?	SE5	lu	
*	Digitaria sanguinalis	large crabgrass			G5	SE5	lu	
*	Echinochloa crusgalli	common barnyard grass			G?	SE5	lc	
	Echinochloa microstachya	small-spiked barnyard grass			G5Q	S4S 5	R?	
	Elymus canadensis	nodding wild rye			G5	S4S 5	VU	
	Elymus hystrix	bottle-brush grass			G5	S5	С	
*	Elymus repens	quack grass			G?	SE5	lc	
	Elymus virginicus var. virginicus	Virginia wild rye			G5T?	S5	С	
*	Festuca arundinacea	tall fescue			G?	SE5	lc	
*	Festuca pratensis	meadow fescue			G5	SE5	lr	
	Festuca rubra ssp. rubra	red fescue			G5T4	S5	lr	
	Glyceria striata	fowl meadow grass			G5	S5	С	
	Hierochloe odorata ssp. odorata	sweet grass			G5T?	S4	R3	
*	Hordeum jubatum ssp. jubatum	squirrel-tail grass			G5T?	SE5	lu	
	Leersia oryzoides	rice cut grass			G5	S5	С	
	Leersia virginica	white cut grass			G5	S4	С	
*	Lolium perenne	English rye grass			G?	SE4	lu	
	Milium effusum	wood millet			G5	S4S	R3	

								1
	Scientific Name	Common Name	COSEWIC	COSSARO	Grank	Srank	Local Status	Legal Status
						5		
	Muhlenbergia frondosa	leafy satin grass			G5	S4	VU	
	Muhlenbergia mexicana var. mexicana	Mexican satin grass			G5T?	S5	U	
	Panicum acuminatum var. acuminatum	acuminate panic grass			G5T	S5	С	
	Panicum capillare	witch grass			G5	S5	С	
	Panicum columbianum var. siccanum	panic grass			G5T5	S4	R1	
*	Panicum dichotomiflorum	fall panicum			G5	SE5	lc	
	Panicum latifolium	broad-leaved panic grass			G5	S4	U	
	Panicum sphaerocarpon	rough-fruited panic grass			G5	S3	R5	
	Panicum virgatum	switch grass			G5	S4	U	
	Paspalum setaceum	bristle-like paspalum			G5	S2	R4	
	Phalaris arundinacea	reed canary grass			G5	S5	С	
*	Phleum pratense	timothy			G?	SE5	lc	
	Phragmites australis	common reed			G5	S5	С	
	Poa compressa	Canada blue grass			G?	SE5	С	
	Poa palustris	fowl meadow grass			G5	S5	VU	
	Poa pratensis ssp. pratensis	Kentucky bluegrass			G5T5?	S5	С	
	Schizachyrium scoparium	little bluestem			G5	S4	U	
*	Setaria faberi	giant foxtail			G?	SE4	lc	
*	Setaria pumila	yellow foxtail			G?	SE5	lc	
*	Setaria viridis	green foxtail			G?	SE5	lc	
	Sorghastrum nutans	Indian grass			G5	S4	R5	
	Spartina pectinata	tall cord grass			G5	S4	U	
	TYPHACEAE	CAT-TAIL FAMILY						
	Typha angustifolia	narrow-leaved cattail			G5	SE5	С	
	Typha latifolia	broad-leaved cattail			G5	S5	U	
	LILIACEAE	LILY FAMILY						
	Aletris farinosa	colic-root	THR	THR	G5	S2	R4	SARA (1), PA
	Allium canadense var. canadense	Canada wild onion			G5T5	S5	С	
*	Asparagus officinalis	garden asparagus			G5?	SE5	lc	
*	Convallaria majalis	lily-of-the-valley			G5	SE5	lr	
	Erythronium americanum ssp. americanum	yellow trout lily			G5T5	S5	С	
*	Hemerocallis fulva	orange day-lily			G?	SE5	lu	
	Hypoxis hirsuta	yellow star-grass			G5	S3	R5	

APPENDIX B
LIST OF VASCULAR PLANTS LOCATED IN THE AREA OF INVESTIGATION

Maianthemum racemosum ssp. racemosumfalse Solomon's sealG5T5S5CMaianthemum stellatumstar-flowered Solomon's sealG5S5CMuscari botryoidesgrape hyacinthG?SE3?* Narcissus pseudonarcissusdaffodilG?SE2Ir* Ornithogalum umbellatumsummer snowflakeG2?SE3IrPolygonatum biflorumhairy Solomon's sealG5S4CPolygonatum pubescenshairy Solomon's sealG5S5CStreptopus roseusrose twisted-stalkG5S5?Trillium grandiflorumwhite trilliumG5S5CUvularia sessilifoliasessile-leaved bellwortG5S4R5IRIDACEAEIRIS FAMILYG5S5CSisyrinchium albidumwhite blue-eyed-grassG5?S1R4	
Maianthemum stellatumstar-flowered Solomon's sealG5S5CMuscari botryoidesgrape hyacinthG?SE3?* Narcissus pseudonarcissusdaffodilG?SE2Ir* Ornithogalum umbellatumsummer snowflakeG2?SE3IrPolygonatum biflorumhairy Solomon's sealG5S4CPolygonatum pubescenshairy Solomon's sealG5S5CStreptopus roseusrose twisted-stalkG5S5?Trillium grandiflorumwhite trilliumG5S5CUvularia sessilifoliasessile-leaved bellwortG5S4R5IRIDACEAEIRIS FAMILYG5S5CIris virginicasouthern blue-flagG5S5C	
* Narcissus pseudonarcissus daffodil G? SE2 Ir * Ornithogalum umbellatum summer snowflake G2? SE3 Ir Polygonatum biflorum hairy Solomon's seal G5 S4 C Polygonatum pubescens hairy Solomon's seal G5 S5 C Streptopus roseus rose twisted-stalk G5 S5 ? Trillium grandiflorum white trillium G5 S5 C Uvularia sessilifolia sessile-leaved bellwort G5 S4 R5 IRIDACEAE IRIS FAMILY Iris virginica southern blue-flag G5 S5 C	
* Ornithogalum umbellatum summer snowflake G2? SE3 Ir Polygonatum biflorum hairy Solomon's seal G5 S4 C Polygonatum pubescens hairy Solomon's seal G5 S5 C Streptopus roseus rose twisted-stalk G5 S5 ? Trillium grandiflorum white trillium G5 S5 C Uvularia sessilifolia sessile-leaved bellwort G5 S4 R5 IRIDACEAE IRIS FAMILY Iris virginica southern blue-flag G5 S5 C	
Polygonatum biflorumhairy Solomon's sealG5S4CPolygonatum pubescenshairy Solomon's sealG5S5CStreptopus roseusrose twisted-stalkG5S5?Trillium grandiflorumwhite trilliumG5S5CUvularia sessilifoliasessile-leaved bellwortG5S4R5IRIDACEAEIRIS FAMILYG5S5CIris virginicasouthern blue-flagG5S5C	
Polygonatum pubescens hairy Solomon's seal G5 S5 C Streptopus roseus rose twisted-stalk G5 S5 ? Trillium grandiflorum white trillium G5 S5 C Uvularia sessilifolia sessile-leaved bellwort G5 S4 R5 IRIDACEAE IRIS FAMILY G5 S5 C Iris virginica southern blue-flag G5 S5 C	
Streptopus roseus rose twisted-stalk G5 S5 ? Trillium grandiflorum white trillium G5 S5 C Uvularia sessilifolia sessile-leaved bellwort G5 S4 R5 IRIDACEAE IRIS FAMILY G5 S5 C Iris virginica southern blue-flag G5 S5 C	
Trillium grandiflorum white trillium G5 S5 C Uvularia sessilifolia sessile-leaved bellwort G5 S4 R5 IRIDACEAE IRIS FAMILY G5 S5 C Iris virginica southern blue-flag G5 S5 C	
Uvularia sessilifolia sessile-leaved bellwort G5 S4 R5 IRIDACEAE IRIS FAMILY Southern blue-flag G5 S5 C	
Uvularia sessilifolia sessile-leaved bellwort G5 S4 R5 IRIDACEAE IRIS FAMILY Southern blue-flag G5 S5 C	
Iris virginica southern blue-flag G5 S5 C	
Sisyrinchium albidum white blue-eyed-grass G5? S1 R4	
Sisyrinchium angustifolium pointed blue-eyed-grass G5 S4 C	
SMILACACEAE CATBRIER FAMILY	
Smilax herbacea herbaceous carrion flower G5 S4 R1	
Smilax hispida bristly greenbrier G5 S4 C	
Smilax lasioneura hairy-nerved carrion flower G5 S4 C	
DIOSCOREACEAE YAM FAMILY	
Dioscorea quaternata wild yam-root G5 S4 C	
ORCHIDACEAE ORCHID FAMILY	
Cypripedium calceolus var. large yellow lady's slipper G5T S5 R2 pubescens	
* Epipactis helleborine common helleborine G? SE5 Ir	
SAPINDACEAE SOAPBERRY FAMILY	
* Koelreuteria paniculata Golden rain tree ?	
TAMARICACEAE TAMARISK FAMILY	
* Tamarix ramosissima Tamarisk ?	
MORACEAE FIG FAMILY	
* Ficus sp. Fig tree ?	

^{*} Species introduced to Ontario

Local Status Distribution and Status of the Vascular Plants of Southwestern Ontario

Status of the plants in Essex County was thoroughly investigated by the Ontario Ministry of Natural Resources through the use of plant stations. Plant stations are locations that are defined as a 1 km radius around a plant occurrence. Plant rarity is based on the number of stations for a native plant species. A variable cut-off is used for the number of stations based on the size of the municipality or site district and by the intensity of fieldwork that has been carried out in the area.

- R Native and rare, based on 5 or fewer recent (post-1963) stations. A station is a population separated by at least 1 kilometer from the nearest population of the same species.
- R# Rare, number of recent stations.
- R? Rare, exact number of stations not known.
- Rh Rare, known only from historic (pre-1964) record.
- VU Native and very uncommon, based on 6 to 8 recent stations.
- U Native and uncommon, based on 9 to 15 recent stations.
- C Native and common, based on more than 15 recent stations.
- I Introduced and persisting of cultivation.
- Ir Introduced and rare, based on 5 or fewer recent stations.
- Ivu Introduced and very uncommon, based on 6 to 8 recent stations.
- lu Introduced and uncommon, based on 9 to 15 recent stations.
- Ic Introduced and common, based on more than 15 recent stations.
- Ih Introduced and known only from historic (pre-1964) records
- ? Questionable record. These are typically literature reports for which no specimen is known, or other records for which there is some reason to doubt either the identity or origin of the record
- ? Not listed as present within Essex County, but was found by LGL staff in 2006.



ELC	Vegetation	Species Association	Comments	LGL Polygon				
Code	Type	Species Association	Comments	Reference				
	Terrestrial-Natural/Semi-Natural							
TPO		GRASS PRAIRIE						
TPO2-1	Fresh - Moist Tallgrass Prairie	Canopy: Eastern cottonwood (<i>Populus deltoides</i> ssp. deltoides) is dominant. Understorey: Silky dogwood (<i>Cornus amomum</i> ssp. obliqua) is dominant with gray dogwood (<i>Cornus foemina</i> ssp. racemosa) and multiflora rose (<i>Rosa multiflora</i>) as associates. Ground Cover: Big bluestem (<i>Andropogon gerardii</i>), Canadian tick-trefoil (<i>Desmodium canadense</i>), common reed (<i>Phragmites australis</i>), gray goldenrod (<i>Solidago nemoralis</i> ssp. nemoralis), gray-headed coneflower (<i>Ratibida pinnata</i>), Indian grass (<i>Sorghastrum nutans</i>), ironweed (<i>Vernonia gigantea</i>), little bluestem (<i>Schizachyrium scoparium</i>), switch grass (<i>Panicum virgatum</i>), Virginia broom-sedge (<i>Andropogon virginicus</i>), Virginia mountain-mint (<i>Pycnanthemum virginianum</i>), wild bergamot (<i>Monarda fistulosa</i>) and wild carrot (<i>Daucus carota</i>) are abundant with occasional blood-red milkwort (<i>Polygala sanguinea</i>), butterfly-weed (<i>Asclepias tuberosa</i>), calico aster (<i>Aster lateriflorus</i> var. <i>lateriflorus</i>), Canada bluegrass (<i>Poa compressa</i>), Canada goldenrod (<i>Solidago canadensis</i>), colic-root (<i>Aletris farinosa</i>), cut-leaved water-horehound (<i>Lycopus americanus</i>), early goldenrod (<i>Solidago canadensis</i>) spurpuea), field thistle (<i>Cirsium discolor</i>), flowering spurge (<i>Euphorbia corollata</i>), Kentucky bluegrass (<i>Poa pratensis</i> ssp. pratensis), large purple agalinis (<i>Agalinis purpurea</i>), New England aster (<i>Aster novae-angliae</i>), orchard grass (<i>Dactylis glomerata</i>), prickly raspberry (<i>Rubus flagellaris</i>), rough goldenrod (<i>Solidago rugosa</i> ssp. <i>rugosa</i>), rough-headed bush-clover (<i>Lespedeza capitata</i>), slender-leaved agalinis (Agalinis tenuifolia var. macrophylla), smooth blue aster (<i>Aster novae-angliae</i>), orchard grass (<i>Dactylis glomerata</i>), stiff-leaved goldenrod (<i>Solidago rigida</i> ssp. rigida), swamp milkweed (<i>Asclepias incarnata</i> ssp. <i>incarnata</i>), tall cord grass (<i>Spartina pectinata</i>), tall fescue (<i>Festuca arundinacea</i>), tall goldenrod (<i>Solidago altissima</i> var. <i>altissima</i>), tall tickseed (<i>Coreopsis tripteris</i>), tall wild sunflower (<i>Heli</i>	- Tree cover <= 25%; shrub cover <= 25% Subject to seasonal extremes in moisture conditions; spring flooding and summer drought (TPO) Dominated by Prairie graminoids and forbs (2-1) Pioneer community resulting from, or maintained by, frequent disturbance by fire.	ANS1A, BBA4EC, BBA4MB, ESA1, LAM1, MAL1D, MAL3B, NAR4A, NAR15, NAR16, NCH2E, NCH4B, NCH4Z, NCH12B, NSG7A, NSG7C, OAK3, OAK4, RED5, RED12, YWK1B				

¹ Lee, H.T., W.D. Bakowsky, J. Riley, J. Bowles, M. Puddister, P. Uhlig and S. McMurray. 1998. Ecological Land Classification for Southern Ontario: First Approximation and Its Application. Ontario Ministry of Natural Resources, Southcentral Sciences Section, Science Development and Transfer Branch. SCSS Field Guide FG-02. North Bay, Ontario.

ELC	Vegetation	Species Association	Comments	LGL Polygon
Code	Type	·	33	Reference
TPS TPS2-1	TALL-GRASS Fresh - Moist Pin Oak - Bur Oak Tallgrass Savannah	Canopy: Pin oak (<i>Quercus palustris</i>) and bur oak (<i>Quercus macrocarpa</i>) are co-dominant with American elm (<i>Ulmus americana</i>), eastern cottonwood, red ash (<i>Fraxinus pennsylvanica</i>) and shagbark hickory (<i>Carya ovata</i> var. <i>ovata</i>) as associates. Understorey: American hazel (<i>Corylus americana</i>), black ash (<i>Fraxinus nigra</i>), black locust (<i>Robinia pseudo-acacia</i>), common buckthorn (<i>Rhamnus cathartica</i>), Drummond's dogwood (<i>Cornus drummondii</i>), gray dogwood, Manitoba maple (<i>Acer negundo</i>), red ash, staghorn sumac (<i>Rhus typhina</i>) and Tartarian honeysuckle (<i>Lonicera tatarica</i>). Ground Cover: Common dandelion (<i>Taraxacum officinale</i>), eastern cottonwood, gray goldenrod, Pennsylvania sedge (<i>Carex pensylvanica</i>), scarlet strawberry (<i>Fragaria virginiana</i> ssp. <i>virginiana</i>), spotted crane's bill (<i>Geranium maculatum</i>), tall tickseed, yellow avens (<i>Geum aleppicum</i>) and yellow trout lily (<i>Erythronium americanum</i> ssp. <i>americanum</i>).	 25% < Tree Cover <= 35% with prairie graminoids and forbs in the Ground Cover (TPS). Seasonal flooding followed by summer drought. Fresh - Moist conditions, dominated by Pin Oak and Bur Oak (2-1). Young Community. 	ESA5
TPW	TALL-GRASS		1	1
TPW2-1	Fresh - Moist Black Oak - White Oak Tallgrass Woodland	Canopy: Black oak (<i>Quercus velutina</i>) and pin oak are dominant with black cherry (<i>Prunus serotina</i>), eastern cottonwood, freeman's maple (<i>Acer X freemanii</i>) and white oak (<i>Quercus alba</i>) as associates. Understorey: Black cherry is dominant with American hazel, gray dogwood, prairie rose (<i>Rosa setigera</i>), riverbank grape (<i>Vitis riparia</i>), sassafras (<i>Sassafras albidum</i>), staghorn sumac, thimble-berry (<i>Rubus occidentalis</i>) and white mulberry (<i>Morus alba</i>) as associates. Ground Cover: Eastern bracken-fern (<i>Pteridium aquilinum var. latiusculum</i>), four-flowered loosestrife (<i>Lysimachia quadriflora</i>), glaucous white rattlesnake-root (<i>Prenanthes racemosa</i> ssp. <i>racemosa</i>), many-flowered agrimony (<i>Agrimony parviflora</i>), orchard grass, spotted crane's bill and swamp white oak (<i>Quercus bicolor</i>).	 35% < Tree Cover <= 60% with prairie graminoids and forbs in the Ground Cover (TPS). Seasonal flooding followed by summer drought. Fresh - Moist conditions, dominated by Black Oak and White Oak (2-1). Mid-age to Mature Community. 	ANS1, ANS2C
TPW2-2	Fresh - Moist Pin Oak Tallgrass Woodland	Canopy: Pin oak is dominant with black cherry and freeman's maple as associates. Understorey: Black cherry is dominant with American hazel, gray dogwood, prairie rose, riverbank grape, sassafras, staghorn sumac, thimble-berry and white mulberry as associates. Ground Cover: Eastern bracken-fern, many-flowered agrimony, orchard grass, spotted crane's bill and swamp white oak.	 35% < Tree Cover <= 60% with prairie graminoids and forbs in the Ground Cover (TPS). Seasonal flooding followed by summer drought. Fresh - Moist conditions, dominated by Pin Oak (2-2). Mid-age to Mature Community. 	ANS2

ELC Code	Vegetation Type	Species Association	Comments	LGL Polygon Reference
FOD	DECIDUOUS	FOREST		
FOD1-3	Dry - Fresh Black Oak Deciduous Forest	Canopy: Black oak, pin oak, freeman's maple and eastern cottonwood are dominant with American elm, black cherry and swamp white oak as associates. Subcanopy: American elm, black oak, black cherry and red maple (<i>Acer rubrum</i>). Understorey: Black cherry and common reed are codominant with American hazel, gray dogwood, narrow-leaved crabapple (<i>Malus coronaria</i>), red ash and sassafras as associates. Ground Layer: Common reed, eastern bracken-ferm (<i>Pteridium aquilinum</i> var. <i>latiusculum</i>), inserted Virginiacreeper (<i>Parthenocissus inserta</i>), Pennsylvania sedge and riverbank grape are dominant with garlic mustard (<i>Alliaria petiolata</i>), spotted crane's bill and wood anemone (<i>Anemone quinquefolia</i> var. <i>quinquefolia</i>) as associates.	- Tree cover > 60 % (FO) Deciduous trees > 75 % of canopy cover (D) Black Oak is dominant (1-3) Sand and loam soils with rapid drainage in upper to middle slope positions (Dry-Fresh) Mature Community.	MAL9, MAL11, YWK2
FOD1-4	Dry - Fresh Mixed Oak Deciduous Forest	Canopy: Black oak and white oak are dominant with eastern cottonwood, pin oak and swamp white oak as associates. Subcanopy: Black oak and pin oak are dominant with abundant black cherry. Understorey: American hazel and gray dogwood are codominant. Ground Layer: Canada goldenrod, common reed, eastern bracken-fern, inserted Virginia-creeper, interrupted fern (Osmunda claytoniana), rose twisted-stalk (Streptopus roseus), Royal fern (Osmunda regalis) and spotted crane's bill are dominant.	 Tree cover > 60 % (FO). Deciduous trees > 75 % of canopy cover (D). More than two Oak species are dominant (1-4). Sand and loam soils with rapid drainage in upper to middle slope positions (Dry-Fresh). Mid-age to Mature Community. 	MAL1, MAL1E
FOD2-2	Dry - Fresh Oak - Hickory Deciduous Forest	Canopy: Black oak, swamp white oak and shagbark hickory are dominant with bur oak, pin oak, red oak (Quercus rubra), freeman's maple and white oak as associates. Subcanopy: Black cherry and freeman's maple are codominant. Understorey: Black cherry and choke cherry (<i>Prunus virginiana</i> ssp. virginiana) are co-dominant with American elm and red ash as associates. Ground Layer: Garlic mustard, large-leaved aster (<i>Aster macrophyllus</i>), spotted crane's bill and yellowish enchanter's nightshade (<i>Circaea lutetiana</i> ssp. <i>canadensis</i>) are dominant with common blackberry (<i>Rubus allegheniensis</i>), inserted Virginia-creeper, Pennsylvania sedge, western poison-ivy (<i>Rhus rydbergii</i>), wild red raspberry (<i>Rubus idaeus</i> ssp. <i>melanolasius</i>) and yellow trout lily as associates.	 Tree cover > 60 % (FO). Deciduous trees > 75 % of canopy cover (D). Oak and Hickory are dominant (2-2). Sand and loam soils with rapid drainage in upper to middle slope positions (Dry-Fresh). Mature Community. 	ESA2

ELC Code	Vegetation Type	Species Association	Comments	LGL Polygon Reference
FOD4	Dry - Fresh Deciduous Forest	Canopy: Manitoba maple, black locust and eastern cottonwood are dominant with black cherry, freeman's maple, American elm and black walnut (<i>Juglans nigra</i>) as associates. Subcanopy: Black cherry, Manitoba maple and white mulberry. Understorey: Manitoba maple is dominant with abundant black cherry, prairie rose, Tartarian honeysuckle and white mulberry with some gray dogwood, poison-ivy (<i>Rhus radicans</i>), red ash, riverbank grape, smooth sumac (<i>Rhus glabra</i>), staghorn sumac and freeman's maple. Ground Layer: Garlic mustard is dominant with common dandelion (<i>Taraxacum officinale</i>), cleavers (<i>Galium aparine</i>) and inserted Virginia-creeper.	- Tree cover > 60 % (FO) Deciduous trees > 75 % of canopy cover (D) Tree species associations that are either relatively uncommon or a result of disturbance or management (4) Sand and loam soils with rapid drainage in upper to middle slope positions (Dry-Fresh) Young Community.	BBA1A, BBA7,BBA8, BBA12, BBBA14, MAL5, NCH7H, NGM1
FOD7-1	Fresh - Moist White Elm Lowland Deciduous Forest	Canopy: American elm is dominant with abundant standing snags of red ash with some black cherry, eastern cottonwood, pin oak and swamp white oak. Subcanopy: American elm, pin oak and swamp white oak are dominant. Understorey: Gray dogwood is dominant with American hazel, choke cherry, prairie rose and Tartarian honeysuckle as associates. Ground Layer: Common dandelion, inserted Virginiacreeper, Manitoba maple, marsh bedstraw (<i>Galium palustre</i>), marsh fern (<i>Thelypteris palustris</i> var. <i>pubescens</i>) and Sensitive fern.	- Tree cover > 60 % (FO) Deciduous trees > 75 % of canopy cover (D) Lowland deciduous forest (7), dominated by White Elm (-1) Sand, loam and clay soils that are poorly drained, in lower slope, mid slope, and bottomland positions (Fresh-Moist) Mid-age community.	NAR12
FOD7-2	Fresh - Moist Ash Lowland Deciduous Forest	Canopy: Red ash is dominant with American elm, eastern cottonwood, black cherry and red maple as associates. Subcanopy: American elm, black cherry, glossy buckthom (<i>Rhamnus frangula</i>), Manitoba maple, pin oak and red ash. Understorey: Black walnut, common buckthorn, choke cherry, gray dogwood, multiflora rose, nannyberry (<i>Viburnum lentago</i>), prairie rose, red ash, staghorn sumac and Tartarian honeysuckle. Ground Layer: Common dandelion, inserted Virginiacreeper, Manitoba maple, wild parsnip (<i>Pastinaca sativa</i>) and yellowish enchanter's nightshade.	 Tree cover > 60 % (FO). Deciduous trees > 75 % of canopy cover (D). Lowland deciduous forest (7), dominated by Red Ash (-2). Sand, loam and clay soils that are poorly drained, in lower slope, mid slope, and bottomland positions (Fresh-Moist). Young to Mid-age Community. 	NAR13, NSG3

ELC Code	Vegetation Type	Species Association	Comments	LGL Polygon Reference
FOD7-3	Fresh - Moist Willow Lowland Deciduous Forest	Canopy: Black willow (<i>Salix nigra</i>) is dominant with black cherry and Manitoba maple as associates. Subcanopy: Manitoba maple is dominant with black cherry, Drummond's dogwood, red ash and white mulberry as associates. Understorey: Common buckthorn, gray dogwood, and Tartarian honeysuckle are dominant with American elm, Black walnut, choke cherry, inserted Virginia-creeper, multiflora rose, nannyberry (<i>Viburnum lentago</i>), riverbank grape, prairie rose, red ash, red currant (<i>Ribes rubrum</i>) and staghorn sumac as associates. Ground Layer: Awnless brome (<i>Bromus inermis</i> ssp. <i>inermis</i>), Canada goldenrod, Canada thistle (<i>Cirsium arvense</i>), Common dandelion, inserted Virginia-creeper, Manitoba maple, orchard grass, upright yellow wood-sorrel (<i>Oxalis stricta</i>), wild parsnip (<i>Pastinaca sativa</i>) and yellowish enchanter's nightshade.	 Tree cover > 60 % (FO). Deciduous trees > 75 % of canopy cover (D). Lowland deciduous forest (7), dominated by Black Willow (-3). Sand, loam and clay soils that are poorly drained, in lower slope, mid slope, and bottomland positions (Fresh-Moist). Mature Community. 	LAM4A
FOD7-4	Fresh - Moist Black Walnut Lowland Deciduous Forest	Canopy: Black walnut is dominant with American elm, black cherry, black locust, common hackberry (<i>Celtis occidentalis</i>), eastern cottonwood, Manitoba maple, silver poplar (<i>Populus alba</i>) and freeman's maple as associates. Subcanopy: Black cherry, black walnut, common hackberry, Manitoba maple and white mulberry. Understorey: Black cherry, gray dogwood and Manitoba maple are dominant with amur honeysuckle (<i>Lonicera maackii</i>), black locust, choke cherry, common elderberry (<i>Sambucus canadensis</i>), common hackberry, narrow-leaved crabapple, poison-ivy, prairie rose, riverbank grape, sassafras, freeman's maple, Tartarian honeysuckle, thimble-berry and tree-of-heaven as associates. Ground Layer: Garlic mustard, lily-of-the-valley and inserted Virginia-creeper are dominant with Canada anemone (<i>Anemone canadensis</i>), cleavers, common burdock (<i>Arctium minus</i> ssp. <i>minus</i>), common motherwort (<i>Leonurus cardiaca</i> ssp. <i>cardiaca</i>), hound's-tongue (<i>Cynoglossum officinale</i>), Philadelphia fleabane (<i>Erigeron philadelphicus</i> ssp. <i>philadelphicus</i>), riverbank grape, scarlet strawberry, star-flowered Solomon's seal (<i>Maianthemum stellatum</i>), upright yellow wood-sorrel, white avens (Geum <i>canadense</i>) and yellow avens as associates.	- Tree cover > 60 % (FO) Deciduous trees > 75 % of canopy cover (D) Lowland deciduous forest (7), dominated by Black Walnut (-4) Sand, loam and clay soils that are poorly drained, in lower slope, mid slope, and bottomland positions (Fresh-Moist) Mid-age Community.	BBA2, BBA13

ELC	Vegetation	Charles Accordation	Comments	LGL Polygon
Code	Туре	Species Association	Comments	Reference
FOD8	Fresh - Moist Poplar- Sassafras Deciduous Forest	Canopy: Eastern cottonwood is dominant with abundant pin oak and freeman's maple with some black cherry, black oak, red ash, red oak and white oak. Subcanopy: Manitoba maple and red ash are dominant with black cherry, black willow, peach-leaved willow (Salix amygdaloides), pin oak, sassafras, freeman's maple and white mulberry as associates. Understorey: Gray dogwood, black cherry and Manitoba maple are dominant with black willow, choke cherry, common buckthorn, Drummond's dogwood, nannyberry, red ash, sassafras and wild black currant (Ribes americanum) as associates. Ground Layer: Canada bluegrass, Canada goldenrod, common reed, garlic mustard, inserted Virginia-creeper, Pennsylvania sedge, riverbank grape, spotted crane's bill and yellowish enchanter's nightshade.	 Tree cover > 60 % (FO). Deciduous trees > 75 % of canopy cover (D). Dominated by Poplars and Sassafras (8). Sand, loam and clay soils that are poorly drained, in lower slope, mid slope, and bottomland positions (Fresh-Moist). Young to Mature Community. 	MAL1B, NAR3A, NAR6A, NAR6B, NSG6, NSG10, OAK2
FOD8-1	Fresh - Moist Poplar Deciduous Forest	Canopy: Eastern cottonwood is dominant with American elm, Manitoba maple and trembling aspen (<i>Populus tremuloides</i>) as associates. Subcanopy: Gray dogwood and Manitoba maple are dominant. Understorey: American hazel, black cherry, choke cherry, common buckthorn, gray dogwood, Manitoba maple, prairie rose and red ash. Ground Layer: Common dandelion, inserted Virginiacreeper, old-field cinquefoil (<i>Potentilla simplex</i>), sensitive fern, yellow trout lily and yellowish enchanter's nightshade.	- Tree cover > 60 % (FO) Deciduous trees > 75 % of canopy cover (D) Dominated by Poplars (8-1) Sand, loam and clay soils that are poorly drained, in lower slope, mid slope, and bottomland positions (Fresh-Moist) Young Community.	HCL2, NAR8, NAR9
FOD8-2	Fresh - Moist Sassafras Deciduous Forest	Canopy: Sassafras is dominant with black cherry, eastern cottonwood and pin oak. Subcanopy: Black cherry and sassafras are dominant. Understorey: Black cherry, choke cherry, common buckthorn and sassafras. Ground Layer: Cleavers, inserted Virginia-creeper, rose twisted-stalk, sessile-leaved bellwort (<i>Uvularia sessilifolia</i>), spotted crane's bill, wild columbine (<i>Aquilegia canadensis</i>) and yellow trout lily.	- Tree cover > 60 % (FO) Deciduous trees > 75 % of canopy cover (D) Dominated by Sassafras (8-2) Sand, loam and clay soils that are poorly drained, in lower slope, mid slope, and bottomland positions (Fresh-Moist) Young Community.	HCL1A, HCL10

ELC Code	Vegetation Type	Species Association	Comments	LGL Polygon Reference
FOD9	Fresh - Moist Oak - Maple - Hickory Deciduous Forest	Canopy: Eastern cottonwood, pin oak and freeman's maple are dominant with black cherry, black oak and red oak. Subcanopy: American elm, black cherry, Manitoba maple, red ash and white mulberry. Understorey: American hazel, black cherry, gray dogwood and multiflora rose. Ground Layer: Inserted Virginia-creeper, Pennsylvania sedge, prickly raspberry, riverbank grape and yellowish enchanter's nightshade.	- Tree cover > 60 % (FO) Deciduous trees > 75 % of canopy cover (D) Dominated by Oak and Maple (9) Sand, loam and clay soils that are poorly drained, in lower slope, mid slope, and bottomland positions (Fresh-Moist) Young to Mid-age Community.	NAR7, NAR10, NAR11, NAR20, NSG12
Terrestria				
CUP	CULTURAL P		T	,
CUP1-8	Red Oak Deciduous Plantation	Canopy: Red oak is dominant with freeman's maple as a secondary. Subcanopy: Red Oak is dominant. Understorey: Gray dogwood and red ash are co-dominant. Ground Layer: Kentucky bluegrass, choke cherry and creeping Charlie (<i>Glechoma hederacea</i>) are dominant.	 Cultural communities (CU). Planted tree cover > 60% (P). Deciduous trees > 75% of canopy cover (1), dominated by Red Oak (-8). Mid-age community. 	NAR3B
CUP3	Coniferous Plantation	Canopy: Eastern white cedar (<i>Thuja occidentalis</i>) is dominant with eastern white pine (<i>Pinus strobus</i>) and red ash as associates. Understorey: Red ash and riverbank grape are codominant. Ground Cover: Field horsetail (<i>Equisetum arvense</i>) is dominant.	 Cultural communities (CU). Planted tree cover > 60% (P). Coniferous trees > 75% of canopy cover (3). Young community. 	NCH5
CUP3-3	Scotch Pine Coniferous Plantation	Canopy: Scotch pine (<i>Pinus sylvestris</i>) is dominant with Manitoba maple, black oak and eastern cottonwood as associates. Subcanopy: Black cherry, red ash and common crabapple (<i>Malus pumila</i>). Understorey: Red ash, American hazel and gray dogwood. Ground Cover: Field horsetail is dominant.	- Cultural communities (CU) Planted tree cover > 60% (P) Coniferous trees > 75% of canopy cover (3), dominated by Scotch Pine (-3) Young community.	NAR2

ELC	Vegetation	Species Association	Comments	LGL Polygon
Code	Туре	•	Comments	Reference
CUM	CULTURAL M	EADOW		
CUM1-1	Dry - Moist Old Field Meadow	Canopy: Wild carrot, common reed, tall goldenrod, orchard grass, Canada goldenrod, Kentucky bluegrass, Canada thistle, ribgrass (<i>Plantago lanceolata</i>), common St. John'swort (<i>Hypericum perforatum</i>), common yarrow (<i>Achillea millefolium</i> ssp. <i>millefolium</i>), white heath aster white sweet-clover (<i>Melilotus alba</i>), wild bergamot, Canada bluegrass common motherwort (<i>Leonurus cardiaca</i> ssp. <i>cardiaca</i>), creeping Charlie, garlic mustard, awnless brome, common dandelion, field horsetail, ironweed, prickly raspberry, quack grass (<i>Elymus repens</i>), scarlet strawberry, sensitive fern (<i>Onoclea sensibilis</i>) and shepherd's purse (<i>Capsella bursa-pastoris</i>).	- Cultural communities (CU) Tree cover and shrub cover < 25% (M) Parent mineral material or mineral soils (1) This community can occur on a wide range of soil moisture regimes (Dry-Moist) (-1) Pioneer community resulting from, or maintained by, anthropogenic-based influences.	BBA3A, BBA4E, BBA4E, BBA4F, BBA4G, BBA4G, BBA4H, BBA4I, BBA4J, BBA4K, BBA4K, BBA4K, BBA4S, BBA5, BBA7B, BBA8B, BBA16B, HCL7, HCL9, HWY1, HWY5, LAM4F, LAM4G, MAL1A, MAL3C, MAL8, NAR4C, NCH2A, NCH2A, NCH2B, NCH2C, NCH2D, NCH4A, NCH4Y, NSG7, OAK1A, RED2B, RED10, RED11, RED15, YWK3, YWK3A, YWK6, YWK8
CUT	CULTURAL TI	HICKET		
CUT1	Mineral Cultural Thicket	Canopy: Eastern cottonwood, red ash, American elm, freeman's maple, Cockspur thorn (<i>Crataegus crus-galli</i>) and pin oak. Understorey: Gray dogwood, staghorn sumac, common buckthorn, Manitoba maple, red ash, riverbank grape, silky dogwood and Tartarian honeysuckle. Ground Cover: Scarlet strawberry, Canada goldenrod, common dandelion, garlic mustard and sensitive fern.	- Cultural communities (CU) Tree cover <= 25%; shrub cover > 25% (T) Parent mineral material or mineral soils (1) Young community resulting from, or maintained by, anthropogenic-based influences.	BBA17, ESA3, ESA4, HWY4, NAR1, NAR3C, NAR5, NAR17, NAR19, NCH1B, NCH1C, NCH1E, NCH1F, NCH12, NSG1, NSG11, RED3, RED13

ELC Code	Vegetation Type	Species Association	Comments	LGL Polygon Reference
CUT1-4	Gray Dogwood Cultural Thicket	Canopy: Eastern cottonwood, red ash, pin oak, American elm and freeman's maple. Understorey: Gray dogwood is dominant with staghorn sumac and Drummond's dogwood as associates. Ground Cover: Common reed, common cinquefoil (Potentilla canadensis) and wild carrot.	- Cultural communities (CU) Tree cover <= 25%; shrub cover > 25% (T) Parent mineral material or mineral soils (1), dominated by Gray Dogwood (-4) Young community resulting from, or maintained by, anthropogenic-based influences.	BBA3, HCL3, HCL6, NAR6C, NCH1A, NCH1G, NSG2
CUS	CULTURAL S	AVANNAH	l	
CUS1	Mineral Cultural Savannah	Canopy: Manitoba maple, black walnut, eastern cottonwood, freeman's maple, tree-of-heaven (<i>Ailanthus altissima</i>) and white mulberry. Understorey: Manitoba maple, Tartarian honeysuckle, Drummond's dogwood, gray dogwood, prairie rose, Siberian elm, American elm, red ash and staghorn sumac. Ground Cover: Orchard grass, wild carrot, common mullein (<i>Verbascum thapsus</i>), common reed, white clover (<i>Trifolium repens</i>), awnless brome, Canada goldenrod, catnip (<i>Nepeta cataria</i>), common heal-all, inserted Virginia-creeper, tall goldenrod and white heath aster.	- Cultural communities (CU) 25% < Tree Cover <= 35% (S) Parent mineral material or mineral soils (1) Young community resulting from, or maintained by, anthropogenic-based influences.	BBA1, BBA1B, BBA4B, BBA4C, BBA4D, BBA4L, BBA4N, BBA4P, BBA4R, LAM3, MAL6, NCH7, NCH7G, NCH7J, NSG5
CUS1-1	Hawthorn Mineral Cultural Savannah	Canopy: Eastern cottonwood is dominant with Manitoba maple, red ash and black locust as associates. Understorey: Staghorn sumac is dominant with gray dogwood, cockspur thorn and eastern cottonwood as associates. Ground Cover: Common reed and Kentucky bluegrass are co-dominant with tall fescue, white sweet-clover, tall goldenrod and Orchard grass as associates.	- Cultural communities (CU) 25% < Tree Cover <= 35% (S) Parent mineral material or mineral soils (1), dominated by hawthorn and a mixture of other woody plants Young community resulting from, or maintained by, anthropogenic-based influences.	MAL3

ELC Code	Vegetation Type	Species Association	Comments	LGL Polygon Reference
CUW	CULTURAL W	OODLAND		Troforono
CUW1	Mineral Cultural Woodland	Canopy: Eastern cottonwood, freeman's maple, Manitoba maple, red ash, American elm, black cherry, black locust, black oak, pin oak, Siberian elm, silver maple (<i>Acer saccharinum</i>), tree-of-heaven, weeping willow (<i>Salix X sepulcralis</i>) and white mulberry. Subcanopy: Manitoba maple, red ash, American elm, Drummond's dogwood, freeman's maple and white mulberry. Understorey: Black cherry, gray dogwood, white mulberry, common buckthorn, red ash, American elm, common crabapple, eastern red cedar, guelder rose (<i>Viburnum opulus</i>), Japanese barberry (<i>Berberis thunbergi</i>), Manitoba maple, multiflora rose, nannyberry (<i>Viburnum lentago</i>), prairie rose, riverbank grape, Siberian elm, silky dogwood, staghorn sumac, Tartarian honeysuckle and thimble-berry. Ground Cover: Garlic mustard, common reed, inserted Virginia-creeper, yellowish enchanter's nightshade, calico aster, Canada bluegrass, Canada goldenrod, common dandelion, Indian hemp (<i>Apocynum cannabinum</i> var. <i>cannabinum</i>), Kentucky bluegrass, many-flowered agrimony, old-field cinquefoil, orchard grass, scarlet strawberry, sensitive fern, spotted crane's-bill, tall goldenrod, tall hairy agrimony (<i>Agrimonia gryposepala</i>), wild carrot and yellow avens.	- Cultural communities (CU) - 35% < Tree Cover <= 60% (W) Parent mineral material or mineral soils (1) Young community resulting from, or maintained by, anthropogenic-based influences.	ABO1, BBA4A, BBA4JB, BBA5B, BBA6, BBA9, BBA16, HCL1, HWY2, LAM2, LAM4B, LAM4D, LAM4E, LAM5, LAM6, LAM7, MAL1C MAL12, NAR3D, NAR14, NCH1, NCH1D, NCH3A, NCH7B, NCH7C, NCH7D, NCH7F, NCH7F, NCH7F, NCH7F, NCH7F, NCH7F, NCH8, NCH11, NGM2, NGM3, NSG4, NSG7B, NSG13, NSG14, NSG15, OAK1B, OAK2B, OAK2C, RED2A, RED9, YWK1, YWK1C, YWK4, YWK5

ELC	Vegetation	Species Association	Comments	LGL Polygon
Code	Туре			Reference
Wetland	DECIDITORIO	CMAND		
SWD SWD1-3	DECIDUOUS Pin Oak Mineral Deciduous Swamp	Canopy: Pin oak is dominant with abundant eastern cottonwood with some American elm, big shellbark hickory, black cherry, black oak, bur oak, Manitoba maple, red ash, shumard oak (<i>Quercus shumardii</i>), freeman's maple, swamp white oak, trembling aspen and white oak. Subcanopy: Pin oak is dominant with American elm, Manitoba maple, red ash, freeman's maple and swamp white oak as associates. Understorey: American hazel, big shellbark hickory (<i>Carya laciniosa</i>), black cherry, choke cherry, common buckthorn, gray dogwood, Manitoba maple, narrow-leaved crabapple and red ash. Ground Cover: Eastern cottonwood seedlings, inserted Virginia-creeper, marsh fern, Pennsylvania sedge, prickly raspberry, sensitive fern, spotted crane's bill, western	- Standing water >20% of ground coverage dominated by hydrophytic shrub and tree species (SW) Tree cover > 25% with deciduous tree species > 75% of canopy cover (D) Mineral soil (1) Pin Oak is dominant (-3).	HCL5, RED2. RED4, RED8
SWD3-3	Freeman's Maple Mineral Deciduous Swamp	poison-ivy, wood anemone, yellowish enchanter's nightshade and yellow trout lily. Canopy: Eastern cottonwood and freeman's maple are dominant with American basswood, American elm, black cherry, Manitoba maple, pin oak, red ash and trembling aspen as associates. Subcanopy: Swamp maple is dominant with American elm, Manitoba maple, pin oak and red ash as associates. Understorey: Red ash, silky dogwood and freeman's maple are dominant with Black cherry, common buckthorn, gray dogwood, guelder rose, Manitoba maple, Russian olive and staghorn sumac as associates. Ground Layer: Common reed, garlic mustard, inserted Virginia-creeper, riverbank grape, sensitive fern and wood anemone are dominant.	- Standing water >20% of ground coverage dominated by hydrophytic shrub and tree species (SW) Tree cover > 25% with deciduous tree species > 75% of canopy cover (D) Mineral soil (3) Freeman's Maple is dominant (-3).	MAL10, NCH3, NCH3B, NSG8, OAK2A, RED6, RED7
MAM MAM2	MEADOW MA Mineral Meadow Marsh	Canopy: Common reed is dominant with broad-leaved cattail (<i>Typha latifolia</i>), gray dogwood, Manitoba maple, narrow-leaved cattail (Typha angustifolia) and riverbank grape as associates. Ground Cover: Common barnyard grass (<i>Echinochloa crusgalli</i>), eastern cottonwood, hairy aster (<i>Aster pilosus</i> var. pilosus), Indian hemp, ironweed, Philadelphia fleabane, riverbank grape, small-spiked barnyard grass (<i>Echinochloa microstachya</i>), straw-colored umbrella sedge (<i>Cyperus strigosus</i>), tall goldenrod, Torrey's rush (<i>Juncus torreyi</i>), tree-of-heaven and white heath aster.	- Seasonally flooded and is dominated by emergent hydrophytic macrophytes (MAM) Represents the wetland – terrestrial interface Tree and shrub cover <= 25% Mineral soil (2), dominated by common reed Community age pioneer.	BBA10, HCL4, MAL2, MAL7, NAR6D, NAR18, RED14, YWK7

ELC Code	Vegetation Type	Species Association	Comments	LGL Polygon Reference
MAM2- 10	Forb Mineral Meadow Marsh	Canopy: European beggar-ticks (<i>Bidens tripartita</i>) is dominant with abundant devil's beggar-ticks (<i>Bidens frondosa</i>), spotted touch-me-not (<i>Impatiens capensis</i>) and tumor-curing cocklebur (<i>Xanthium strumarium</i>) as associates.	- Seasonally flooded and is dominated by emergent hydrophytic macrophytes (MAM) Represents the wetland – terrestrial interface Tree and shrub cover <= 25% Mineral soil (2), dominated by forbs (-10). Community age pioneer.	BBA15
MAS	SHALLOW MA	ARSH	T Community ago pionoon.	
MAS2-1	Cattail Mineral Shallow Marsh	Canopy: Narrow-leaved cattail is dominant with calico aster, Canada thistle, field sow-thistle (<i>Sonchus arvensis</i> ssp. <i>arvensis</i>), fowl meadow grass (<i>Poa palustris</i>), orchard grass and tumor-curing cocklebur as associates.	- Standing or flowing water for much of the growing season and hydrophytic emergent macrophyte cover >25 % (MAS) Tree and shrub cover <= 25% Mineral soil (2) Narrow-leaved Cattail is dominant (-1) Community age pioneer.	HCL8, YWK9
OAO	OPEN AQUA		T	
OAO	Open Aquatic	Ground Cover: Not applicable	No Macrophyte vegetation, trees, or shrub cover.Water Depth > 2m	HWY3



APPENDIX D

PROVINCIALLY RARE ELC VEGETATION COMMUNITIES¹ LOCATED IN THE AREA OF INVESTIGATION

LGL ID	ELC Code	ELC Description	Grank	Srank	# of S1-S3	S1-S3 Plant Species Identifier ²
ABO1	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	2	38,60
ANS1	TPW2-1	Fresh-Moist Black Oak-White Oak Tallgrass Woodland	G2	S1	12	8,22,30,32,35,37, 39,48,52,55,60,62
ANS1A	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	4	8,9,16,35
ANS2	TPW2-2	Fresh-Moist Pin Oak Tallgrass Woodland	G1	S1	13	13,22,26,30, 32,37,39,42, 44,45,48,55,60
ANS2C	TPW2-1	Fresh-Moist Black Oak-White Oak Tallgrass Woodland	G2	S1	17	13,22,27,30,32,35,37, 39,42,44,45,47, 48,55,58,60,62
BBA1	CUS1	Mineral Cultural Savannah Ecosite	not ranked	not ranked	5	3,14,38,39,60
BBA1A	FOD4	Dry-Fresh Deciduous Forest Ecosite	not ranked	not ranked	0	
BBA1B	CUS1	Mineral Cultural Savannah Ecosite	not ranked	not ranked	0	
BBA2	FOD7-4	Fresh-Moist Black Walnut Lowland Deciduous Forest	G4?	S2S3	1	48
BBA3	CUT1-4	Gray Dogwood Cultural Thicket	not ranked	not ranked	0	
BBA3A	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	0	
BBA4A	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	1	60
BBA4B	CUS1	Mineral Cultural Savannah Ecosite	not ranked	not ranked	3	3,7,60
BBA4C	CUS1	Mineral Cultural Savannah Ecosite	not ranked	not ranked	2	3,60
BBA4D	CUS1	Mineral Cultural Savannah Ecosite	not ranked	not ranked	3	3,25,60
BBA4E	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	1	60
BBA4EB	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	1	60
BBA4EC	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	5	3,7,30,38,60
BBA4F	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	8	20,25,37-39,52,57,60
BBA4G	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked		
BBA4H	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked		

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¹ Lee, H.T., W.D. Bakowsky, J. Riley, J. Bowles, M. Puddister, P. Uhlig and S. McMurray. 1998. Ecological Land Classification for Southern Ontario: First Approximation and Its Application. Ontario Ministry of Natural Resources, Southcentral Sciences Section, Science Development and Transfer Branch. SCSS Field Guide FG-02. North Bay, Ontario.

² Numbers correspond with the species number listed in Table 2 of the main report.

APPENDIX D

PROVINCIALLY RARE ELC VEGETATION COMMUNITIES LOCATED IN THE AREA OF INVESTIGATION

LGL ID	ELC Code	ELC Description	Grank	Srank	# of S1-S3	S1-S3 Plant Species Identifier ²
BBA4I	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked		
BBA4J	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked		
BBA4JB	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked		
BBA4K	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked		
BBA4L	CUS1	Mineral Cultural Savannah Ecosite	not ranked	not ranked		
BBA4N	CUS1	Mineral Cultural Savannah Ecosite	not ranked	not ranked		
BBA4P	CUS1	Mineral Cultural Savannah Ecosite	not ranked	not ranked		
BBA4R	CUS1	Mineral Cultural Savannah Ecosite	not ranked	not ranked		
BBA4S	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	1	25
BBA4M	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	2	52,60
BBA4MB	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	5	30,37,38,52,60
BBA5	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	0	
BBA5B	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	0	
BBA6	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	0	
BBA7	FOD4	Dry-Fresh Deciduous Forest Ecosite	not ranked	not ranked	1	48
BBA7B	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	0	
BBA8	FOD4	Dry-Fresh Deciduous Forest Ecosite	not ranked	not ranked	0	
BBA8B	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	0	
BBA9	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	0	
BBA10	MAM2	Mineral Meadow Marsh Ecosite	not ranked	not ranked	1	3
BBA12	FOD4	Dry-Fresh Deciduous Forest Ecosite	not ranked	not ranked	1	48
BBA13	FOD7-4	Fresh-Moist Black Walnut Lowland Deciduous Forest	G4?	S2S3	1	48
BBA14	FOD4	Dry-Fresh Deciduous Forest Ecosite	not ranked	not ranked	2	25,48
BBA15	MAM2- 10	Forb Mineral Meadow Marsh	G5?	S5	0	
BBA16	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not	1	3

APPENDIX D

PROVINCIALLY RARE ELC VEGETATION COMMUNITIES LOCATED IN THE AREA OF INVESTIGATION

LGL ID	ELC Code	ELC Description	Grank	Srank	# of S1-S3	S1-S3 Plant Species Identifier ²
				ranked		
BBA16B	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	1	3
BBA17	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	2	35,55
ESA1	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	4	37,38,57,60
ESA2	FOD2-2	Dry-Fresh Oak-Hickory Deciduous Forest	G4?	S3S4	5	16,25,37,39,55
ESA3	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	9	8,11,17,30,39, 52,55,57,60
ESA4	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	7	8,11,30,39,55,57,60
ESA5	TPS2-1	Fresh-Moist Pin Oak-Bur Oak Tallgrass Savannah	G1	S1	10	2,11,17,22,30, 37,39,55,57,60
HCL1	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	1	39
HCL1A	FOD8-2	Fresh-Moist Sassafras Deciduous Forest	not ranked	not ranked	1	55
HCL2	FOD8-1	Fresh-Moist Poplar Deciduous Forest	not ranked	not ranked	1	48
HCL3	CUT1-4	Gray Dogwood Cultural Thicket	not ranked	not ranked	10	8,17,30,37,39, 43,52,55,57,60
HCL4	MAM2	Mineral Meadow Marsh Ecosite	not ranked	not ranked	3	22,52,60
HCL5	SWD1-3	Pin Oak Mineral Deciduous Swamp	G2	S2S3	3	39,55,57
HCL6	CUT1-4	Gray Dogwood Cultural Thicket	not ranked	not ranked	8	11,17,22,38, 39,55,57,60
HCL7	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	0	
HCL8	MAS2-1	Cattail Mineral Shallow Marsh	G5	S5	1	18
HCL9	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	1	22
HCL10	FOD8-2	Fresh-Moist Sassafras Deciduous Forest	not ranked	not ranked	1	55
HWY1	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	4	22,39,52,60
HWY2	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	0	
HWY3	OAO	Open Aquatic	NA	S5	0	
HWY4	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	0	
HWY5	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	0	
LAM1	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	18	3,8,11,18,22,28, 30,32,35,37-39, 46,49,54,58-60
LAM2	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	11	8,11,18,22,30,37, 39,50,55,57,60

APPENDIX D

PROVINCIALLY RARE ELC VEGETATION COMMUNITIES LOCATED IN THE AREA OF INVESTIGATION

LGL ID	ELC Code	ELC Description	Grank	Srank	# of S1-S3	S1-S3 Plant Species Identifier ²
LAM3	CUS1	Mineral Cultural Savannah Ecosite	not ranked	not ranked	6	18,39,42,55,58,60
LAM4A	FOD7-3	Fresh-Moist Willow Lowland Deciduous Forest	not ranked	not ranked	0	
LAM4B	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	2	18,22
LAM4D	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	6	13,18,22,39,48,55
LAM4E	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	0	
LAM4F	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	0	
LAM4G	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	0	
LAM5	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	2	39,55
LAM6	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	0	
LAM7	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	2	39,55
MAL1	FOD1-4	Dry-Fresh Mixed Oak Deciduous Forest	G?	S3S4	6	22,37,44,49,53,55
MAL1A	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	0	
MAL1B	FOD8	Fresh-Moist Poplar-Sassafras Deciduous Forest Ecosite	not ranked	not ranked	5	21,22,30,37,55
MAL1C	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	0	
MAL1D	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	7	24,38,39,52, 57,59,60
MAL1E	FOD1-4	Dry-Fresh Mixed Oak Deciduous Forest	G?	S3S4	2	21,55
MAL2	MAM2	Mineral Meadow Marsh Ecosite	not ranked	not ranked	0	
MAL3	CUS1-1	Hawthorn Cultural Savannah	not ranked	not ranked	7	22,30,37,39, 49,52,60
MAL3B	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	10	3,14,18,22,30, 37,39,49,52,60
MAL3C	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	1	39
MAL5	FOD4	Dry-Fresh Deciduous Forest Ecosite	not ranked	not ranked	1	48
MAL6	CUS1	Mineral Cultural Savannah Ecosite	not ranked	not ranked	0	
MAL7	MAM2	Mineral Meadow Marsh Ecosite	not ranked	not ranked	0	
MAL8	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	0	
MAL9	FOD1-3	Dry-Fresh Black Oak Deciduous Forest	G4?	S3	5	22,35,37,39,55
MAL10	SWD3-3	Freeman's Maple Mineral Deciduous	not ranked	not	5	22,35,37,39,55

APPENDIX D

PROVINCIALLY RARE ELC VEGETATION COMMUNITIES LOCATED IN THE AREA OF INVESTIGATION

LGL ID	ELC Code	ELC Description	Grank	Srank	# of S1-S3	S1-S3 Plant Species Identifier ²
		Swamp		ranked		
MAL11	FOD1-3	Dry-Fresh Black Oak Deciduous Forest	G4?	S3	5	22,35,37,39,55
MAL12	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	2	38,60
NAR1	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	10	4,14,22,30,38, 49,51,55,59,60
NAR2	CUP3-3	Scotch Pine Coniferous Plantation	not ranked	not ranked	0	
NAR3A	FOD8	Fresh-Moist Poplar-Sassafras Deciduous Forest Ecosite	not ranked	not ranked	2	39,55
NAR3B	CUP1-8	Red Oak Deciduous Plantation	not ranked	not ranked	0	
NAR3C	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	0	
NAR3D	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	1	55
NAR4A	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	10	4,14,22,30, 37- 39,49,52,60
NAR4B	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	7	4,14,22,30,37,52,60
NAR4C	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	10	4,6,9,14,22, 30,32,37,52,60
NAR5	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	2	1,55
NAR6A	FOD8	Fresh-Moist Poplar-Sassafras Deciduous Forest Ecosite	not ranked	not ranked	1	55
NAR6B	FOD8	Fresh-Moist Poplar-Sassafras Deciduous Forest Ecosite	not ranked	not ranked	1	55
NAR6C	CUT1-4	Gray Dogwood Cultural Thicket	not ranked	not ranked	1	55
NAR6D	MAM2	Mineral Meadow Marsh Ecosite	not ranked	not ranked	2	34,52
NAR7	FOD9	Fresh-Moist Oak-Maple-Hickory Deciduous Forest Ecosite	not ranked	not ranked	0	
NAR8	FOD8-1	Fresh-Moist Poplar Deciduous Forest	not ranked	not ranked	1	36
NAR9	FOD8-1	Fresh-Moist Poplar Deciduous Forest	not ranked	not ranked	0	
NAR10	FOD9	Fresh-Moist Oak-Maple-Hickory Deciduous Forest Ecosite	not ranked	not ranked	1	55
NAR11	FOD9	Fresh-Moist Oak-Maple-Hickory Deciduous Forest Ecosite	not ranked	not ranked	0	
NAR12	FOD7-1	Fresh-Moist White Elm Lowland Deciduous Forest	not ranked	not ranked	4	10,37,39,55
NAR13	FOD7-2	Fresh-Moist Ash Lowland Deciduous Forest	not ranked	not ranked	0	
NAR14	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	3	22,37,39

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PROVINCIALLY RARE ELC VEGETATION COMMUNITIES LOCATED IN THE AREA OF INVESTIGATION

LGL ID	ELC Code	ELC Description	Grank	Srank	# of S1-S3	S1-S3 Plant Species Identifier ²
NAR15	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	13	4,5,9,10,14,22,30, 37,38,49,55,59,60
NAR16	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	13	5,9,10,14,22,30,37- 39,49,55,59,60
NAR17	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	1	55
NAR18	MAM2-2	Reed-canary Grass Mineral Meadow Marsh	not ranked	not ranked	0	
NAR19	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	4	9,39,55,60
NAR20	FOD9	Fresh-Moist Oak-Maple-Hickory Deciduous Forest Ecosite	not ranked	not ranked	1	55
NCH1	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	1	39
NCH1A	CUT1-4	Gray Dogwood Cultural Thicket	not ranked	not ranked	5	4,5,39,49,55
NCH1B	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	5	4,5,39,49,55
NCH1C	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	5	4,5,39,49,55
NCH1D	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	5	9,22,37,39,55
NCH1E	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	1	57
NCH1F	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	2	39,55
NCH1G	CUT1-4	Gray Dogwood Cultural Thicket	not ranked	not ranked	2	39,55
NCH2A	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	4	5,37,39,60
NCH2B	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	7	9,15,22,24,35,55,60
NCH2C	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	3	22,30,60
NCH2D	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	2	39,55
NCH2E	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	6	1,4,14,15,22,30
NCH3	SWD3-3	Freeman's Maple Mineral Deciduous Swamp	not ranked	not ranked	1	39
NCH3A	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	0	
NCH3B	SWD3-3	Freeman's Maple Mineral Deciduous Swamp	not ranked	not ranked	0	
NCH4A	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	2	39,60
NCH4B	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	12	2,4,14,15,22,27, 30,37-39,59,60
NCH4Y	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not	3	27,39,60

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PROVINCIALLY RARE ELC VEGETATION COMMUNITIES LOCATED IN THE AREA OF INVESTIGATION

LGL ID	ELC Code	ELC Description	Grank	Srank	# of S1-S3	S1-S3 Plant Species Identifier ²
				ranked		
NCH4Z	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	10	4,14,15,22,30,37- 39,59,60
NCH5	CUP3	Coniferous Plantations	not ranked	not ranked	0	
NCH7	CUS1	Mineral Cultural Savannah Ecosite	not ranked	not ranked	2	39,59
NCH7B	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	1	55
NCH7C	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	1	55
NCH7D	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	0	
NCH7E	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	2	18,22
NCH7F	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	4	9,22,39,59
NCH7G	CUS1	Mineral Cultural Savannah Ecosite	not ranked	not ranked	0	
NCH7H	FOD4	Dry-Fresh Deciduous Forest Ecosite	not ranked	not ranked	1	39
NCH7J	CUS1	Mineral Cultural Savannah Ecosite	not ranked	not ranked	2	39,55
NCH8	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	2	39,48
NCH11	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	2	39,55
NCH12	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	13	1,5,6,14,15,19,22, 29,30,37,49,52,60
NCH12B	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	7	15,18,22,30, 32,37,52,
NGM1	FOD4	Dry-Fresh Deciduous Forest Ecosite	not ranked	not ranked	5	23,55,59-61
NGM2	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	5	23,55,59-61
NGM3	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	2	38,60
NSG1	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	2	39,55
NSG2	CUT1-4	Gray Dogwood Cultural Thicket	not ranked	not ranked	3	11,22,39
NSG3	FOD7-2	Fresh-Moist Ash Lowland Deciduous Forest	not ranked	not ranked	2	39,55
NSG4	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	0	
NSG5	CUS1	Mineral Cultural Savannah Ecosite	not ranked	not ranked	9	22,30,37- 39,49,53,55,60
NSG6	FOD8	Fresh-Moist Poplar-Sassafras Deciduous	not ranked	not	1	55

APPENDIX D

PROVINCIALLY RARE ELC VEGETATION COMMUNITIES LOCATED IN THE AREA OF INVESTIGATION

LGL ID	ELC Code	ELC Description	Grank	Srank	# of S1-S3	S1-S3 Plant Species Identifier ²
		Forest Ecosite		ranked		
NSG7	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	3	30,38,60
NSG7A	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	3	30,38,60
NSG7B	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	1	55
NSG7C	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	3	30,38,60
NSG8	SWD3-3	Freeman's Maple Mineral Deciduous Swamp	not ranked	not ranked	1	55
NSG10	FOD8	Fresh-Moist Poplar-Sassafras Deciduous Forest Ecosite	not ranked	not ranked	1	55
NSG11	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	3	22,39,55
NSG12	FOD9	Fresh-Moist Oak-Maple-Hickory Deciduous Forest Ecosite	not ranked	not ranked	1	55
NSG13	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	2	38,55
NSG14	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	2	38,60
NSG15	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	0	
OAK1A	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	7	9,14,22,30,32,52,60
OAK1B	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	9	4,21,23,30,39, 52,55,57,60
OAK2	FOD8	Fresh-Moist Poplar-Sassafras Deciduous Forest Ecosite	not ranked	not ranked	5	22,39,48,55,60
OAK2A	SWD3-3	Freeman's Maple Mineral Deciduous Swamp	not ranked	not ranked	1	23
OAK2B	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	1	60
OAK2C	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	2	22,39
OAK3	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	5	1,14,30,32,33
OAK4	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	0	1,14,30,32,33
RED2	SWD1-3	Pin Oak Mineral Deciduous Swamp	G2	S2S3	7	22,36,39,41,55-57
RED2A	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	3	1,39,56
RED2B	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	4	1,9,15,55
RED3	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	3	22,59,60
RED4	SWD1-3	Pin Oak Mineral Deciduous Swamp	G2	S2S3	5	22,39,45,55,56
RED5	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	4	22,30,39,60
RED6	SWD3-3	Freeman's Maple Mineral Deciduous Swamp	not ranked	not ranked	0	

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PROVINCIALLY RARE ELC VEGETATION COMMUNITIES LOCATED IN THE AREA OF INVESTIGATION

LGL ID	ELC Code	ELC Description	Grank	Srank	# of S1-S3	S1-S3 Plant Species Identifier ²
RED7	SWD3-3	Freeman's Maple Mineral Deciduous Swamp	not ranked	not ranked	5	18,37,39,55,60
RED8	SWD1-3	Pin Oak Mineral Deciduous Swamp	G2	S2S3	7	18,22,37,39, 44,55,56
RED9	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	0	
RED10	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	0	
RED11	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	0	
RED12	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	9	8,14,15,19, 22,30,39,52,60
RED13	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	9	8,14,15,19,22, 30,39,52,60
RED14	MAM2	Mineral Meadow Marsh Ecosite	not ranked	not ranked	2	52,60
RED15	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	0	
YWK1	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	11	4,22,30,32,37,39, 40,49,51,55,60
YWK1B	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	10	4,22,30,32,37,39, 40,49,51,60
YWK1C	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	11	4,22,30,32,37,39, 40,49,51,55,60
YWK2	FOD1-3	Dry-Fresh Black Oak Deciduous Forest	G4?	S3	4	22,48,55,60
YWK3	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	3	18,22,60
YWK3A	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	0	
YWK4	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	4	7,37,55,60
YWK5	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	3	34,55,60
YWK6	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	1	34
YWK7	MAM2	Mineral Meadow Marsh Ecosite	not ranked	not ranked	2	55,60
YWK8	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	3	7,37,60
YWK9	MAS2-1	Cattail Mineral Shallow Marsh	G5	S5	0	

Note: Shading indicates vegetation communities that are provincially rare.



				FISH HABITAT ASSE	SSMENT SUMMARY				
Watercourse/ Waterbody Name	Reach Location	Agricultural Municipal Drain Classification (A, B, C, D, E, F)	Fish Community (warmwater, coolwater, coldwater, baitfish, sportfish, migratory)	Habitat Summary	Flow Conditions (ephemeral, intermittent, permanent)	Drainage Connectivity (obstructed, partially obstructed, unobstructed)	Habitat Class (marginal, important, critical)	Channel Structure (channelized, channelized lined, natural)	Comments
Basin Drain	Upstream of E.C. Row	F	none	 piped upstream and downstream of Continental Drive open pooled water upstream of E.C. Row buried culvert? 	permanent	obstructed	none	channelized	
Basin Drain	Downstream of E.C. Row	F	warmwater baitfish	 ditched watercourse morphology – flats with small riffle and pools near Spring Garden Road width 2 m, depth 30 cm more shallow and diverse downstream sparse instream cover upstream, more downstream riparian vegetation – trees, shrubs and herbaceous vegetation substrate – muck 	permanent	unobstructed	marginal	channelized	
Benson Drain	Upstream of South Talbot Road	F	warmwater baitfish	 narrow ditched watercourse morphology – flats with dry areas width 0.5 m, depth 10 cm riparian vegetation – trees, shrubs, grasses and herbaceous vegetation good shade sparse instream cover substrate – clay 	intermittent	unobstructed	marginal	channelized	
Broadway Drain	Upstream of Sandwich Street	F	none	 roadside ditch dry lack of channel definition riparian vegetation – cattails and <i>Phragmites</i> 	intermittent	partially obstructed	marginal	channelized	
Broadway Drain	Downstream of Sandwich Street	F		 seasonal ditched watercourse mostly dry – rip rap-lined pool at culvert receives warm effluent pool 2.5 m wide, 25 cm deep some channel definition riparian vegetation - cattails, <i>Phragmites</i> and trees channel accessible from Detroit River during high flows 	intermittent	partially obstructed	marginal	channelized	
Burke Drain	South Talbot Road to Talbot Road	F	warmwater sportfish	 pooled water in roadside ditch width 2 m, depth 15 cm riparian vegetation – cattails substrate – detritus and muck 	intermittent	partially obstructed	marginal	channelized	Water does not appear to be flowing. Water is pooled in a deep roadside ditch
Burke Drain	Downstream of South Talbot Road	F	none	roadside ditchdrylack of channel definition	ephemeral	partially obstructed	none	channelized	
Cahill Drain	Upstream of confluence with Wolfe Drain	F	warmwater baitfish	 narrow ditched watercourse morphology – flats with some runs and riffles width 1.5 m, depth 20 cm sparse instream cover riparian vegetation – herbaceous vegetation and grasses substrate – clay 	permanent	unobstructed	marginal	channelized	

Watercourse/ Waterbody Name	Reach Location	Agricultural Municipal Drain Classification (A, B, C, D, E, F)	Fish Community (warmwater, coolwater, coldwater, baitfish, sportfish, migratory)	Habitat Summary	Flow Conditions (ephemeral, intermittent, permanent)	Drainage Connectivity (obstructed, partially obstructed, unobstructed)	Habitat Class (marginal, important, critical)	Channel Structure (channelized, channelized lined, natural)	Comments
Cahill Drain	Downstream of Talbot Road	E	warmwater sportfish	ditched watercourse with some naturalization morphology – flats with some runs and pools width 4 m, depth 40 cm riparian vegetation – trees, shrubs, herbaceous vegetation and grasses substrate – muck	permanent	unobstructed	important	channelized	
Collins Drain	Upstream of Confluence with Wolfe Drain	F	warmwater baitfish	 ditched watercourse morphology - flats width 1.5 m, depth 5 cm riparian vegetation – cattails and <i>Phragmites</i> substrate – clay/silt 	intermittent	unobstructed	marginal	channelized	
Dickson Drain	Upstream of Confluence with Benson Drain	F	none	 roadside ditch dry lack of channel definition riparian vegetation – cattails 	ephemeral	partially obstructed	none	channelized	
Dickson Drain	Downstream of South Talbot Road	F	warmwater baitfish	 narrow ditched watercourse morphology – flats with dry areas width 1 m, depth 10 cm riparian vegetation – trees, shrubs, grasses and herbaceous vegetation good shade sparse instream cover substrate – clay 	intermittent	unobstructed	marginal	channelized	
Grand Marais Drain (Turkey Creek)	Upstream of Huron Church Road	unclassified	warmwater sportfish	 concrete lined channel morphology - runs width 2.2 m, depth 25 cm very sparse instream cover no riparian vegetation substrate – silt and sand over concrete 	permanent	unobstructed	marginal	channelized concrete lined	
Grand Marais Drain (Turkey Creek)	Downstream of Huron Church Road	Е	warmwater sportfish	 concrete lined channel morphology – runs with small riffles width 2.2 m, depth 25 cm sparse instream cover no riparian vegetation for 100 m, then old field vegetation substrate – silt and sand over concrete 	permanent	unobstructed	marginal	channelized concrete lined	
Healy Drain	Upstream of Sandwich Street	F	none	 roadside ditch obstructed by buried culvert some standing water lack of channel definition riparian vegetation – cattails and <i>Phragmites</i> 	intermittent	obstructed	none	channelized	
Healy Drain	Downstream of Sandwich Street	F	warmwater	 seasonal ditched watercourse dry riparian vegetation – cattails and <i>Phragmites</i> channel accessible from Detroit River during high flows 	intermittent	partially obstructed	marginal	channelized	
Howard Avenue Drain	Upstream of South Talbot Road	F	none	 roadside ditch dry lack of channel definition riparian vegetation - cattails 	ephemeral	partially obstructed	none	channelized	

	FISH HABITAT ASSESSMENT SUMMARY								
Watercourse/ Waterbody Name	Reach Location	Agricultural Municipal Drain Classification (A, B, C, D, E, F)	Fish Community (warmwater, coolwater, coldwater, baitfish, sportfish, migratory)	Habitat Summary	Flow Conditions (ephemeral, intermittent, permanent)	Drainage Connectivity (obstructed, partially obstructed, unobstructed)	Habitat Class (marginal, important, critical)	Channel Structure (channelized, channelized lined, natural)	Comments
Lennon Drain	Upstream of Talbot Road	F	warmwater sportfish	ditched watercourse morphology – flats width 2 m, depth 25 cm sparse instream cover riparian vegetation – manicured grass with some trees substrate – geotextile and clay	permanent	unobstructed	important	channelized	
Lennon Drain	Talbot Road to Huron Church Line	E	warmwater sportfish	 ditched watercourse morphology – runs with few riffles width 1.5 m, depth 20 cm riparian vegetation – herbaceous vegetation, grasses, and few shrubs substrate – rip rap good instream cover 	permanent	unobstructed	important	channelized rip rap lined	
Lennon Drain	Downstream of Huron Church Line	E	warmwater sportfish	ditched watercourse morphology – runs with few riffles width 1.5 m, depth 20 cm sparse instream cover riparian vegetation – manicured grass with some trees substrate - clay	permanent	unobstructed	important	channelized	
Marentette Drain	Upstream of Huron Church Road	F	none	Piped	intermittent	obstructed	none	channelized	
Marentette Drain	Downstream of Huron Church Road	F	none	 piped for ~60 m then open dry channel riparian vegetation – trees substrate – silt and detritus 	intermittent	obstructed	none	channelized	
McKee Drain	Upstream of Matchette Road	F	none	 piped upstream of Matchette Road across residential property open channel inaccessible to fish riparian vegetation – manicured grass 	intermittent	obstructed	none	channelized	
McKee Drain	Matchette Road to E.C. Row	F	warmwater sportfish	 ditched watercourse partially rip rap lined near E.C. Row morphology – flat width 1.5 m, depth 20 less water near Matchette Road riparian vegetation – <i>Phragmites</i> substrate – muck and detritus 	intermittent	unobstructed	important	channelized	
McKee Drain	Downstream of E.C. Row	F	warmwater sportfish	 ditched watercourse rip rap lined morphology - flat width 2 m, depth 20 cm riparian vegetation – <i>Phragmites</i> substrate – muck and detritus 	intermittent	unobstructed	important	channelized	
McKee Creek	Upstream of Sandwich Street	F	warmwater sportfish	 ditched watercourse lined with sheet piling morphology – flat width 3 m, depth 15 cm riparian vegetation – old field with vines substrate – muck 	permanent	unobstructed	important	channelized	

				FISH HABITAT ASSE	ESSIMENT SUMMARY				
Watercourse/ Waterbody Name	Reach Location	Agricultural Municipal Drain Classification (A, B, C, D, E, F)	Fish Community (warmwater, coolwater, coldwater, baitfish, sportfish, migratory)	Habitat Summary	Flow Conditions (ephemeral, intermittent, permanent)	Drainage Connectivity (obstructed, partially obstructed, unobstructed)	Habitat Class (marginal, important, critical)	Channel Structure (channelized, channelized lined, natural)	Comments
McKee Creek	Downstream of Sandwich Street	E	warmwater sportfish	 ditched watercourse flows downstream of sandwich street into a canal on Van De Hogen property morphology – flat width 4 m, depth 25 cm riparian vegetation – <i>Phragmites</i> substrate – muck and silt 	permanent	partially obstructed	important	channelized	
NoName Tributary of Dickson Drain along South Talbot Road	Upstream of Confluence with Dickson Drain	F	none	 roadside ditch dry lack of channel definition riparian vegetation - cattails 	ephemeral	partially obstructed	none	channelized	
NoName Tributary of Susan Drain along Broadway Street	Upstream of Confluence with Susan Drain	F	none	 roadside ditch dry lack of channel definition riparian vegetation – cattails and <i>Phragmites</i> 	none	partially obstructed	none	channelized	
No Name Tributary of Wolfe Drain along HWY 401	Upstream of confluence with Wolfe Drain	F	none	 roadside ditch dry lack of channel definition riparian vegetation – cattails and <i>Phragmites</i> 	ephemeral	partially obstructed	none	channelized	
No Name Tributary of Wolfe Drain along Howard Avenue	Upstream of confluence with Wolfe Drain	F	none	 roadside ditch dry lack of channel definition riparian vegetation – cattails and <i>Phragmites</i> 	ephemeral	partially obstructed	none	channelized	
Susan Drain	Downstream of Broadway Street to Confluence with NoName Tributary	F	none	 ditched watercourse dry riparian vegetation – Oak forest substrate - detritus 	intermittent	unobstructed	none	channelized	
Talbot Drain	Upstream of confluence with Cahill Drain	F	none	 narrow ditched watercourse riparian vegetation – trees, shrubs, herbaceous vegetation and grasses substrate – clay perched above Cahill Drain at confluence 	intermittent	obstructed	none	channelized	
Titcombe Drain	Downstream of E.C. Row	F	warmwater sportfish	 seasonal ditched watercourse no flow in September 2006 pockets of standing water near Chappus Road approximate width of channel 1.5 m riparian vegetation – trees, shrubs, herbaceous vegetation and manicured grass substrate – silt and detritus 	intermittent	unobstructed	important	channelized	
Unnamed pond	West of Outer Drive, east of Howard Ave, South of Talbot Road	unclassified	warmwater sportfish	 pond habitat dimensions approximately 55x55 m riparian vegetation – cattails, trees and shrubs substrate – clay and muck 	permanent	Not connected	marginal	Man made	Man made pond Not connected to watercourses
Wolfe Drain	Upstream of Confluence with Collins Drain	F	warmwater baitfish	 ditched watercourse morphology – flats and runs width 1.5 m, depth 25 cm sparse instream cover riparian vegetation – herbaceous vegetation and grasses substrate - clay 	permanent	unobstructed	marginal	channelized	

APPENDIX E FISH HABITAT ASSESSMENT SUMMARY

Watercourse/ Waterbody Name	Reach Location	Agricultural Municipal Drain Classification (A, B, C, D, E, F)	Fish Community (warmwater, coolwater, coldwater, baitfish, sportfish, migratory)	Habitat Summary	Flow Conditions (ephemeral, intermittent, permanent)	Drainage Connectivity (obstructed, partially obstructed, unobstructed)	Habitat Class (marginal, important, critical)	Channel Structure (channelized, channelized lined, natural)	Comments
Wolfe Drain	Confluence with Collins Drain to Confluence with Cahill Drain	F	warmwater baitfish	ditched watercourse morphology – flats with some runs, pools and riffles width 2 m, depth 25 cm sparse instream cover riparian vegetation – trees, shrubs, herbaceous vegetation and grasses well shaded for most of reach	permanent	unobstructed	marginal	channelized	
Wolfe Drain	Confluence with Cahill Drain to Talbot Road Crossing	E	warmwater sportfish	 ditched watercourse morphology – flats with some runs, riffles and pools width 2 m, depth 15 cm sparse instream cover riparian vegetation –shrubs, herbaceous vegetation and grasses good shade for most of reach substrate - clay 	permanent	unobstructed	marginal	channelized	
Youngstown Drain	Upstream of Confluence with Basin Drain	F	warmwater baitfish	narrow ditched watercourse morphology - flats width 0.3 m, depth 10 cm very little flow riparian vegetation – herbaceous vegetation and grasses substrate – clay	intermittent	unobstructed	marginal	channelized	



APPENDIX F LIST OF WILDLIFE SPECIES RECORDED IN THE AREA OF INVESTIGATION

Wildlife	Scientific Name	Common Name	COSEWIC	OMNR	Local	Legal Status	Others ¹
Herpetofauna	Bufo americanus	American Toad					
	Pseudacris triseriata	Western Chorus Frog					
	Rana pipiens	Northern Leopard Frog					
	Rana clamitans	Green Frog					
	Chelydra serpentina	Snapping Turtle				FWCA(G)	
	Chrysemys picta marginata	Midland Painted Turtle				FWCA(P)	
	Thamnophis sirtalis	Eastern Gartersnake					
	Thamnophis butleri	Butler's Gartersnake	THR	THR		SARA(1)/ FWCA(P)	
	Storeria dekayi	Dekay's Brown Snake				, ,	
	Storeria occipitomaculata	Northern Red-bellied Snake					
	·					SARA(1)/	
	Elaphe gloydi	Eastern Fox Snake	THR	THR		FWCA(P)	
Birds	Branta canadensis	Canada Goose				MBCA	
	Aix sponsa	Wood Duck			BSC	MBCA	
	Anas platyrhynchos	Mallard				MBCA	
						MBCA /	
	Phasianus colchicus	Ring-necked Pheasant				FWCA(G)	
	Phalacrocorax auritus	Double-crested Cormorant					
	Ardea herodias	Great Blue Heron				MBCA	
1	Ardea alba	Great Egret				MBCA	
	Nycticorax nycticorax	Black-crowned Night Heron			BSC	MBCA	
	Cathartes aura	Turkey Vulture			BSC	FWCA(P)	
	Pandion haliaetus	Osprey			BSC	FWCA(P)	
	Accipiter striatus	Sharp-shinned Hawk				FWCA(P)	
	Accipiter cooperii	Cooper's Hawk				FWCA(P)	
	Accipiter gentilis	Northern Goshawk				FWCA(P)	
	Buteo platypterus	Broad-winged Hawk			BSC	FWCA(P)	
	Buteo jamaicensis	Red-tailed Hawk				FWCA(P)	
	Falco sparverius	American Kestrel			BSC	FWCA(P)	
	Charadrius vociferus	Killdeer				MBCÀ	
	Actitis macularius	Spotted Sandpiper			BSC	MBCA	
	Gallinago delicata	Wilson's Snipe			BSC	MBCA	
	Scolopax minor	American Woodcock			BSC	MBCA	
	Larus delawarensis	Ring-billed Gull				MBCA	
	Columba livia	Rock Pigeon					
	Zenaida macroura	Mourning Dove				MBCA	
	Coccyzus americanus	Yellow-billed Cuckoo			BSC	MBCA	*
	Megascops asio	Eastern Screech-Owl				FWCA(P)	
	Archilochus colubris	Ruby-throated Hummingbird			BSC	MBCA	
	Melanerpes	,					
	erythrocephalus	Red-headed Woodpecker	SC	SC	BSC	MBCA	
	Melanerpes carolinus	Red-bellied Woodpecker			BSC	MBCA	
	Picoides pubescens	Downy Woodpecker				MBCA	
	Picoides villosus	Hairy Woodpecker				MBCA	*
	Colaptes auratus	Northern Flicker				MBCA	
	Contopus virens	Eastern Wood Pewee				MBCA	

¹ An asterisk indicates that the species has been identified by others and that suitable habitat exists in the area of investigation.

APPENDIX F LIST OF WILDLIFE SPECIES RECORDED IN THE AREA OF INVESTIGATION

Wildlife	Scientific Name	Common Name	COSEWIC	OMNR	Local	Legal Status	Others
	Empidonax traillii	Willow Flycatcher				MBCA	
	Empidonax minimus	Least Flycatcher				MBCA	
	Sayornis phoebe	Eastern Phoebe			BSC	MBCA	
	Myiarchus crinitus	Great Crested Flycatcher				MBCA	*
	Tyrannus tyrannus	Eastern Kingbird			BSC	MBCA	
	Vireo flavifrons	Yellow-throated Vireo				MBCA	
	Vireo solitarius	Blue-headed Vireo				MBCA	
	Vireo gilvus	Warbling Vireo				MBCA	
	Vireo olivaceus	Red-eyed Vireo				MBCA	
	Cyanocitta cristata	Blue Jay				FWCA(P)	
	Corvus brachyrhynchos	American Crow				` /	
	Eremophila alpestris	Horned Lark			BSC	MBCA	
	Tachycineta bicolor	Tree Swallow				MBCA	
	,	Northern Rough-winged					
	Stelgidopteryx serripennis	Swallow			BSC	MBCA	
	Petrochelidon pyrrhonota	Cliff Swallow			BSC	MBCA	
	Hirundo rustica	Barn Swallow			BSC	MBCA	
	Poecile atricapillus	Black-capped Chickadee				MBCA	
	Sitta carolinensis	White-breasted Nuthatch				MBCA	
	Certhia americana	Brown Creeper			BSC	MBCA	
	Thryothorus Iudovicianus	Carolina Wren			BSC	MBCA	
	Troglodytes aedon	House Wren				MBCA	
	Regulus satrapa	Golden-crowned Kinglet				MBCA	
	Regulus calendula	Ruby-crowned Kinglet				MBCA	
	Polioptila caerulea	Blue-gray Gnatcatcher			BSC	MBCA	
	Sialia sialis	Eastern Bluebird			BSC	MBCA	
	Cathartes fuscescens	Veery			BSC	MBCA	
	Catharus guttatus	Hermit Thrush				MBCA	
	Hylocichla mustelina	Wood Thrush				MBCA	
	Turdus migratorius	American Robin				MBCA	
	Dumetella carolinensis	Gray Catbird			BSC	MBCA	
	Toxostoma rufum	Brown Thrasher			BSC	MBCA	
	Sturnus vulgaris	European Starling					
	Bombycilla cedrorum	Cedar Waxwing				MBCA	
	Vermivora chrysoptera	Golden-winged Warbler				MBCA	
	Vermivora peregrina	Tennessee Warbler				MBCA	
	Vermivora ruficapilla	Nashville Warbler				MBCA	
	Parula americana	Northern Parula				MBCA	
	Dendroica petechia	Yellow Warbler				MBCA	
	Dendroica pensylvanica	Chestnut-sided Warbler			BSC	MBCA	
	Dendroica magnolia	Magnolia Warbler				MBCA	
	Dendroica caerulescens	Black-throated Blue Warbler				MBCA	
	Dendroica coronata	Yellow-rumped Warbler				MBCA	
	Dendroica virens	Black-throated Green Warbler				MBCA	
	Dendroica fusca	Blackburnian Warbler				MBCA	
	Dendroica pinus	Pine Warbler				MBCA	
	Dendroica palmarum	Palm Warbler				MBCA	
	Dendroica castanea	Bay-breasted Warbler				MBCA	
	Mniotilta varia	Black and White Warbler				MBCA	
	Setophaga ruticilla	American Redstart			BSC	MBCA	

APPENDIX F LIST OF WILDLIFE SPECIES RECORDED IN THE AREA OF INVESTIGATION

Wildlife	Scientific Name	Common Name	COSEWIC	OMNR	Local	Legal Status	Others ¹
	Seiurus aurocapilla	Ovenbird			BSC	MBCA	*
	Oporornis philadelphia	Mourning Warbler			BSC	MBCA	
	Geothlypis trichas	Common Yellowthroat				MBCA	
	Wilsonia pusilla	Wilson's Warbler				MBCA	
	Piranga olivacea	Scarlet Tanager			BSC	MBCA	*
	Pipilo erythrophthalmus	Eastern Towhee			BSC	MBCA	
	Spizella passerina	Chipping Sparrow				MBCA	
	Spizella pusilla	Field Sparrow			BSC	MBCA	
	Pooecetes gramineus	Vesper Sparrow			BSC	MBCA	
	Passerculus sandwichensis	Savannah Sparrow			BSC	MBCA	
	Melospiza georgiana	Swamp Sparrow			BSC	MBCA	*
	Melospiza melodia	Song Sparrow				MBCA	
	Melospiza lincolnii	Lincoln's Sparrow				MBCA	
	Zonotrichia albicollis	White-throated Sparrow				MBCA	
	Zonotrichia leucophrys	White-crowned Sparrow				MBCA	
	Junco hyemalis	Dark-eyed Junco				MBCA	
	Cardinalis cardinalis	Northern Cardinal				MBCA	
	Pheucticus Iudovicianus	Rose-breasted Grosbeak				MBCA	
	Passerina cyanea	Indigo Bunting				MBCA	
	Agelaius phoeniceus	Red-winged Blackbird					
	Quiscalus quiscula	Common Grackle					
	Molothrus ater	Brown-headed Cowbird					
	Icterus spurius	Orchard Oriole			BSC	MBCA	
	Icterus galbula	Baltimore Oriole				MBCA	
	Carpodacus mexicanus	House Finch				MBCA	
	Carduelis tristis	American Goldfinch			BSC	MBCA	
	Passer domesticus	House Sparrow					
Mammals	Didelphis virginiana	Virginia Opossum				FWCA(F)	
	Blarina brevicauda	N. Short-tailed Shrew				FWCA(P)	
	Eptesicus fuscus	Big Brown Bat				FWCA(P)	*
	Lasiurus borealis	Eastern Red Bat				FWCA(P)	*
	Lasiurus cinereus	Hoary Bat				FWCA(P)	*
	Sylvilagus floridanus	Eastern Cottontail				FWCA(G)	
	Lepus europaeus	European Hare				FWCA(G)	
	Tamias striatus	Eastern Chipmunk				FWCA(P)	
	Marmota monax	Groundhog				,	
	Sciurus carolinensis	Gray Squirrel				FWCA(G)	
	Peromyscus leucopus	White-footed Mouse				` ,	
	Microtus pennsylvanicus	Meadow Vole					
	Ondatra zibethica	Muskrat				FWCA(F)	
	Rattus norvegicus	Norway Rat					*
	Mus musculus	House Mouse					*
	Canis latrans	Coyote				FWCA(F)	
	Vulpes vulpes	Red Fox				FWCA(F)	
	Procyon lotor	Raccoon				FWCA(F)	
	Mephitis mephitis	Striped Skunk				FWCA(F)	
	Odocoileus virginianus	White-tailed Deer				FWCA(G)	1



APPENDIX G LIST OF BIRD SPECIES WITH BREEDING EVIDENCE

Scientific Name	Common Name	COSEWIC	OMNR	Local	Legal Status	Others ¹	BBE
Branta canadensis	Canada Goose				MBCA		NE, FY
Aix sponsa	Wood Duck			BSC	MBCA		
Anas platyrhynchos	Mallard				MBCA		FY
					MBCA/		
Phasianus colchicus	Ring-necked Pheasant				FWCA(G)		T
Phalacrocorax auritus	Double-crested Cormorant						
Ardea herodias	Great Blue Heron				MBCA		
Ardea alba	Great Egret				MBCA		
Nycticorax nycticorax	Black-crowned Night Heron			BSC	MBCA		
Cathartes aura	Turkey Vulture			BSC	FWCA(P)		
Pandion haliaetus	Osprey			BSC	FWCA(P)		
Accipiter striatus	Sharp-shinned Hawk				FWCA(P)		
Accipiter cooperii	Cooper's Hawk				FWCA(P)		Н
Accipiter gentilis	Northern Goshawk				FWCA(P)		
Buteo platypterus	Broad-winged Hawk			BSC	FWCA(P)		
Buteo jamaicensis	Red-tailed Hawk				FWCA(P)		NE
Falco sparverius	American Kestrel			BSC	FWCA(P)		CF
Charadrius vociferus	Killdeer				MBCA		T, A, FY
Actitis macularius	Spotted Sandpiper			BSC	MBCA		T, A
Gallinago delicata	Wilson's Snipe			BSC	MBCA		
Scolopax minor	American Woodcock			BSC	MBCA		
Larus delawarensis	Ring-billed Gull				MBCA		
Columba livia	Rock Pigeon						
Zenaida macroura	Mourning Dove				MBCA		T, FY
Coccyzus americanus	Yellow-billed Cuckoo			BSC	MBCA	*	
Megascops asio	Eastern Screech-Owl				FWCA(P)		
Archilochus colubris	Ruby-throated Hummingbird			BSC	MBCA		
Melanerpes erythrocephalus	Red-headed Woodpecker	SC	SC	BSC	MBCA		
Melanerpes carolinus	Red-bellied Woodpecker			BSC	MBCA		
Picoides pubescens	Downy Woodpecker				MBCA		N, CF, FY
Picoides villosus	Hairy Woodpecker				MBCA	*	
Colaptes auratus	Northern Flicker				MBCA		D, FY
Contopus virens	Eastern Wood Pewee				MBCA		T
Empidonax traillii	Willow Flycatcher				MBCA		NE, NY
Empidonax minimus	Least Flycatcher				MBCA		,
Sayornis phoebe	Eastern Phoebe			BSC	MBCA		
Myiarchus crinitus	Great Crested Flycatcher				MBCA	*	
Tyrannus tyrannus	Eastern Kingbird			BSC	MBCA		T, A
Vireo flavifrons	Yellow-throated Vireo				MBCA		S
Vireo navinons Vireo solitarius	Blue-headed Vireo				MBCA		
Vireo gilvus	Warbling Vireo				MBCA		S, A
Vireo giivas Vireo olivaceus	Red-eyed Vireo				MBCA		S, T
Cyanocitta cristata	Blue Jay				FWCA(P)		T T
Corvus brachyrhynchos	American Crow				3/ 1(1 /		<u>'</u>

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¹ An asterisk indicates that the species has been identified by others and that suitable habitat exists in the area of investigation.

APPENDIX G LIST OF BIRD SPECIES WITH BREEDING EVIDENCE

Scientific Name	Common Name	COSEWIC	OMNR	Local	Legal Status	Others ¹	BBE
Eremophila alpestris	Horned Lark			BSC	MBCA		FY
Tachycineta bicolor	Tree Swallow				MBCA		AE
	Northern Rough-winged						
Stelgidopteryx serripennis	Swallow			BSC	MBCA		
Petrochelidon pyrrhonota	Cliff Swallow			BSC	MBCA		AE
Hirundo rustica	Barn Swallow			BSC	MBCA		N, AE
Poecile atricapillus	Black-capped Chickadee				MBCA		FY
Sitta carolinensis	White-breasted Nuthatch				MBCA		
Certhia Americana	Brown Creeper			BSC	MBCA		
Thryothorus ludovicianus	Carolina Wren			BSC	MBCA		S
Troglodytes aedon	House Wren				MBCA		S
Regulus satrapa	Golden-crowned Kinglet				MBCA		
Regulus calendula	Ruby-crowned Kinglet				MBCA		
Polioptila caerulea	Blue-gray Gnatcatcher			BSC	MBCA		
Sialia sialis	Eastern Bluebird			BSC	MBCA		
Cathartes fuscescens	Veery			BSC	MBCA		
Catharus guttatus	Hermit Thrush				MBCA		
Hylocichla mustelina	Wood Thrush				MBCA		S, T, NE
Turdus migratorius	American Robin				MBCA		NE, NY, FY
Dumetella carolinensis	Gray Catbird			BSC	MBCA		N, NE, NY, CF
Toxostoma rufum	Brown Thrasher			BSC	MBCA		FY
Sturnus vulgaris	European Starling						AE, FY
Bombycilla cedrorum	Cedar Waxwing				MBCA		A, N, CF
Vermivora chrysoptera	Golden-winged Warbler				MBCA		
Vermivora peregrine	Tennessee Warbler				MBCA		
Vermivora ruficapilla	Nashville Warbler				MBCA		
Parula Americana	Northern Parula				MBCA		
Dendroica petechia	Yellow Warbler				MBCA		NE, CF
Dendroica pensylvanica	Chestnut-sided Warbler			BSC	MBCA		
Dendroica magnolia	Magnolia Warbler				MBCA		
Dendroica caerulescens	Black-throated Blue Warbler				MBCA		
Dendroica coronata	Yellow-rumped Warbler				MBCA		
Dendroica virens	Black-throated Green Warbler				MBCA		
Dendroica fusca	Blackburnian Warbler				MBCA		
Dendroica pinus	Pine Warbler				MBCA		
Dendroica palmarum	Palm Warbler				MBCA		
Dendroica castanea	Bay-breasted Warbler				MBCA		
Mniotilta varia	Black and White Warbler				MBCA		
Setophaga ruticilla	American Redstart			BSC	MBCA		
Seiurus aurocapilla	Ovenbird			BSC	MBCA	*	
Oporornis Philadelphia	Mourning Warbler			BSC	MBCA		
Geothlypis trichas	Common Yellowthroat				MBCA		A, T
Wilsonia pusilla	Wilson's Warbler				MBCA		,
Piranga olivacea	Scarlet Tanager			BSC	MBCA	*	
Pipilo erythrophthalmus	Eastern Towhee			BSC	MBCA		S, T

APPENDIX G LIST OF BIRD SPECIES WITH BREEDING EVIDENCE

Scientific Name	Common Name	COSEWIC	OMNR	Local	Legal Status	Others ¹	BBE
Spizella passerine	Chipping Sparrow				MBCA		Т
Spizella pusilla	Field Sparrow			BSC	MBCA		S, T
Pooecetes gramineus	Vesper Sparrow			BSC	MBCA		CF
Passerculus sandwichensis	Savannah Sparrow			BSC	MBCA		S, T
Melospiza melodia	Song Sparrow				MBCA		CF, FY
Melospiza lincolnii	Lincoln's Sparrow				MBCA		
Melospiza Georgiana	Swamp Sparrow			BSC	MBCA	*	
Zonotrichia albicollis	White-throated Sparrow				MBCA		
Zonotrichia leucophrys	White-crowned Sparrow				MBCA		
Junco hyemalis	Dark-eyed Junco				MBCA		
Cardinalis cardinalis	Northern Cardinal				MBCA		CF
Pheucticus ludovicianus	Rose-breasted Grosbeak				MBCA		S, A, CF
Passerina cyanea	Indigo Bunting				MBCA		S, T, D, CF
Agelaius phoeniceus	Red-winged Blackbird						N, CF, FY
Quiscalus quiscula	Common Grackle						CF, FY
Molothrus ater	Brown-headed Cowbird						NY
Icterus spurious	Orchard Oriole			BSC	MBCA		D, CF
Icterus galbula	Baltimore Oriole				MBCA		NE, CF
Carpodacus mexicanus	House Finch				MBCA		T, FY
Carduelis tristis	American Goldfinch			BSC	MBCA		D
							AE, CF,
Passer domesticus	House Sparrow						FY

BBE - Breeding Bird Evidence (according to Bird Studies Canada):

Possible Breeding:

- H Species observed in its breeding season in suitable nesting habitat.
- S Singing male present in its breeding season in suitable nesting habitat.

Probable Breeding:

- T Permanent territory presumed through registration of territorial song on at least two days, a week or so apart, at the same place.
- D Courtship or display between male and female, including courtship feeding or copulation.
- A Agitated behavior or anxiety calls of an adult.
- N Nest-building or excavation of nest hole.

Confirmed Breeding:

- AE Adults leaving or entering nest site in circumstances indication occupied nest.
- NU Used nest or egg shell found (occupied or laid within the period of study).
- FY Recently fledged young or downy young, including young incapable of sustained flight.
- CF Adult carrying food for young.
- NE Nest containing eggs.
- NY Nest with young seen or heard.



Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
1	0328060E 4681980N	Brighton Beach Broadway Street	Jun 5	Phasianus colchicus Zenaida macroura Colaptes auratus Vireo gilvus Poecile atricapillus Sialia sialis Hylocichla mustelina Turdus migratorius Dumetella carolinensis Sturnus vulgaris Bombycilla cedrorum Dendroica petechia Pipilo erythrophthalmus Melospiza melodia Cardinalis cardinalis Quiscalus quiscula Icterus galbula	Ring necked Pheasant Mourning Dove Northern Flicker Warbling Vireo Black capped Chickadee Eastern Bluebird Wood Thrush American Robin Gray Catbird European Starling Cedar Waxwing Yellow Warbler Eastern Towhee Song Sparrow Northern Cardinal Common Grackle Baltimore Oriole	Jun 15	Phasianus colchicus Vireo gilvus Cyanocitta cristata Thryothorus ludovicianus Troglodytes aedon Turdus migratorius Dumetella carolinensis Melospiza melodia Cardinalis cardinalis Icterus galbula	Ring necked Pheasant Warbling Vireo Blue Jay Carolina Wren House Wren American Robin Gray Catbird Song Sparrow Northern Cardinal Baltimore Oriole
2	0328248E 4682110N	Brighton Beach Scotten Road	Jun 5	Zenaida macroura Colaptes auratus Vireo gilvus Troglodytes aedon Turdus migratorius Bombycilla cedrorum Dendroica petechia Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus Passer domesticus	Mourning Dove Northern Flicker Warbling Vireo House Wren American Robin Cedar Waxwing Yellow Warbler Song Sparrow Northern Cardinal Red winged Blackbird House Sparrow	Jun 15	Zenaida macroura Colaptes auratus Vireo gilvus Corvus brachyrhynchos Troglodytes aedon Turdus migratorius Dumetella carolinensis Sturnus vulgaris Dendroica petechia Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus Quiscalus quiscula Molothrus ater Passer domesticus	Mourning Dove Northern Flicker Warbling Vireo American Crow House Wren American Robin Gray Catbird European Starling Yellow Warbler Song Sparrow Northern Cardinal Red winged Blackbird Common Grackle Brown headed Cowbird House Sparrow

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
3	0327940E 4682265N	Brighton Beach Road	Jun 5	Phasianus colchicus Zenaida macroura Vireo gilvus Cyanocitta cristata Troglodytes aedon Turdus migratorius Dumetella carolinensis Sturnus vulgaris Bombycilla cedrorum Dendroica petechia Melospiza melodia Agelaius phoeniceus	Ring necked Pheasant Mourning Dove Warbling Vireo Blue Jay House Wren American Robin Gray Catbird European Starling Cedar Waxwing Yellow Warbler Song Sparrow Red winged Blackbird	Jun 15	Charadrius vociferus Colaptes auratus Vireo gilvus Stelgidopteryx serripennis Troglodytes aedon Turdus migratorius Dumetella carolinensis Sturnus vulgaris Dendroica petechia Melospiza melodia Agelaius phoeniceus Quiscalus quiscula Molothrus ater Carduelis tristis Passer domesticus	Killdeer Northern Flicker Warbling Vireo Northern Rough winged Swallow House Wren American Robin Gray Catbird European Starling Yellow Warbler Song Sparrow Red winged Blackbird Common Grackle Brown headed Cowbird American Goldfinch House Sparrow
4	0327720E 4682194N	Brighton Beach Broadway Street	Jun 5	Phasianus colchicus Colaptes auratus Vireo olivaceus Troglodytes aedon Turdus migratorius Dumetella carolinensis Bombycilla cedrorum Dendroica petechia Cardinalis cardinalis Pheucticus Iudovicianus Agelaius phoeniceus Molothrus ater Icterus galbula Carduelis tristis Passer domesticus	Ring necked Pheasant Northern Flicker Red eyed Vireo House Wren American Robin Gray Catbird Cedar Waxwing Yellow Warbler Northern Cardinal Rose breasted Grosbeak Red winged Blackbird Brown headed Cowbird Baltimore Oriole American Goldfinch House Sparrow	Jun 15	Phasianus colchicus Picoides pubescens Colaptes auratus Contopus virens Vireo flavifrons Vireo olivaceus Troglodytes aedon Turdus migratorius Dumetella carolinensis Bombycilla cedrorum Dendroica petechia Melospiza melodia Cardinalis cardinalis Pheucticus ludovicianus Passerina cyanea Molothrus ater Icterus galbula Carduelis tristis Passer domesticus	Ring necked Pheasant Downy Woodpecker Northern Flicker Eastern Wood Pewee Yellow throated Vireo Warbling Vireo Red eyed Vireo House Wren American Robin Gray Catbird Cedar Waxwing Yellow Warbler Song Sparrow Northern Cardinal Rose breasted Grosbeak Indigo Bunting Brown headed Cowbird Baltimore Oriole American Goldfinch House Sparrow

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
5	0327408E	Brighton Beach	Jun 5	Zenaida macroura	Mourning Dove	Jun 15	Phasianus colchicus	Ring necked Pheasant
	4682286N	Broadway & Sandwich		Colaptes auratus Vireo gilvus Troglodytes aedon Turdus migratorius Dumetella carolinensis Sturnus vulgaris Bombycilla cedrorum Dendroica petechia Melospiza melodia Cardinalis cardinalis Pheucticus ludovicianus Passerina cyanea Agelaius phoeniceus Quiscalus quiscula Molothrus ater Icterus galbula Carduelis tristis Passer domesticus	Northern Flicker Warbling Vireo House Wren American Robin Gray Catbird European Starling Cedar Waxwing Yellow Warbler Song Sparrow Northern Cardinal Rose breasted Grosbeak Indigo Bunting Red winged Blackbird Common Grackle Brown headed Cowbird Baltimore Oriole American Goldfinch House Sparrow		Zenaida macroura Picoides pubescens Colaptes auratus Contopus virens Tachycineta bicolor Thryothorus ludovicianus Turdus migratorius Dumetella carolinensis Bombycilla cedrorum Dendroica petechia Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus Molothrus ater Icterus galbula Carduelis tristis Passer domesticus	Mourning Dove Downy Woodpecker Northern Flicker Eastern Wood Pewee Tree Swallow Carolina Wren American Robin Gray Catbird Cedar Waxwing Yellow Warbler Song Sparrow Northern Cardinal Red winged Blackbird Brown headed Cowbird Baltimore Oriole American Goldfinch House Sparrow
6	0327278E 4682455N	Brighton Beach ? Road	Jun 5	Megascops asio Picoides pubescens Colaptes auratus Empidonax traillii Vireo olivaceus Cyanocitta cristata Poecile atricapillus Thryothorus ludovicianus Troglodytes aedon Turdus migratorius Sturnus vulgaris Bombycilla cedrorum Dendroica petechia Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus Molothrus ater Icterus galbula	Eastern Screech Owl Downy Woodpecker Northern Flicker Willow Flycatcher Red eyed Vireo Blue Jay Black capped Chickadee Carolina Wren House Wren American Robin European Starling Cedar Waxwing Yellow Warbler Song Sparrow Northern Cardinal Red winged Blackbird Brown headed Cowbird Baltimore Oriole	Jun 15	Phasianus colchicus Picoides pubescens Colaptes auratus Troglodytes aedon Turdus migratorius Dumetella carolinensis Toxostoma rufum Bombycilla cedrorum Dendroica petechia Spizella passerina Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus Molothrus ater Carduelis tristis	Ring necked Pheasant Downy Woodpecker Northern Flicker House Wren American Robin Gray Catbird Brown Thrasher Cedar Waxwing Yellow Warbler Chipping Sparrow Song Sparrow Northern Cardinal Red winged Blackbird Brown headed Cowbird American Goldfinch

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
7	0327080E 4682640N	Brighton Beach Detroit River	Jun 5	Empidonax traillii Vireo gilvus Hirundo rustica Thryothorus ludovicianus Troglodytes aedon Turdus migratorius Dumetella carolinensis Sturnus vulgaris Dendroica petechia Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus Icterus galbula Carduelis tristis	Willow Flycatcher Warbling Vireo Barn Swallow Carolina Wren House Wren American Robin Gray Catbird European Starling Yellow Warbler Song Sparrow Northern Cardinal Red winged Blackbird Baltimore Oriole American Goldfinch	Jun 15	Picoides pubescens Empidonax traillii Hirundo rustica Turdus migratorius Dumetella carolinensis Sturnus vulgaris Bombycilla cedrorum Dendroica petechia Melospiza melodia Cardinalis cardinalis Icterus galbula Carduelis tristis	Downy Woodpecker Willow Flycatcher Barn Swallow American Robin Gray Catbird European Starling Cedar Waxwing Yellow Warbler Song Sparrow Northern Cardinal Baltimore Oriole American Goldfinch
8	0327678E 4682590N	Brighton Beach Chappus & Sandwich	Jun 5	Phasianus colchicus Zenaida macroura Empidonax traillii Tyrannus tyrannus Vireo gilvus Troglodytes aedon Turdus migratorius Sturnus vulgaris Dendroica petechia Melospiza melodia Agelaius phoeniceus Quiscalus quiscula Molothrus ater	Ring necked Pheasant Mourning Dove Willow Flycatcher Eastern Kingbird Warbling Vireo House Wren American Robin European Starling Yellow Warbler Song Sparrow Red winged Blackbird Common Grackle Brown headed Cowbird	Jun 14	Zenaida macroura Empidonax traillii Vireo gilvus Hirundo rustica Troglodytes aedon Turdus migratorius Dumetella carolinensis Sturnus vulgaris Bombycilla cedrorum Dendroica petechia Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus Icterus galbula Carpodacus mexicanus	Mourning Dove Willow Flycatcher Warbling Vireo Barn Swallow House Wren American Robin Gray Catbird European Starling Cedar Waxwing Yellow Warbler Song Sparrow Northern Cardinal Red winged Blackbird Baltimore Oriole House Finch

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
9	0328335E	Brighton Beach Chappus &	Jun 6	Charadrius vociferus	Killdeer	Jun 14	Charadrius vociferus	Killdeer
	4682365N	Scotten		Zenaida macroura Empidonax traillii Turdus migratorius Dendroica petechia Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus	Mourning Dove Willow Flycatcher American Robin Yellow Warbler Song Sparrow Northern Cardinal Red winged Blackbird		Empidonax traillii Thryothorus ludovicianus Turdus migratorius Dumetella carolinensis Sturnus vulgaris Dendroica petechia Melospiza melodia Agelaius phoeniceus Carduelis tristis Passer domesticus	Willow Flycatcher Carolina Wren American Robin Gray Catbird European Starling Yellow Warbler Song Sparrow Red winged Blackbird American Goldfinch House Sparrow
10	0328448E 4681895N	Yawkey Ojibway & Broadway	Jun 6	Poecile atricapillus Troglodytes aedon Turdus migratorius Dumetella carolinensis Bombycilla cedrorum Cardinalis cardinalis Passerina cyanea	Black capped Chickadee House Wren American Robin Gray Catbird Cedar Waxwing Northern Cardinal Indigo Bunting	Jun 15	Cyanocitta cristata Thryothorus ludovicianus Troglodytes aedon Turdus migratorius Dumetella carolinensis Bombycilla cedrorum Cardinalis cardinalis Passerina cyanea Icterus galbula Carduelis tristis Passer domesticus	Blue Jay Carolina Wren House Wren American Robin Gray Catbird Cedar Waxwing Northern Cardinal Indigo Bunting Baltimore Oriole American Goldfinch House Sparrow

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
11	0328785E 4682010N	Yawkey Beech Street	Jun 6	Phasianus colchicus Picoides pubescens Vireo gilvus Vireo olivaceus Cyanocitta cristata Troglodytes aedon Turdus migratorius Sturnus vulgaris Dendroica petechia Geothlypis trichas Spizella passerina Passerina cyanea Agelaius phoeniceus Molothrus ater Icterus galbula Carpodacus mexicanus Carduelis tristis Passer domesticus	Ring necked Pheasant Downy Woodpecker Warbling Vireo Red eyed Vireo Blue Jay House Wren American Robin European Starling Yellow Warbler Common Yellowthroat Chipping Sparrow Indigo Bunting Red winged Blackbird Brown headed Cowbird Baltimore Oriole House Finch American Goldfinch House Sparrow	Jun 16	Vireo gilvus Troglodytes aedon Turdus migratorius Dumetella carolinensis Sturnus vulgaris Spizella passerina Melospiza melodia Cardinalis cardinalis Passerina cyanea Agelaius phoeniceus Molothrus ater Carduelis tristis	Warbling Vireo House Wren American Robin Gray Catbird European Starling Chipping Sparrow Song Sparrow Northern Cardinal Indigo Bunting Red winged Blackbird Brown headed Cowbird American Goldfinch
12	0328630E 4682270N	Yawkey Chappus Street	Jun 6	Zenaida macroura Contopus virens Empidonax traillii Vireo gilvus Troglodytes aedon Turdus migratorius Dumetella carolinensis Sturnus vulgaris Dendroica petechia Cardinalis cardinalis Agelaius phoeniceus Molothrus ater Icterus galbula Passer domesticus	Mourning Dove Eastern Wood Pewee Willow Flycatcher Warbling Vireo House Wren American Robin Gray Catbird European Starling Yellow Warbler Northern Cardinal Red winged Blackbird Brown headed Cowbird Baltimore Oriole House Sparrow	Jun 16	Empidonax traillii Vireo gilvus Troglodytes aedon Turdus migratorius Dumetella carolinensis Sturnus vulgaris Dendroica petechia Agelaius phoeniceus Passer domesticus	Willow Flycatcher Warbling Vireo House Wren American Robin Gray Catbird European Starling Yellow Warbler Red winged Blackbird House Sparrow

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
13	0329038E	Yawkey Matchette &	Jun 6	Zenaida macroura	Mourning Dove	Jun 16	Zenaida macroura	Mourning Dove
	4681910N	Armanda		Tyrannus tyrannus Cyanocitta cristata Troglodytes aedon Turdus migratorius Sturnus vulgaris Cardinalis cardinalis Agelaius phoeniceus Ouiscalus quiscula Icterus galbula Passer domesticus	Eastern Kingbird Blue Jay House Wren American Robin European Starling Northern Cardinal Red winged Blackbird Common Grackle Baltimore Oriole House Sparrow		Cyanocitta cristata Turdus migratorius Sturnus vulgaris Cardinalis cardinalis Agelaius phoeniceus Quiscalus quiscula Molothrus ater Icterus galbula Passer domesticus	Blue Jay American Robin European Starling Northern Cardinal Red winged Blackbird Common Grackle Brown headed Cowbird Baltimore Oriole House Sparrow
14	0328982E 4682330N	Yawkey S.Matchette & EC Row	Jun 6	Charadrius vociferus Hirundo rustica Turdus migratorius Dumetella carolinensis Dendroica petechia Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus	Killdeer Barn Swallow American Robin Gray Catbird Yellow Warbler Song Sparrow Northern Cardinal Red winged Blackbird	Jun 16	Charadrius vociferus Vireo gilvus Turdus migratorius Sturnus vulgaris Dumetella carolinensis Bombycilla cedrorum Dendroica petechia Geothlypis trichas Spizella passerina Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus Quiscalus quiscula Molothrus ater Icterus galbula Carpodacus mexicanus Passer domesticus	Warbling Vireo American Robin European Starling Gray Catbird Cedar Waxwing Yellow Warbler Common Yellowthroat Chipping Sparrow Song Sparrow Northern Cardinal Red winged Blackbird Common Grackle Brown headed Cowbird Baltimore Oriole House Finch House Sparrow

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
	UTM's 0329250E 4682566N	Location Malden Park N.Matchette & EC Row		Charadrius vociferus Vireo gilvus Hirundo rustica Turdus migratorius Sturnus vulgaris Dendroica petechia Geothlypis trichas Passerculus sandwichensis Melospiza melodia Agelaius phoeniceus Carpodacus mexicanus Carduelis tristis	Killdeer Warbling Vireo Barn Swallow American Robin European Starling Yellow Warbler Common Yellowthroat Savannah Sparrow Song Sparrow Red winged Blackbird House Finch American Goldfinch		Actitis macularius Zenaida macroura Picoides pubescens Empidonax traillii Hirundo rustica Turdus migratorius Sturnus vulgaris Bombycilla cedrorum Dendroica petechia Passerculus sandwichensis Melospiza melodia Cardinalis cardinalis Passerina cyanea Agelaius phoeniceus Icterus galbula Carpodacus mexicanus	Killdeer Spotted Sandpiper Mourning Dove Downy Woodpecker Willow Flycatcher Barn Swallow American Robin European Starling Cedar Waxwing Yellow Warbler Savannah Sparrow Song Sparrow Northern Cardinal Indigo Bunting Red winged Blackbird Baltimore Oriole House Finch
							Carduelis tristis Passer domesticus	American Goldfinch House Sparrow

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
16	0329276E 4682170N	North Chappus Road Chappus Road	Jun 6	Charadrius vociferus Actitis macularius Colaptes auratus Contopus virens Tyrannus tyrannus Vireo gilvus Thryothorus ludovicianus Troglodytes aedon Hylocichla mustelina Turdus migratorius Dumetella carolinensis Bombycilla cedrorum Dendroica petechia Geothlypis trichas Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus Icterus galbula Carduelis tristis	Killdeer Spotted Sandpiper Northern Flicker Eastern Wood Pewee Eastern Kingbird Warbling Vireo Carolina Wren House Wren Wood Thrush American Robin Gray Catbird Cedar Waxwing Yellow Warbler Common Yellowthroat Song Sparrow Northern Cardinal Red winged Blackbird Baltimore Oriole American Goldfinch	Jun 16	Actitis macularius Contopus virens Vireo gilvus Cyanocitta cristata Thryothorus Iudovicianus Troglodytes aedon Turdus migratorius Dumetella carolinensis Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus Molothrus ater	Spotted Sandpiper Eastern Wood Pewee Warbling Vireo Blue Jay Carolina Wren House Wren American Robin Gray Catbird Song Sparrow Northern Cardinal Red winged Blackbird Brown headed Cowbird

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
17	0329380E 4681810N	North Chappus Road	Jun 6	Charadrius vociferus Melanerpes carolinus Picoides pubescens Colaptes auratus Contopus virens Vireo gilvus Cyanocitta cristata Troglodytes aedon Turdus migratorius Dumetella carolinensis Bombycilla cedrorum Melospiza melodia Cardinalis cardinalis Pheucticus Iudovicianus Agelaius phoeniceus Quiscalus quiscula Icterus galbula	Killdeer Red bellied Woodpecker Downy Woodpecker Northern Flicker Eastern Wood Pewee Warbling Vireo Blue Jay House Wren American Robin Gray Catbird Cedar Waxwing Song Sparrow Northern Cardinal Rose breasted Grosbeak Red winged Blackbird Common Grackle Baltimore Oriole	Jun 16	Zenaida macroura Picoides pubescens Colaptes auratus Empidonax traillii Vireo gilvus Thryothorus ludovicianus Troglodytes aedon Turdus migratorius Dumetella carolinensis Sturnus vulgaris Dendroica petechia Melospiza melodia Cardinalis cardinalis Pheucticus ludovicianus Agelaius phoeniceus Molothrus ater Icterus galbula	Mourning Dove Downy Woodpecker Northern Flicker Willow Flycatcher Warbling Vireo Carolina Wren House Wren American Robin Gray Catbird European Starling Yellow Warbler Song Sparrow Northern Cardinal Rose breasted Grosbeak Red winged Blackbird Brown headed Cowbird Baltimore Oriole
18	0329745E 4681758N	North Chappus Road ? Drain	Jun 6	Picoides pubescens Cyanocitta cristata Thryothorus Iudovicianus Troglodytes aedon Dumetella carolinensis Bombycilla cedrorum Pipilo erythrophthalmus Cardinalis cardinalis Passerina cyanea Quiscalus quiscula	Downy Woodpecker Blue Jay Carolina Wren House Wren Gray Catbird Cedar Waxwing Eastern Towhee Northern Cardinal Indigo Bunting Common Grackle	Jun 16	Phasianus colchicus Contopus virens Thryothorus Iudovicianus Troglodytes aedon Dumetella carolinensis Cardinalis cardinalis Passerina cyanea Molothrus ater	American Goldfinch Ring necked Pheasant Eastern Wood Pewee Carolina Wren House Wren Gray Catbird Northern Cardinal Indigo Bunting Brown headed Cowbird

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
19	0329854E 4681940N	Chappus Woods	Jun 6	Zenaida macroura Colaptes auratus Empidonax traillii Thryothorus ludovicianus Turdus migratorius Sturnus vulgaris Dendroica petechia Geothlypis trichas Melospiza melodia Cardinalis cardinalis Pheucticus Iudovicianus Agelaius phoeniceus Molothrus ater Icterus galbula Carduelis tristis	Mourning Dove Northern Flicker Willow Flycatcher Carolina Wren American Robin European Starling Yellow Warbler Common Yellowthroat Song Sparrow Northern Cardinal Rose breasted Grosbeak Red winged Blackbird Brown headed Cowbird Baltimore Oriole American Goldfinch	Jun 16	Colaptes auratus Contopus virens Empidonax traillii Vireo gilvus Cyanocitta cristata Turdus migratorius Dumetella carolinensis Dendroica petechia Cardinalis cardinalis Pheucticus ludovicianus Agelaius phoeniceus Molothrus ater Icterus galbula Carduelis tristis	Northern Flicker Eastern Wood Pewee Willow Flycatcher Warbling Vireo Blue Jay American Robin Gray Catbird Yellow Warbler Northern Cardinal Rose breasted Grosbeak Red winged Blackbird Brown headed Cowbird Baltimore Oriole American Goldfinch
20	0329965E 4682016N	Chappus Woods	Jun 6	Archilochus colubris Empidonax traillii Vireo gilvus Cyanocitta cristata Turdus migratorius Dumetella carolinensis Sturnus vulgaris Bombycilla cedrorum Dendroica petechia Geothlypis trichas Cardinalis cardinalis Agelaius phoeniceus Molothrus ater Carduelis tristis	Ruby throated Hummingbird Willow Flycatcher Warbling Vireo Blue Jay American Robin Gray Catbird European Starling Cedar Waxwing Yellow Warbler Common Yellowthroat Northern Cardinal Red winged Blackbird Brown headed Cowbird American Goldfinch	Jun 19	Empidonax traillii Turdus migratorius Dumetella carolinensis Sturnus vulgaris Bombycilla cedrorum Dendroica petechia Geothlypis trichas Melospiza melodia Cardinalis cardinalis Passerina cyanea Agelaius phoeniceus Molothrus ater Carduelis tristis	Willow Flycatcher American Robin Gray Catbird European Starling Cedar Waxwing Yellow Warbler Common Yellowthroat Song Sparrow Northern Cardinal Indigo Bunting Red winged Blackbird Brown headed Cowbird American Goldfinch

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
21	0329615E 4682085N	Chappus Woods	Jun 6	Picoides pubescens Contopus virens Empidonax traillii Vireo gilvus Turdus migratorius Dumetella carolinensis Bombycilla cedrorum Dendroica petechia Pipilo erythrophthalmus Spizella pusilla Melospiza melodia Cardinalis cardinalis Pheucticus ludovicianus Agelaius phoeniceus Molothrus ater Icterus galbula Carduelis tristis	Downy Woodpecker Eastern Wood Pewee Willow Flycatcher Warbling Vireo American Robin Gray Catbird Cedar Waxwing Yellow Warbler Eastern Towhee Field Sparrow Song Sparrow Northern Cardinal Rose breasted Grosbeak Red winged Blackbird Brown headed Cowbird Baltimore Oriole American Goldfinch	Jun 19	Picoides pubescens Empidonax traillii Tachycineta bicolor Thryothorus ludovicianus Turdus migratorius Dumetella carolinensis Dendroica petechia Spizella pusilla Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus Icterus galbula	Downy Woodpecker Willow Flycatcher Tree Swallow Carolina Wren American Robin Gray Catbird Yellow Warbler Field Sparrow Song Sparrow Northern Cardinal Red winged Blackbird Baltimore Oriole
22	0329530E 4681940N	Chappus Woods	Jun 6	Phasianus colchicus Charadrius vociferus Melanerpes carolinus Sayornis phoebe Cyanocitta cristata Turdus migratorius Dumetella carolinensis Dendroica petechia Spizella pusilla Melospiza melodia Agelaius phoeniceus Icterus galbula Carduelis tristis	Ring necked Pheasant Killdeer Red bellied Woodpecker Eastern Phoebe Blue Jay American Robin Gray Catbird Yellow Warbler Field Sparrow Song Sparrow Red winged Blackbird Baltimore Oriole American Goldfinch	Jun 16	Empidonax traillii Tachycineta bicolor Turdus migratorius Dumetella carolinensis Sturnus vulgaris Dendroica petechia Melospiza melodia Cardinalis cardinalis Pheucticus ludovicianus Agelaius phoeniceus Molothrus ater	Willow Flycatcher Tree Swallow American Robin Gray Catbird European Starling Yellow Warbler Song Sparrow Northern Cardinal Rose breasted Grosbeak Red winged Blackbird Brown headed Cowbird

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
23	0329904E	Chappus Woods	Jun 6	Anas platyrhynchos	Mallard	Jun 16	Phasianus colchicus Thryothorus	Ring necked Pheasant
	4681595N			Picoides pubescens	Downy Woodpecker		ludovicianus	Carolina Wren
				Contopus virens Thryothorus	Eastern Wood Pewee		Turdus migratorius	American Robin
				ludovicianus	Carolina Wren		Dumetella carolinensis	Gray Catbird
				Troglodytes aedon	House Wren		Cardinalis cardinalis	Northern Cardinal
				Hylocichla mustelina	Wood Thrush		Dendroica petechia	Yellow Warbler
				Turdus migratorius	American Robin		Agelaius phoeniceus	Red winged Blackbird
				Dumetella carolinensis Cardinalis cardinalis	Gray Catbird			
				Molothrus ater	Northern Cardinal Brown headed Cowbird			
		North Spring		WOOTH US ALCI	Diowii lieaded Cowbiid			
24	0330365E	Garden	Jun 8	Aix sponsa	Wood Duck	Jun 20	Accipiter cooperii	Cooper's Hawk
	4681700N			Accipiter cooperii	Cooper's Hawk		Picoides pubescens	Downy Woodpecker
				Picoides pubescens	Downy Woodpecker		Vireo olivaceus	Red eyed Vireo
				Contopus virens	Eastern Wood Pewee		Poecile atricapillus	Black capped Chickadee
				Vireo gilvus	Warbling Vireo		Thryothorus ludovicianus	Carolina Wren
				Troglodytes aedon	House Wren		Troglodytes aedon	House Wren
				Turdus migratorius	American Robin		Turdus migratorius	American Robin
				Dendroica petechia Geothlypis trichas	Yellow Warbler Common Yellowthroat		Dumetella carolinensis Melospiza melodia	Gray Catbird Song Sparrow
				Melospiza melodia	Song Sparrow		Cardinalis cardinalis	Northern Cardinal
				Cardinalis cardinalis	Northern Cardinal		Pheucticus Iudovicianus	Rose breasted Grosbeak
				Agelaius phoeniceus	Red winged Blackbird		Passerina cyanea	Indigo Bunting
				Icterus galbula	Baltimore Oriole		Agelaius phoeniceus	Red winged Blackbird
							Molothrus ater	Brown headed Cowbird
							Icterus galbula	Baltimore Oriole

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
25	0330402E 4681855N	North Spring Garden	Jun 8	Picoides pubescens Contopus virens Vireo gilvus Vireo olivaceus Troglodytes aedon Dumetella carolinensis Dendroica petechia Geothlypis trichas Melospiza melodia Agelaius phoeniceus	Downy Woodpecker Eastern Wood Pewee Warbling Vireo Red eyed Vireo House Wren Gray Catbird Yellow Warbler Common Yellowthroat Song Sparrow Red winged Blackbird	Jun 20	Picoides pubescens Colaptes auratus Contopus virens Vireo gilvus Troglodytes aedon Turdus migratorius Dumetella carolinensis Dendroica petechia Geothlypis trichas Melospiza melodia Agelaius phoeniceus Icterus galbula	Downy Woodpecker Northern Flicker Eastern Wood Pewee Warbling Vireo House Wren American Robin Gray Catbird Yellow Warbler Common Yellowthroat Song Sparrow Red winged Blackbird Baltimore Oriole
26	0330570E 4681804N	North Spring Garden	Jun 8	Poecile atricapillus Troglodytes aedon Turdus migratorius Dumetella carolinensis Dendroica petechia Cardinalis cardinalis Pheucticus ludovicianus Agelaius phoeniceus	Black capped Chickadee House Wren American Robin Gray Catbird Yellow Warbler Northern Cardinal Rose breasted Grosbeak Red winged Blackbird	Jun 20	Troglodytes aedon Hylocichla mustelina Dumetella carolinensis Bombycilla cedrorum Dendroica petechia Cardinalis cardinalis Agelaius phoeniceus Quiscalus quiscula Icterus galbula Carduelis tristis	House Wren Wood Thrush Gray Catbird Cedar Waxwing Yellow Warbler Northern Cardinal Red winged Blackbird Common Grackle Baltimore Oriole American Goldfinch

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
27	0330755E 4681670N	North Spring Garden	Jun 7	Cyanocitta cristata Poecile atricapillus Thryothorus Iudovicianus Troglodytes aedon Turdus migratorius Dumetella carolinensis Sturnus vulgaris Bombycilla cedrorum Dendroica petechia Melospiza melodia Passerina cyanea Carduelis tristis	Blue Jay Black capped Chickadee Carolina Wren House Wren American Robin Gray Catbird European Starling Cedar Waxwing Yellow Warbler Song Sparrow Indigo Bunting American Goldfinch	Jun 20	Picoides pubescens Colaptes auratus Thryothorus Iudovicianus Troglodytes aedon Turdus migratorius Dumetella carolinensis Sturnus vulgaris Bombycilla cedrorum Dendroica petechia Cardinalis cardinalis Ouiscalus quiscula Molothrus ater Icterus galbula	Downy Woodpecker Northern Flicker Carolina Wren House Wren American Robin Gray Catbird European Starling Cedar Waxwing Yellow Warbler Northern Cardinal Common Grackle Brown headed Cowbird Baltimore Oriole
28	0330895E 4681745N	North Spring Garden	Jun 8	Gallinago delicata Picoides pubescens Turdus migratorius Dumetella carolinensis Dendroica petechia Cardinalis cardinalis Agelaius phoeniceus Icterus galbula Carduelis tristis	Wilson's Snipe Downy Woodpecker American Robin Gray Catbird Yellow Warbler Northern Cardinal Red winged Blackbird Baltimore Oriole American Goldfinch	Jun 20	Picoides pubescens Turdus migratorius Dumetella carolinensis Dendroica petechia Pipilo erythrophthalmus Cardinalis cardinalis Agelaius phoeniceus	Downy Woodpecker American Robin Gray Catbird Yellow Warbler Eastern Towhee Northern Cardinal Red winged Blackbird
29	0330978E 4681694N	North Spring Garden	Jun 8	Turdus migratorius Dumetella carolinensis Dendroica petechia Cardinalis cardinalis Agelaius phoeniceus	American Robin Gray Catbird Yellow Warbler Northern Cardinal Red winged Blackbird	Jun 20	Turdus migratorius Dumetella carolinensis Sturnus vulgaris Dendroica petechia Cardinalis cardinalis Agelaius phoeniceus	American Robin Gray Catbird European Starling Yellow Warbler Northern Cardinal Red winged Blackbird

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
30	0330585E 4681450N	Lambton	Jun 7	Zenaida macroura Picoides pubescens Tyrannus tyrannus Vireo gilvus Corvus brachyrhynchos Stelgidopteryx serripennis Hirundo rustica Troglodytes aedon Turdus migratorius Sturnus vulgaris Cardinalis cardinalis Agelaius phoeniceus Icterus galbula Carduelis tristis Passer domesticus	Mourning Dove Downy Woodpecker Eastern Kingbird Warbling Vireo American Crow Northern Rough winged Swallow Barn Swallow House Wren American Robin European Starling Northern Cardinal Red winged Blackbird Baltimore Oriole American Goldfinch House Sparrow	Jun 19	Zenaida macroura Vireo gilvus Troglodytes aedon Turdus migratorius Dumetella carolinensis Sturnus vulgaris Bombycilla cedrorum Dendroica petechia Spizella passerina Spizella pusilla Agelaius phoeniceus Carpodacus mexicanus	Mourning Dove Warbling Vireo House Wren American Robin Gray Catbird European Starling Cedar Waxwing Yellow Warbler Chipping Sparrow Field Sparrow Red winged Blackbird House Finch
31	0330892E 4681394N	Lambton	Jun 7	Melanerpes carolinus Picoides pubescens Colaptes auratus Tyrannus tyrannus Vireo gilvus Cyanocitta cristata Troglodytes aedon Turdus migratorius Sturnus vulgaris Bombycilla cedrorum Melospiza melodia Cardinalis cardinalis Quiscalus quiscula Icterus spurius Icterus galbula	Red bellied Woodpecker Downy Woodpecker Northern Flicker Eastern Kingbird Warbling Vireo Blue Jay House Wren American Robin European Starling Cedar Waxwing Song Sparrow Northern Cardinal Common Grackle Orchard Oriole Baltimore Oriole	Jun 20	Myiarchus crinitus Tyrannus tyrannus Vireo gilvus Troglodytes aedon Turdus migratorius Dumetella carolinensis Pipilo erythrophthalmus Spizella pusilla Cardinalis cardinalis Passerina cyanea Quiscalus quiscula Molothrus ater Icterus galbula Carduelis tristis Passer domesticus	Great Crested Flycatcher Eastern Kingbird Warbling Vireo House Wren American Robin Gray Catbird Eastern Towhee Field Sparrow Northern Cardinal Indigo Bunting Common Grackle Brown headed Cowbird Baltimore Oriole American Goldfinch House Sparrow

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
32	0331247E 4681434N	Lambton	Jun 8	Zenaida macroura Picoides pubescens Turdus migratorius Dumetella carolinensis Sturnus vulgaris Icterus galbula Carduelis tristis Passer domesticus	Mourning Dove Downy Woodpecker American Robin Gray Catbird European Starling Baltimore Oriole American Goldfinch House Sparrow	Jun 19	Columba livia Zenaida macroura Picoides pubescens Cyanocitta cristata Turdus migratorius Dumetella carolinensis Sturnus vulgaris Bombycilla cedrorum	Rock Pigeon Mourning Dove Downy Woodpecker Blue Jay American Robin Gray Catbird European Starling Cedar Waxwing
33	0331450E 4681040N	Lambton	Jun 8	Buteo jamaicensis Picoides pubescens Vireo olivaceus Thryothorus Iudovicianus Turdus migratorius Dumetella carolinensis Cardinalis cardinalis Passerina cyanea Icterus galbula Carduelis tristis Passer domesticus	Red tailed Hawk Downy Woodpecker Red eyed Vireo Carolina Wren American Robin Gray Catbird Northern Cardinal Indigo Bunting Baltimore Oriole American Goldfinch House Sparrow	Jun 21	Charadrius vociferus Picoides pubescens Colaptes auratus Poecile atricapillus Thryothorus Iudovicianus Troglodytes aedon Turdus migratorius Dumetella carolinensis Bombycilla cedrorum Pipilo erythrophthalmus Spizella passerina Cardinalis cardinalis Passerina cyanea Icterus galbula Carduelis tristis Passer domesticus	Killdeer Downy Woodpecker Northern Flicker Black capped Chickadee Carolina Wren House Wren American Robin Gray Catbird Cedar Waxwing Eastern Towhee Chipping Sparrow Northern Cardinal Indigo Bunting Baltimore Oriole American Goldfinch House Sparrow
34	0331678E 4680514N	North and South of Reddock Avenue	Jun 9	Tyrannus tyrannus Vireo gilvus Cyanocitta cristata Troglodytes aedon Cardinalis cardinalis Molothrus ater Icterus galbula	Eastern Kingbird Warbling Vireo Blue Jay House Wren Northern Cardinal Brown headed Cowbird Baltimore Oriole	Jun 23	Cyanocitta cristata Troglodytes aedon Turdus migratorius Dumetella carolinensis Sturnus vulgaris Melospiza melodia Cardinalis cardinalis Passerina cyanea Agelaius phoeniceus Passer domesticus	Blue Jay House Wren American Robin Gray Catbird European Starling Song Sparrow Northern Cardinal Indigo Bunting Red winged Blackbird House Sparrow

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
35	0331780E 4680168N	North and South of Reddock Avenue	Jun 9	Zenaida macroura Picoides pubescens Cyanocitta cristata Poecile atricapillus Thryothorus ludovicianus Troglodytes aedon Hylocichla mustelina Turdus migratorius Sturnus vulgaris Cardinalis cardinalis Passerina cyanea Quiscalus quiscula Molothrus ater Carduelis tristis Passer domesticus	Mourning Dove Downy Woodpecker Blue Jay Black capped Chickadee Carolina Wren House Wren Wood Thrush American Robin European Starling Northern Cardinal Indigo Bunting Common Grackle Brown headed Cowbird American Goldfinch House Sparrow	Jun 23	Charadrius vociferus Columba livia Picoides pubescens Cyanocitta cristata Troglodytes aedon Turdus migratorius Sturnus vulgaris Spizella passerina Cardinalis cardinalis Molothrus ater	Killdeer Rock Pigeon Downy Woodpecker Blue Jay House Wren American Robin European Starling Chipping Sparrow Northern Cardinal Brown headed Cowbird
36	0331875E 4679910N	North and South of Reddock Avenue	Jun 9	Vireo gilvus Turdus migratorius Dumetella carolinensis Spizella passerina Cardinalis cardinalis Passerina cyanea Agelaius phoeniceus Quiscalus quiscula Molothrus ater Icterus galbula Carduelis tristis	Warbling Vireo American Robin Gray Catbird Chipping Sparrow Northern Cardinal Indigo Bunting Red winged Blackbird Common Grackle Brown headed Cowbird Baltimore Oriole American Goldfinch	Jun 23	Charadrius vociferus Tyrannus tyrannus Vireo gilvus Turdus migratorius Dumetella carolinensis Sturnus vulgaris Bombycilla cedrorum Spizella passerina Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus Icterus spurius Icterus galbula Carduelis tristis	Killdeer Eastern Kingbird Warbling Vireo American Robin Gray Catbird European Starling Cedar Waxwing Chipping Sparrow Song Sparrow Northern Cardinal Red winged Blackbird Orchard Oriole Baltimore Oriole American Goldfinch

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
37	0332088E 4679970N	Oakwood Bush	Jun 9	Vireo gilvus Turdus migratorius Dumetella carolinensis Sturnus vulgaris Bombycilla cedrorum Dendroica petechia Melospiza melodia Agelaius phoeniceus Icterus galbula Carduelis tristis	Warbling Vireo American Robin Gray Catbird European Starling Cedar Waxwing Yellow Warbler Song Sparrow Red winged Blackbird Baltimore Oriole American Goldfinch	Jun 23	Zenaida macroura Picoides pubescens Turdus migratorius Dumetella carolinensis Bombycilla cedrorum Spizella passerina Melospiza melodia Agelaius phoeniceus Icterus galbula Carduelis tristis	Mourning Dove Downy Woodpecker American Robin Gray Catbird Cedar Waxwing Chipping Sparrow Song Sparrow Red winged Blackbird Baltimore Oriole American Goldfinch
38	0332157E 4679450N	Huron Church north of Cousineau Road	Jun 9	Charadrius vociferus Zenaida macroura Corvus brachyrhynchos Turdus migratorius Sturnus vulgaris Molothrus ater Carpodacus mexicanus Carduelis tristis	Killdeer Mourning Dove American Crow American Robin European Starling Brown headed Cowbird House Finch American Goldfinch	Jun 23	Charadrius vociferus Actitis macularius Cyanocitta cristata Turdus migratorius Sturnus vulgaris Bombycilla cedrorum Melospiza melodia Icterus galbula Passer domesticus	Killdeer Spotted Sandpiper Blue Jay American Robin European Starling Cedar Waxwing Song Sparrow Baltimore Oriole House Sparrow
39	0332494E 4679204N	Huron Church north of Cousineau Road	Jun 9	Zenaida macroura Vireo gilvus Vireo olivaceus Troglodytes aedon Turdus migratorius Sturnus vulgaris Melospiza melodia Cardinalis cardinalis Passerina cyanea Passer domesticus	Mourning Dove Warbling Vireo Red eyed Vireo House Wren American Robin European Starling Song Sparrow Northern Cardinal Indigo Bunting House Sparrow	Jun 23	Zenaida macroura Hirundo rustica Turdus migratorius Sturnus vulgaris Quiscalus quiscula Molothrus ater Carduelis tristis Passer domesticus	Mourning Dove Barn Swallow American Robin European Starling Common Grackle Brown headed Cowbird American Goldfinch House Sparrow

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
40	0332868E 4679067N	Huron Church north of Cousineau Road	Jun 9	Picoides pubescens Colaptes auratus Empidonax traillii Vireo olivaceus Dumetella carolinensis Sturnus vulgaris Bombycilla cedrorum Dendroica petechia Cardinalis cardinalis Agelaius phoeniceus Icterus galbula Carduelis tristis	Downy Woodpecker Northern Flicker Willow Flycatcher Red eyed Vireo Gray Catbird European Starling Cedar Waxwing Yellow Warbler Northern Cardinal Red winged Blackbird Baltimore Oriole American Goldfinch	Jun 22	Zenaida macroura Picoides pubescens Colaptes auratus Empidonax traillii Poecile atricapillus Troglodytes aedon Turdus migratorius Dumetella carolinensis Bombycilla cedrorum Dendroica petechia Spizella passerina Melospiza melodia Cardinalis cardinalis Passerina cyanea Agelaius phoeniceus Icterus galbula Carduelis tristis Passer domesticus	Mourning Dove Downy Woodpecker Northern Flicker Willow Flycatcher Black capped Chickadee House Wren American Robin Gray Catbird Cedar Waxwing Yellow Warbler Chipping Sparrow Song Sparrow Northern Cardinal Indigo Bunting Red winged Blackbird Baltimore Oriole American Goldfinch House Sparrow
41	0331607E 4680690N	North and South of Reddock Avenue	Jun 9	Ardea herodias Charadrius vociferus Petrochelidon pyrrhonota Hirundo rustica Turdus migratorius Dumetella carolinensis Agelaius phoeniceus Passer domesticus	Great Blue Heron Killdeer Cliff Swallow Barn Swallow American Robin Gray Catbird Red winged Blackbird House Sparrow	Jun 22	Charadrius vociferus Petrochelidon pyrrhonota Hirundo rustica Sturnus vulgaris Agelaius phoeniceus Passer domesticus	Killdeer Cliff Swallow Barn Swallow European Starling Red winged Blackbird House Sparrow

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
42	0333138E 4678925N	Huron Church north of Cousineau Road	Jun 9	Empidonax traillii Poecile atricapillus Dendroica petechia Melospiza melodia Agelaius phoeniceus Molothrus ater Icterus galbula Carduelis tristis	Willow Flycatcher Black capped Chickadee Yellow Warbler Song Sparrow Red winged Blackbird Brown headed Cowbird Baltimore Oriole American Goldfinch	Jun 22	Zenaida macroura Empidonax traillii Hirundo rustica Poecile atricapillus Turdus migratorius Dumetella carolinensis Dendroica petechia Passerculus sandwichensis Melospiza melodia Agelaius phoeniceus Molothrus ater Carduelis tristis	Mourning Dove Willow Flycatcher Barn Swallow Black capped Chickadee American Robin Gray Catbird Yellow Warbler Savannah Sparrow Song Sparrow Red winged Blackbird Brown headed Cowbird American Goldfinch
43	0333435E 4678741N	Huron Church north of Cousineau Road	Jun 9	Zenaida macroura Colaptes auratus Sturnus vulgaris Melospiza melodia Agelaius phoeniceus Carduelis tristis Passer domesticus	Mourning Dove Northern Flicker European Starling Song Sparrow Red winged Blackbird American Goldfinch House Sparrow	Jun 23	Charadrius vociferus Zenaida macroura Stelgidopteryx serripennis Hirundo rustica Melospiza melodia Agelaius phoeniceus Carduelis tristis	Killdeer Mourning Dove Northern Rough winged Swallow Barn Swallow Song Sparrow Red winged Blackbird American Goldfinch
44	0332450E 4679410N	St. Clair College ESA	Jun 13	Zenaida macroura Turdus migratorius Bombycilla cedrorum Melospiza melodia Cardinalis cardinalis Quiscalus quiscula Molothrus ater Carpodacus mexicanus Carduelis tristis Passer domesticus	Mourning Dove American Robin Cedar Waxwing Song Sparrow Northern Cardinal Common Grackle Brown headed Cowbird House Finch American Goldfinch House Sparrow	Jun 22	Zenaida macroura Hirundo rustica Turdus migratorius Sturnus vulgaris Spizella passerina Cardinalis cardinalis Quiscalus quiscula Molothrus ater Carpodacus mexicanus Carduelis tristis Passer domesticus	Mourning Dove Barn Swallow American Robin European Starling Chipping Sparrow Northern Cardinal Common Grackle Brown headed Cowbird House Finch American Goldfinch House Sparrow

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
45	0333225E 4679040N	St. Clair College ESA	Jun 13	Anas platyrhynchos Picoides pubescens Colaptes auratus Contopus virens Vireo olivaceus Turdus migratorius Dumetella carolinensis Sturnus vulgaris Dendroica petechia Geothlypis trichas Spizella passerina Melospiza melodia Cardinalis cardinalis Passerina cyanea Agelaius phoeniceus Molothrus ater Carduelis tristis Passer domesticus	Mallard Downy Woodpecker Northern Flicker Eastern Wood Pewee Red eyed Vireo American Robin Gray Catbird European Starling Yellow Warbler Common Yellowthroat Chipping Sparrow Song Sparrow Northern Cardinal Indigo Bunting Red winged Blackbird Brown headed Cowbird American Goldfinch House Sparrow	Jun 22	Anas platyrhynchos Zenaida macroura Picoides pubescens Colaptes auratus Vireo olivaceus Stelgidopteryx serripennis Hirundo rustica Troglodytes aedon Turdus migratorius Dumetella carolinensis Sturnus vulgaris Bombycilla cedrorum Dendroica petechia Spizella passerina Spizella pusilla Melospiza melodia Cardinalis cardinalis Passerina cyanea Agelaius phoeniceus Quiscalus quiscula Molothrus ater Icterus galbula Carduelis tristis Passer domesticus	Mallard Mourning Dove Downy Woodpecker Northern Flicker Red eyed Vireo Northern Rough winged Swallow Barn Swallow House Wren American Robin Gray Catbird European Starling Cedar Waxwing Yellow Warbler Chipping Sparrow Field Sparrow Song Sparrow Northern Cardinal Indigo Bunting Red winged Blackbird Common Grackle Brown headed Cowbird Baltimore Oriole American Goldfinch House Sparrow

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
46	0334535E 4678090N	Montgomery Drive at Talbot Road	Jun 13	Zenaida macroura Cyanocitta cristata Thryothorus ludovicianus Troglodytes aedon Turdus migratorius Sturnus vulgaris Bombycilla cedrorum Dendroica petechia Spizella passerina Cardinalis cardinalis	Mourning Dove Blue Jay Carolina Wren House Wren American Robin European Starling Cedar Waxwing Yellow Warbler Chipping Sparrow Northern Cardinal	Jun 23	Zenaida macroura Picoides pubescens Cyanocitta cristata Thryothorus Iudovicianus Troglodytes aedon Turdus migratorius Sturnus vulgaris Spizella passerina Cardinalis cardinalis Quiscalus quiscula	Mourning Dove Downy Woodpecker Blue Jay Carolina Wren House Wren American Robin European Starling Chipping Sparrow Northern Cardinal Common Grackle
				Ouiscalus quiscula Molothrus ater Passer domesticus	Common Grackle Brown headed Cowbird House Sparrow		Carduelis tristis Passer domesticus	American Goldfinch House Sparrow
47	0335150E 4677610N	Howard Avenue at Talbot Road	Jun 13	Zenaida macroura Cyanocitta cristata Troglodytes aedon Turdus migratorius Sturnus vulgaris Bombycilla cedrorum Cardinalis cardinalis Agelaius phoeniceus Quiscalus quiscula Passer domesticus	Mourning Dove Blue Jay House Wren American Robin European Starling Cedar Waxwing Northern Cardinal Red winged Blackbird Common Grackle House Sparrow	Jun 24	Zenaida macroura Picoides pubescens Turdus migratorius Agelaius phoeniceus Quiscalus quiscula Molothrus ater Passer domesticus	Mourning Dove Downy Woodpecker American Robin Red winged Blackbird Common Grackle Brown headed Cowbird House Sparrow
48	0335560E 4677615N	Highway 401 and Talbot Road	Jun 13	Zenaida macroura Empidonax traillii Troglodytes aedon Dendroica petechia Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus Carduelis tristis	Mourning Dove Willow Flycatcher House Wren Yellow Warbler Song Sparrow Northern Cardinal Red winged Blackbird American Goldfinch	Jun 22	Bombycilla cedrorum Dendroica petechia Melospiza melodia Agelaius phoeniceus Carduelis tristis Passer domesticus	Cedar Waxwing Yellow Warbler Song Sparrow Red winged Blackbird American Goldfinch House Sparrow

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
49	0335700E 4677560N	Highway 401 and Talbot Road	Jun 13	Charadrius vociferus Zenaida macroura Turdus migratorius Dumetella carolinensis Sturnus vulgaris Dendroica petechia Melospiza melodia Agelaius phoeniceus Quiscalus quiscula Molothrus ater Carduelis tristis	Killdeer Mourning Dove American Robin Gray Catbird European Starling Yellow Warbler Song Sparrow Red winged Blackbird Common Grackle Brown headed Cowbird American Goldfinch	Jun 22	Branta canadensis Anas platyrhynchos Charadrius vociferus Zenaida macroura Turdus migratorius Sturnus vulgaris Bombycilla cedrorum Dendroica petechia Melospiza melodia Cardinalis cardinalis Passerina cyanea Agelaius phoeniceus Quiscalus quiscula Carduelis tristis	Canada Goose Mallard Killdeer Mourning Dove American Robin European Starling Cedar Waxwing Yellow Warbler Song Sparrow Northern Cardinal Indigo Bunting Red winged Blackbird Common Grackle American Goldfinch
50	0336070E 4677385N	Highway 401 and Talbot Road	Jun 12	Anas platyrhynchos Charadrius vociferus Actitis macularius Eremophila alpestris Turdus migratorius Passerculus sandwichensis Passer domesticus	Mallard Killdeer Spotted Sandpiper Horned Lark American Robin Savannah Sparrow House Sparrow	Jun 24	Anas platyrhynchos Ardea alba Charadrius vociferus Zenaida macroura Eremophila alpestris Sturnus vulgaris Passerculus sandwichensis Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus Molothrus ater Passer domesticus	Mallard Great Egret Killdeer Mourning Dove Horned Lark European Starling Savannah Sparrow Song Sparrow Northern Cardinal Red winged Blackbird Brown headed Cowbird House Sparrow

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
51	0335677E 4677070N	Highway 401 and Talbot Road	Jun 12	Charadrius vociferus Zenaida macroura Tyrannus tyrannus Eremophila alpestris Turdus migratorius Dumetella carolinensis Bombycilla cedrorum Dendroica petechia Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus Molothrus ater Carduelis tristis	Killdeer Mourning Dove Eastern Kingbird Horned Lark American Robin Gray Catbird Cedar Waxwing Yellow Warbler Song Sparrow Northern Cardinal Red winged Blackbird Brown headed Cowbird American Goldfinch	Jun 24	Charadrius vociferus Zenaida macroura Tyrannus tyrannus Eremophila alpestris Turdus migratorius Dumetella carolinensis Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus Molothrus ater Carduelis tristis	Killdeer Mourning Dove Eastern Kingbird Horned Lark American Robin Gray Catbird Song Sparrow Northern Cardinal Red winged Blackbird Brown headed Cowbird American Goldfinch
52	0335503E 4676542N	Highway 401 and Talbot Road	Jun 12	Buteo jamaicensis Charadrius vociferus Picoides pubescens Cyanocitta cristata Eremophila alpestris Troglodytes aedon Turdus migratorius Dumetella carolinensis Toxostoma rufum Sturnus vulgaris Pipilo erythrophthalmus Pooecetes gramineus Melospiza melodia Cardinalis cardinalis Passerina cyanea Quiscalus quiscula Molothrus ater Carduelis tristis Passer domesticus	Red tailed Hawk Killdeer Downy Woodpecker Blue Jay Horned Lark House Wren American Robin Gray Catbird Brown Thrasher European Starling Eastern Towhee Vesper Sparrow Song Sparrow Northern Cardinal Indigo Bunting Common Grackle Brown headed Cowbird American Goldfinch House Sparrow	Jun 24	Eremophila alpestris Hirundo rustica Turdus migratorius Dumetella carolinensis Sturnus vulgaris Pooecetes gramineus Passerculus sandwichensis Melospiza melodia Cardinalis cardinalis Passerina cyanea Agelaius phoeniceus Ouiscalus quiscula Icterus galbula Passer domesticus	Horned Lark Barn Swallow American Robin Gray Catbird European Starling Vesper Sparrow Savannah Sparrow Song Sparrow Northern Cardinal Indigo Bunting Red winged Blackbird Common Grackle Baltimore Oriole House Sparrow

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
53	0336544E 4677424N	Highway 401 and Talbot Road	Jun 13	Zenaida macroura Turdus migratorius Sturnus vulgaris Bombycilla cedrorum Spizella passerina Agelaius phoeniceus Ouiscalus quiscula Carduelis tristis Passer domesticus	Mourning Dove American Robin European Starling Cedar Waxwing Chipping Sparrow Red winged Blackbird Common Grackle American Goldfinch House Sparrow	Jun 24	Turdus migratorius Sturnus vulgaris Spizella passerina Passerculus sandwichensis Melospiza melodia Cardinalis cardinalis Passerina cyanea Quiscalus quiscula Molothrus ater Carpodacus mexicanus Carduelis tristis Passer domesticus	American Robin European Starling Chipping Sparrow Savannah Sparrow Song Sparrow Northern Cardinal Indigo Bunting Common Grackle Brown headed Cowbird House Finch American Goldfinch House Sparrow
54	0336709E 4677960N	Highway 401 and Talbot Road	Jun 13	Charadrius vociferus Actitis macularius Sturnus vulgaris Agelaius phoeniceus Quiscalus quiscula Passer domesticus	Killdeer Spotted Sandpiper European Starling Red winged Blackbird Common Grackle House Sparrow	Jun 24	Charadrius vociferus Columba livia Zenaida macroura Turdus migratorius Sturnus vulgaris Bombycilla cedrorum Melospiza melodia Agelaius phoeniceus Quiscalus quiscula Carduelis tristis Passer domesticus	Killdeer Rock Pigeon Mourning Dove American Robin European Starling Cedar Waxwing Song Sparrow Red winged Blackbird Common Grackle American Goldfinch House Sparrow
55	0327740E 4683580N	Brighton Beach area / Prospect Avenue	Jun 14	Charadrius vociferus Tyrannus tyrannus Vireo gilvus Hirundo rustica Turdus migratorius Dendroica petechia Melospiza melodia Agelaius phoeniceus Passer domesticus	Killdeer Eastern Kingbird Warbling Vireo Barn Swallow American Robin Yellow Warbler Song Sparrow Red winged Blackbird House Sparrow	Jun 24	Tyrannus tyrannus Vireo gilvus Hirundo rustica Turdus migratorius Dendroica petechia Melospiza melodia Agelaius phoeniceus	Eastern Kingbird Warbling Vireo Barn Swallow American Robin Yellow Warbler Song Sparrow Red winged Blackbird

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
56	0328260E 4684385N	Brighton Beach area / Russell Drive	Jun 14	Picoides pubescens Vireo olivaceus Thryothorus ludovicianus Troglodytes aedon Turdus migratorius Dumetella carolinensis Sturnus vulgaris Bombycilla cedrorum Melospiza melodia Cardinalis cardinalis Passerina cyanea Molothrus ater Icterus galbula Passer domesticus	Downy Woodpecker Red eyed Vireo Carolina Wren House Wren American Robin Gray Catbird European Starling Cedar Waxwing Song Sparrow Northern Cardinal Indigo Bunting Brown headed Cowbird Baltimore Oriole House Sparrow	Jun 24	Accipiter cooperii Columba livia Zenaida macroura Vireo olivaceus Cyanocitta cristata Troglodytes aedon Turdus migratorius Sturnus vulgaris Bombycilla cedrorum Melospiza melodia Cardinalis cardinalis Passerina cyanea Passer domesticus	Cooper's Hawk Rock Pigeon Mourning Dove Red eyed Vireo Blue Jay House Wren American Robin European Starling Cedar Waxwing Song Sparrow Northern Cardinal Indigo Bunting House Sparrow
57	0329565E 4682340N	Malden Park	Jun 14	Vireo gilvus Turdus migratorius Dumetella carolinensis Sturnus vulgaris Dendroica petechia Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus Carduelis tristis	Warbling Vireo American Robin Gray Catbird European Starling Yellow Warbler Song Sparrow Northern Cardinal Red winged Blackbird American Goldfinch	Jun 29	Vireo gilvus Troglodytes aedon Turdus migratorius Dumetella carolinensis Dendroica petechia Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus Molothrus ater Carduelis tristis	Warbling Vireo House Wren American Robin Gray Catbird Yellow Warbler Song Sparrow Northern Cardinal Red winged Blackbird Brown headed Cowbird American Goldfinch

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
58	0329975E 4682225N	Malden Park	Jun 14	Zenaida macroura Picoides pubescens Contopus virens Tyrannus tyrannus Vireo gilvus Cyanocitta cristata Turdus migratorius Bombycilla cedrorum Dendroica petechia Spizella passerina Passerina cyanea Agelaius phoeniceus Molothrus ater Icterus galbula Carduelis tristis	Mourning Dove Downy Woodpecker Eastern Wood Pewee Eastern Kingbird Warbling Vireo Blue Jay American Robin Cedar Waxwing Yellow Warbler Chipping Sparrow Indigo Bunting Red winged Blackbird Brown headed Cowbird Baltimore Oriole American Goldfinch	Jun 29	Picoides pubescens Colaptes auratus Contopus virens Tyrannus tyrannus Vireo gilvus Stelgidopteryx serripennis Turdus migratorius Dumetella carolinensis Bombycilla cedrorum Dendroica petechia Geothlypis trichas Melospiza melodia Cardinalis cardinalis Passerina cyanea Molothrus ater Icterus spurius Icterus galbula Carduelis tristis	Downy Woodpecker Northern Flicker Eastern Wood Pewee Eastern Kingbird Warbling Vireo Northern Rough winged Swallow American Robin Gray Catbird Cedar Waxwing Yellow Warbler Common Yellowthroat Song Sparrow Northern Cardinal Indigo Bunting Brown headed Cowbird Orchard Oriole Baltimore Oriole American Goldfinch
59	0328635E 4682425N	Yawkey / Ojibway and EC Row	Jun 13	Buteo jamaicensis Tyrannus tyrannus Turdus migratorius Sturnus vulgaris Dendroica petechia Geothlypis trichas Melospiza melodia Agelaius phoeniceus Carduelis tristis	Red tailed Hawk Eastern Kingbird American Robin European Starling Yellow Warbler Common Yellowthroat Song Sparrow Red winged Blackbird American Goldfinch	Jun 29	Buteo jamaicensis Zenaida macroura Tyrannus tyrannus Turdus migratorius Bombycilla cedrorum Dendroica petechia Geothlypis trichas Melospiza melodia Passerina cyanea Agelaius phoeniceus Molothrus ater Carpodacus mexicanus Carduelis tristis Passer domesticus	Red tailed Hawk Mourning Dove Eastern Kingbird American Robin Cedar Waxwing Yellow Warbler Common Yellowthroat Song Sparrow Indigo Bunting Red winged Blackbird Brown headed Cowbird House Finch American Goldfinch House Sparrow

APPENDIX H
RESULTS OF BIRD POINT COUNT SURVEYS

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
60	0328430E 4682450N	Yawkey / Ojibway and EC Row	Jun 13	Picoides pubescens Empidonax traillii Tyrannus tyrannus Vireo gilvus	Downy Woodpecker Willow Flycatcher Eastern Kingbird Warbling Vireo	Jun 29	Picoides pubescens Empidonax traillii Vireo gilvus Thryothorus Iudovicianus	Downy Woodpecker Willow Flycatcher Warbling Vireo Carolina Wren
				Thryothorus Iudovicianus Turdus migratorius Dumetella carolinensis Dendroica petechia Melospiza melodia Agelaius phoeniceus Passer domesticus	Carolina Wren American Robin Gray Catbird Yellow Warbler Song Sparrow Red winged Blackbird House Sparrow		Turdus migratorius Dumetella carolinensis Sturnus vulgaris Cardinalis cardinalis Agelaius phoeniceus Molothrus ater Passer domesticus	American Robin Gray Catbird European Starling Northern Cardinal Red winged Blackbird Brown headed Cowbird House Sparrow

Bold denotes verified breeding (species observed at both visits)



Reference Number	Location	Habitats (ELC's)		Significant Wildlife	Habitat		Comments
			Seasonal Concentration of Animals ¹	Rare Vegetation Communities ² or Specialized Habitats to Wildlife ³	Species of Conservation Concern ⁴	Animal Movement Corridors ⁵	
W-BBA1	Brighton Beach Area	CUM	No evidence	No areas that would contain wildlife uncommon or rare	Unable to verify	Unable to confirm mammal corridors	Not able to verify – no access to property
W-BBA2	Brighton Beach Area	FOD	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	Unable to verify	Unable to confirm mammal corridors Small part of larger north-south bird migration corridor	Not able to verify – no access to property
W-BBA3	Brighton Beach Area	FOD	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	Cooper's Hawk	Unable to confirm mammal corridors	Not able to verify if Cooper's Hawk nesting or other wildlife species present – no access to property
W-BBA4	Brighton Beach Area	CUW	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	Cooper's HawkGray Catbird	East-west mammal corridor s connecting residences on east side to factory property on west side Small part of migration corridor along Detroit River for migrating birds	 Red Fox pups observed on factory property, opposite CUW, along tree row at south end of factory Cooper's Hawk, although observed in CUW, not nesting there
W-BBA5	Brighton Beach Area	CUW	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	 mammal corridors connecting CUW with surrounding industrial property Small part of migration corridor along Detroit River for migrating birds 	Human adapted wildlife in area
W-BBA6	Brighton Beach Area	МАМ	No evidence	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	East-west mammal corridor from MAM to factory property west of Ojibway Parkway at south end of Russell Street	Human adapted wildlife in area
W-BBA7	Brighton Beach Area	CUW	Unable to verify	Unable to verify	Unable to verify	Unable to verify	Not able to verify – no access to property
W-BBA8	Brighton Beach Area	CUM	Land bird migratory stopover area	Habitat for breeding birds of conservation concern	Eastern Kingbird	Unable to verify	Few observations made from outside fenced-in property
W-BBA9	Brighton Beach Area	CUS	Land bird migratory stopover area	Grasslands and forest in area	Carolina WrenGray CatbirdAmerican Goldfinch	 North-south corridor for red fox, raccoon, skunk and white-tailed deer moving through CUS. One section of a larger bird migration corridor that extends north-south along east side of Detroit River 	 Numerous species of wildlife use the area for feeding Red fox den located on Ontario Hydro property just north of BBA9 Brown snakes located in open area along north edge of FOD Large number of migratory bird nests
WBBA10	Brighton Beach Area	CUW	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Mammal movement corridor along north forest edge Small part of migration corridor along Detroit River for migrating birds	Foraging area for birds and mammals
WBBA11	Brighton Beach Area	CUS	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Mammal movement corridors along roadsides and through CUS Small part of migration corridor along Detroit River for migrating birds	Foraging area for birds and mammals
WBBA12	Brighton Beach Area	CUM	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Mammal movement corridors along roadsides and through CUM Small part of migration corridor along Detroit River for migrating birds	Foraging area for birds and mammals

Reference Number	Location	Habitats (ELC's)		Significant Wildlife I	Habitat		Comments
			Seasonal Concentration of Animals ¹	Rare Vegetation Communities ² or Specialized Habitats to Wildlife ³	Species of Conservation Concern ⁴	Animal Movement Corridors ⁵	
WBBA13	Brighton Beach Area	CUS	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare Habitat for breeding birds of conservation concern	Gray Catbird	Mammal movement corridors along roadsides and through CUM Small part of migration corridor along Detroit River for migrating birds	 Foraging area for birds and mammals Deer bedding area in southeast corner
WBBA14	Brighton Beach Area	CUM	No evidence	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Some evidence of north-south mammal movement corridors through CUM	Other than white-tailed deer and some small mammal activity, this area has limited amounts of wildlife due to its proximity to the highway
WBBA15	Brighton Beach Area	cus	Land bird migratory stopover area	Nno areas that would contain wildlife uncommon or rare No forested areas	No species of conservation concern were recorded	North-south corridor for red fox, raccoon, skunk and white-tailed deer moving through CUM Small part of migration corridor along Detroit River for migrating birds.	Feeding zone for migrating birds.
WBBA16	Brighton Beach Area	FOD	 Land bird migratory stopover area Potential winter deer yard Amphibian breeding ponds in spring 	Forest contains trees with numerous nest cavities deadfalls for breeding birds and mammals Pond inside forest for breeding amphibians	American Goldfinch Carolina Wren Gray Catbird	Mammal corridors for white-tailed deer, red fox, raccoon, and skunk One section of a larger bird migration corridor that extends north-south along east side of Detroit River	 Breeding area for many species of migratory birds Amphibian breeding pond inside forest
WBBA17	Brighton Beach Area	CUM, TPO	Land bird migratory stopover area	Habitat for breeding birds of conservation concern	Brown Thrasher American Goldfinch	East-west corridor for red fox, raccoon and white-tailed deer moving along south side of CUM Small part of migration corridor along Detroit River for migrating birds.	 Feeding zone for migrating birds Brown snake and red-bellied snake located along roadside at west end of CUM
WBBA18	Brighton Beach Area	CUT	Land bird migratory stopover area	Habitat for breeding birds of conservation concern	Gray Catbird American Goldfinch Carolina Wren	Mammal corridors for white-tailed deer, red fox, raccoon, and skunk Small part of migration corridor along Detroit River for migrating birds	Breeding area for migratory birds
WBBA19	Brighton Beach Area	CUM	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	no species of conservation concern were recorded	White-tailed deer corridor along northeast side of CUM Coyote, fox and raccoon corridor along roadway on east side of CUM	Green frogs in ditches along north edge of CUM
WBBA20	Brighton Beach Area	CUM	Land bird migratory stopover area	Lots of fall seed plants for passerine migrants to forage on	Gray Catbird American Goldfinch	East-west mammal movement corridors along north and south sides of CUM Small part of migration corridor along Detroit River for migrating birds	Fall season foraging area for migrating birds
WBBA21	Brighton Beach Area	CUW	Potential land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	Not able to verify – no access to property	Unable to confirm mammal corridors	Not able to verify – no access to property

Reference Number	Location	Habitats (ELC's)		Significant Wildlife H	Habitat		Comments
			Seasonal Concentration of Animals ¹	Rare Vegetation Communities ² or Specialized Habitats to Wildlife ³	Species of Conservation Concern ⁴	Animal Movement Corridors ⁵	
W-ANS1	ANSI south of Broadway St	TPW	 Land bird migratory stopover area Summer white-tailed deer bedding areas Potential winter deer yard 	Habitat for breeding birds of conservation concern Forest contains trees with numerous nest cavities for breeding birds and mammals	American GoldfinchGray CatbirdRed-headed Woodpecker	Mammal corridors throughout ANSI for white-tailed deer, raccoon, red fox, coyote, striped skunk and opossum. Small part of larger north-south bird migration corridor	 ANSI Deer bedding area Red-headed Woodpecker is SARA species
W-YWK1	Yawkey	CUM	No evidence	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	East-west mammal corridor through center of CUM	This area has limited amounts of wildlife due to its proximity to the highway
W-YWK2	Yawkey	CUW	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	East-west mammal corridors through CUW Small part of larger north-south bird migration corridor	This area has limited amounts of wildlife due to its proximity to the highway and human disturbance
W-YWK3	Yawkey	CUM	No evidence	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	North-south mammal corridors through CUM	This area has limited amounts of wildlife due to its proximity to the highway and human disturbance
W-YWK4	Yawkey	MAS	No evidence	Habitat for breeding birds of conservation concern	Gray Catbird	North-south mammal corridors through CUM Small part of larger north-south bird migration corridor	This area has limited amounts of wildlife due to its proximity to the highway and human disturbance
W-YWK5	Yawkey	CUW	Land bird migratory stopover area	Habitat for breeding birds of conservation concern	American Goldfinch Gray Catbird	Numerous north-south mammal corridors from residences to CUW, through to ANSI Small part of larger north-south bird migration corridor	 Garter snakes found in north end of CUW Although it is surrounded by human disturbances, it offers good habitat for foraging and nesting
W-YWK6	Yawkey	CUW	Land bird migratory stopover area	Habitat for breeding birds of conservation concern	Red-tailed Hawk	East-west mammal corridors through CUW Small part of larger north-south bird migration corridor	Active Red-tailed Hawk nest in woodlot
W-YWK7	Yawkey	CUM	Land bird migratory stopover area	Habitat for breeding birds of conservation concern	American GoldfinchEastern Kingbird	White-tailed deer and coyote corridor along east-west ridge on north side of CUM Small part of larger north-south bird migration corridor	Minimal wildlife due to landfill site adjacent to CUM
W-YWK8	Yawkey	MAM	Land bird migratory stopover area	Habitat for breeding birds of conservation concern	American GoldfinchEastern Kingbird	Mammal corridors along ditch area in marsh parallel to EC Row Expressway Small part of larger north-south bird migration corridor	Chain-link fence on north side parallel to EC Row Expressway and Ojibway Parkway intersection limits movement of mammals north-south
W-CH1	Chappus Street Area	CUM	Potential snake hibernaculum	Habitat suitable for breeding birds of conservation concern and snakes	Spotted Sandpiper	East-west mammal corridors connecting Matchette Road west to CUW east Small part of larger north-south bird migration corridor	Possible garter snake hibernaculum at west end of CUM under tree

Reference Number	Location	Habitats (ELC's)		Significant Wildlife	Habitat		Comments
			Seasonal Concentration of Animals ¹	Rare Vegetation Communities ² or Specialized Habitats to Wildlife ³	Species of Conservation Concern ⁴	Animal Movement Corridors ⁵	
W-CH2	Chappus Street Area	FOD, CUW, CUS	 Land bird migratory stopover area Amphibian breeding areas in creek drains 	Habitat suitable for breeding birds of conservation concern Temporary creek drains	 Carolina Wren Eastern Towhee Gray Catbird Spotted Sandpiper 	Large continuous corridor of mammal trails extending from Matchete Road and EC Row Expressway in the northwest to Malden Road and Spring Garden Road in the southeast Small part of larger north-south bird migration corridor	 Creeks running east-west and north-south through center of corridor were breeding areas for American Toad, leopard frog and green frog. Potential Cooper's Hawk nesting site in CUW at south end of corridor (pair very active in spring around previous nest site).
W-CH3	Chappus Street Area	TPO	No evidence	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Minor mammal corridors east-west	White-tailed deer bedding areas around the CUT 's in the TPO area no movement of mammals north due to chain-linked fence along EC Row Expressway
W-CH4	Chappus Street Area	CUT	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	American GoldfinchGray CatbirdRuby-throated Hummingbird	Mammal corridors connecting surrounding CUW's and CUT's Small part of larger north-south bird migration corridor	Human influenced by motorbike trails throughout the area Creek drain flows parallel to south side of CUT
W-CH5	Chappus Street Area	CUT	No evidence	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	No evidence	•
W-CH6	Chappus Street Area	CUP	No evidence	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	no evidence	•
W-CH7	Chappus Street Area	CUW, SWD	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	East-west mammal corridor along north side of CUW1 and SWD parallel to fence line Small part of larger north-south bird migration corridor continuous with Malden Park Forest on north side of EC Row Expressway	No mammal corridors going north due to chain-linked fence along EC Row Expressway
W-CH8	Chappus Street Area	CUM	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	American GoldfinchGray Catbird	East-west mammal corridor connecting CUW on the west side to residences on the east side Small part of larger north-south bird migration corridor	•
W-CH9	Chappus Street Area	CUT	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	Gray Catbird	Mammal corridors connecting two CUW's on east and west sides Small part of larger north-south bird migration corridor	Good area for breeding birds to nest
W-CH10	Chappus Street Area	TPO	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern Habitat suitable for snakes protected by SARA	Butler's Garter SnakeField Sparrow	White-tailed deer, coyote and raccoon corridors connecting CUS and CUT north of area to CUT and CUW south and east of area Small part of larger north-south bird migration corridor	 Butler's Garter Snake is a SARA species It was only found in the TPO's of this section of the AOI.

Reference Number	Location	Habitats (ELC's)		Significant Wildlife	Habitat		Comments
			Seasonal Concentration of Animals ¹	Rare Vegetation Communities ² or Specialized Habitats to Wildlife ³	Species of Conservation Concern ⁴	Animal Movement Corridors ⁵	
W-CH11	Chappus Street Area	CUT	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	 American Goldfinch Eastern Towhee Field Sparrow Gray Catbird 	Mammal corridors east-west through CUT and north-south connecting TPO with CUW1 Small part of larger north-south bird migration corridor	•
W-CH12	Chappus Street Area	CUM	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern and snakes	American Goldfinch Carolina Wren	Mammal and snake corridors connecting area toCUW1 and creek drain in center and CUW1 on south, east and west sides Small part of larger north-south bird migration corridor	 Garter snakes and Brown snakes inhabit area Mammals adapted to human activity using walking trails and 4x4 vehicle trails as corridors
W-CH13	Chappus Street Area	CUT	Land bird migratory stopover area	habitat for breeding birds of conservation concern	 American Goldfinch Carolina Wren Eastern Phoebe Gray Catbird 	White-tailed deer, coyote and raccoon corridors connecting CUT and FOD north and south of area Continuation of snake corridors in TPO Small part of larger north-south bird migration corridor	 Habitat connection with TPO that contains Butler's Garter Snake White-tailed deer beds in east end of area
W-CH14	Chappus Street Area	TPO	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern Habitat suitable for snakes protected by SARA	Butler's Garter Snake American Goldfinch Field Sparrow	White-tailed deer, coyote and raccoon corridors connecting FOD and CUT north and south of area Small part of larger north-south bird migration corridor	 Butler's Garter Snake is a SARA species It was only found in the TPO's of this section of the AOI.
W-CH15	Chappus Street Area	FOD	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	No evidence	Human influenced area
W-CH16	Chappus Street Area	CUT	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Minor mammal corridors between FOD's and residences Small part of larger north-south bird migration corridor	Human influenced area
W-CH17	Chappus Street Area	CUM	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Mammal corridors connecting MAM on east side to CUT1 on south side Small part of larger north-south bird migration corridor	•
W-CH18	Chappus Street Area	MAM	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Mammal corridors connecting surrounding CUT's to CUM on east side Small part of larger north-south bird migration corridor	•
W-CH19	Chappus Street Area	FOD	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Mammal corridors connecting residence yards in south to MAM and FOD in north Small part of larger north-south bird migration corridor	Human influenced area

Reference Number	Location	Habitats (ELC's)		Significant Wildlife I	Habitat		Comments
			Seasonal Concentration of Animals ¹	Rare Vegetation Communities ² or Specialized Habitats to Wildlife ³	Species of Conservation Concern ⁴	Animal Movement Corridors ⁵	
W-CH20	Chappus Street Area	MAM	No evidence	Habitat suitable for breeding birds of conservation concern	American Woodcock	East-west mammal corridors for white-tailed deer and raccoon connecting surrounding CUT, FOD, CUM and TPO areas. Small part of larger north-south bird migration corridor	•
W-CH21	Chappus Street Area	TPO	No evidence	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Mammal and snake corridors connecting CUW on north side to residences and FOD on south side	 Lots of garter snakes in grassy areas Reports by local residents that fox snakes are common in area although none were observed by LGL field personnel
W-CH22	Chappus Street Area	TPO	No evidence	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	East-west mammal corridors along north side of TPO connecting FOD on east side to residence back yards on west side	Lots of human influence
W-CH23	Chappus Street Area	TPO	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Mammal corridors connecting surrounding CUW and FDO's Small part of larger north-south bird migration corridor	North-south creek drain on east side of TPO used by American toad, leopard frog and green frog for breeding
W-CH24	Chappus Street Area	CUT	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Mammal corridors north-south between creek drain on west side and CUT connecting CUW on north side to TPO and FOD on south side Small part of larger north-south bird migration corridor	North-south creek drain on west side of CUT1 used by American toad, leopard frog and green frog for breeding
W-CH25	Chappus Street Area	CUP	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Mammal corridors north-south connect CUW on north side to FOD on south side Small part of larger north-south bird migration corridor	Human influence in this area
W-CH26	Chappus Street Area	CUT	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	Carolina Wren Gray Catbird	Mammal corridors north-south connect FOD to CUP Small part of larger north-south bird migration corridor	•
W-CH27	Chappus Street Area	CUP	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Mammal corridors north-south connect CUP to residence back yards Small part of larger north-south bird migration corridor	Human influence in this area
W-NSG1	North of Spring Garden Road	CUS	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	East-west corridors connecting FOD on east side with Malden Road on west side Small part of larger north-south bird migration corridor	Mammal movement north blocked by chain-linked fence along EC Row Expressway

Reference Number	Location	Habitats (ELC's)		Significant Wildlife I	Habitat		Comments
			Seasonal Concentration of Animals ¹	Rare Vegetation Communities ² or Specialized Habitats to Wildlife ³	Species of Conservation Concern ⁴	Animal Movement Corridors ⁵	
W-NSG2	North of Spring Garden Road	FOD	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	East-west mammal corridors connecting CUM on east side with CUS on west side Small part of larger north-south bird migration corridor	Mammal movement north blocked by chain-linked fence along EC Row Expressway
W-NSG3	North of Spring Garden Road	CUM, TPO	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	Gray Catbird	Mammal corridors throughout CUM connecting FOD and SWD areas Small part of larger north-south bird migration corridor	Lots of white-tailed deer bedding areas at south end of CUM
W-NSG4	North of Spring Garden Road	SWD	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	Carolina WrenCooper's HawkGray Catbird	Mammal corridors connecting CUM north to residence back yards south and FOD on east side Small part of larger north-south bird migration corridor	Cooper's Hawk possibly nesting in area
W-NSG5	North of Spring Garden Road	FOD, CUW	 Land bird migratory stopover area Amphibian breeding ponds in forest 	 Habitat suitable for breeding birds of conservation concern Vernal ponds in forest 	Carolina WrenGray Catbird	Mammal corridors east-west through forest connecting CUT on east side to CUM on west side Small part of larger north-south bird migration corridor	 Cooper's Hawk possibly nesting in area Vernal ponds in west end of forest with breeding chorus frogs North movements impeded by chain-linked fence along EC Row Expressway Lots of white-tailed deer trails going east-west through FOD at south end
W-NSG6	North of Spring Garden Road	CUT	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	American GoldfinchGray Catbird	Mammal corridors east-west through CUT connecting FOD's on each side Small part of larger north-south bird migration corridor	•
W-NSG7	North of Spring Garden Road	CUT	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	American Goldfinch Eastern Towhee Gray Catbird	Lots of white-tailed deer trails running east-west through CUT connecting FOD on west side to CUT on east side Small part of larger north-south bird migration corridor	North movements impeded by chain-linked fence along EC Row Expressway Lots of breeding bird nests (old and new) found in CUT
W-NSG8	North of Spring Garden Road	CUW	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	Gray Catbird	East-west mammal corridors connecting CUW to resident backyards and CUT on east and south sides Small part of larger north-south bird migration corridor	Huron Church Road is partial barrier to east side mammal movements
W-NSG9	North of Spring Garden Road	CUW	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	No mammal corridors evident Small part of larger north-south bird migration corridor	CUW surrounded by major highways making it unsuitable for mammals and herpetofauna

Reference Number	Location	Habitats (ELC's)		Significant Wildlife H	Habitat		Comments
			Seasonal Concentration of Animals ¹	Rare Vegetation Communities ² or Specialized Habitats to Wildlife ³	Species of Conservation Concern ⁴	Animal Movement Corridors ⁵	
W-MAL1	Malden Park	MAM	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Mammal corridor east-west through MAM along fence row Small part of larger north-south bird migration corridor	South movements impeded by chain-linked fence along EC Row Expressway
W-MAL2	Malden Park	CUM	No evidence	Habitat suitable for breeding birds of conservation concern	American Goldfinch	Mammal corridors east-west along park roadway plus north-south connections from FOD on north side to MAM on south side Small part of larger north-south bird migration corridor	Large portion of this habitat is manicured
W-MAL3	Malden Park	FOD	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	Gray Catbird	Mammal corridors connecting FOD to surrounding habitats Small part of larger north-south bird migration corridor	FOD is elevated and primarily a hillside forest
W-MAL4	Malden Park	CUS	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern and snakes	 American Goldfinch Eastern Kingbird Orchard Oriole Rough-winged Swallow 	Mammal corridors east-west along park roadways connecting FOD to CUM Small part of larger north-south bird migration corridor	Brown Snakes migrating along east-west roadways in late September
W-MAL5	Malden Park	FOD	Land bird migratory stopover areaAmphibian breeding ponds	 Habitat suitable for breeding birds of conservation concern Vernal ponds for amphibians 	Gray Catbird	Mammal corridors throughout woodlot connecting CUS1 on west side to CUS1 on east side of Malden Road Small part of larger north-south bird migration corridor	 Pond in center of FOD Chorus frogs using pond as breeding area in spring
W-MAL6	East of Malden Road	TPO	No evidence	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Brown snake and garter snake corridors east-west through TPO	Brown snakes and garter snake found under rock and boards
W-MAL7	East of Malden Road	CUS	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	American Goldfinch	Mammal corridors east-west connecting FOD on east side to FOD on west side across Malden Road Small part of larger north-south bird migration corridor	White-tailed deer beds found in center of CUS
W-MAL8	East of Malden Road	CUM	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	American Goldfinch	Mammal corridor connecting CUS to FOD on east-west sides Small part of larger north-south bird migration corridor	•
W-MAL9	East of Malden Road	MAM	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	No mammal corridor evidence Small part of larger north-south bird migration corridor	Brown snake and garter snake found on north edge of MAM
W-MAL10	East of Malden Road	CUM	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	No corridor evidence	•

Reference Number	Location	Habitats (ELC's)		Significant Wildlife H	Habitat		Comments
			Seasonal Concentration of Animals ¹	Rare Vegetation Communities ² or Specialized Habitats to Wildlife ³	Species of Conservation Concern ⁴	Animal Movement Corridors ⁵	
W-MAL11	East of Malden Road	FOD	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Mammal corridors connecting TPO on east side to CUM on west side Small part of larger north-south bird migration corridor	•
W-MAL12	East of Malden Road	TPO	No evidence	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Mammal corridors at south end connecting FOD to CUW	•
W-MAL13	East of Malden Road	CUW	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	East-west mammal corridor connecting TPO to area along fence row of EC Row Expressway Small part of larger north-south bird migration corridor	•
W-MAL14	East of Malden Road	CUW	No evidence	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	No corridor movements evident	Wildlife presence limited by highways completely surrounding the habitat.
WABO1	NE Quadrant of EC Row and Huron Church	CUW	No evidence	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	No corridor movements evident	Wildlife presence limited by highways completely surrounding the habitat.
W-LAM1	North of Lambton Street	TPO	No evidence	Grasslands around creek are suitable habitat for fox snake and garter snake Habitat suitable for breeding birds of conservation concern	Fox snake Eastern Kingbird	East-west snake and mammal corridors connecting creek on west side to CUW on east side Mammal corridors connecting residence yards on north side with Spring Garden Park on south side	 Fox snake is a SARA species. Bicycle trails along west and south sides of TPO
W-LAM2	North of Lambton Street	CUW	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	Orchard Oriole Red-bellied Woodpecker	East-west snake and mammal corridors connecting creek on west side to CUW on east side North-south snake and mammal corridors connecting creek along north side of CUW to Spring Garden Park on south side Small part of larger north-south bird migration corridor	•
W-LAM3	North of Lambton Street	CUS	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Mammal corridor on west side of CUS connecting CUW's on north and south sides	•
W-LAM4	North of Lambton Street	CUW	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	Gray Catbird	Small part of larger north-south bird migration corridor	Area enclosed by residences and businesses limiting the type of wildlife to human adapted species
W-LAM5	North of Lambton Street	FOD	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	East-west mammal corridors along forest edges Small part of larger north-south bird migration corridor	•
W-LAM6	North of Lambton Street	CUM	No evidence	Habitat suitable for breeding birds of conservation concern	American Goldfinch	North-south mammal corridors leading from CUM to FOD north and CUW south	White-tailed deer beds in area White-tailed deer feeding areas

Reference Number	Location	Habitats (ELC's)		Significant Wildlife H	Habitat		Comments
			Seasonal Concentration of Animals ¹	Rare Vegetation Communities ² or Specialized Habitats to Wildlife ³	Species of Conservation Concern ⁴	Animal Movement Corridors ⁵	
W-LAM7	North of Lambton Street	CUW	Land bird migratory stopover area Potential deer wintering yard	Habitat suitable for breeding birds of conservation concern	Gray Catbird Carolina Wren	Numerous mammal corridors, especially of White-tailed deer, throughout woodlot Small part of larger north-south bird migration corridor	Deer beds found inside woodlot
W-LAM8	North of Lambton Street	CUM	No evidence	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Mammal corridors from CUM to surrounding CUW	•
W-LAM9	North of Lambton Street	CUM	No evidence	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Mammal corridors across CUM and into surrounding CUW	•
W-NGM1	North of Grand Marais Road	CUW	No evidence	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	No corridor movements evident	Area surrounded by heavy traffic
W-NGM2	North of Grand Marais Road	CUW	No evidence	No areas that would contain wildlife uncommon or rare	American GoldfinchGray Catbird	 Mammal corridors throughout bush connecting to surrounding residences Small part of larger north-south bird migration corridor 	Wildlife in area human influenced
W-TC1	Turkey Creek (Bridge and Creek Riparian)	Riparian	Colonial bird breeding colony on Turkey Creek Bridge	 Habitat suitable for breeding birds of conservation concern Habitat suitable for fox snakes 	Fox Snake	No corridors observed	 Fox snakes observed along creek just west of Turkey Creek bridge Fox snake is a SARA species Cliff Swallow nesting colony on ceiling of bridge Barn Swallow nesting colony on ceiling of bridge
W-RED1	North and South of Reddock Avenue	TPO	No evidence	Habitat suitable for breeding birds of conservation concern	Eastern Kingbird	 Mammal corridors running north-south through TPO connecting CUT and SWD on south side to SWD and another TPO on north side Snake corridors east-west and north- south through TPO 	White-tailed deer foraging zone Garter snake foraging zone
W-RED2	North and South of Reddock Avenue	SWD, FOD, CUW	 Land bird migratory stopover area Potential winter deer yard Vernal ponds for breeding amphibians 	 Habitat suitable for breeding birds of conservation concern Habitat suitable for fox snakes Vernal ponds 	Fox SnakeAmerican GoldfinchCarolina WrenGray Catbird	 Mammal corridors connecting SWD to surrounding TPO, residences to FOD and FOD to CUM on east side Small part of larger north-south bird migration corridor 	 White-tailed deer foraging zone White-tailed deer using SWD at north end of unit in TPO area (RED-1) for beds Chorus frog breeding ponds in woodlots Fox snake is a SARA species (reported in residence backyard and verified by local biologists)
W-RED3	North and South of Reddock Avenue	CUT	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	Eastern Kingbird	Mammal corridors connecting TPO to SWD Small part of larger north-south bird migration corridor	White-tailed deer bedding area
W-RED4	North and South of Reddock Avenue	CUM	No evidence	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Mammal corridors from CUM into SWD	•

Reference Number	Location	Habitats (ELC's)		Significant Wildlife I	Habitat		Comments
			Seasonal Concentration of Animals ¹	Rare Vegetation Communities ² or Specialized Habitats to Wildlife ³	Species of Conservation Concern ⁴	Animal Movement Corridors ⁵	
W-RED5	North and South of Reddock Avenue	CUW	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Mammal corridors connecting residence backyards on north side to CUT on south side Small part of larger north-south bird migration corridor	•
W-RED6	North and South of Reddock Avenue	CUT	No evidence	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Mammal corridors connecting CUW on north side to SWD on south side	•
W-RED7	North and South of Reddock Avenue	CUM	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	 American Goldfinch Eastern Kingbird Gray Catbird Orchard Oriole 	East-west mammal corridors along north section of FOD	White-tailed deer foraging area
W-RED8	North and South of Reddock Avenue	MAM	 Land bird migratory stopover area Vernal pond in fragmite patch 	No areas that would contain wildlife uncommon or rare Small pond in fragmite patch suitable for breeding amphibians	No species of conservation concern were recorded	Mammal corridors connecting area to surrounding CUM Small part of larger north-south bird migration corridor	No evidence of movements to the east because of Huron Church Road Green frogs breeding in fragmite patch next to Huron Church Road
W-OAK1	Oakwood Bush	CUW, FOD	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	American GoldfinchGray Catbird	Mammal corridors connecting inside of woodlots to surrounding CUM's North-south mammal corridor connecting Cabana Road area in south end to FOD at north end Small part of larger north-south bird migration corridor	Small creek drain east-west through center of CUW1
W-OAK2	Oakwood Bush	CUM	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Mammal corridors connecting inside of forest to surrounding CUM Small part of larger north-south bird migration corridor	•
W-HCL1	Between Huron Church Line and Huron Church Road	CUW	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Mammal corridors throughout CUW connecting to FOD on southeast side and surrounding residences Small part of larger north-south bird migration corridor	Human adapted wildlife found in this area
W-HCL2	Between Huron Church Line and Huron Church Road	FOD	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Mammal corridors throughout forest connect to CUT on east side and residences on north, west and south sides Small part of larger north-south bird migration corridor	Cahill Drain flows along south side of forest
W-HCL3	Between Huron Church Line and Huron Church Road	CUT	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	American Goldfinch Gray Catbird	Mammal corridors connecting FOD on south side to MAM on north side and SWD on east side Small part of larger north-south bird migration corridor	Cahill Drain flows along south side of CUW evidence mammals crossing from CUW to ESA on north side of Huron Church Road

APPENDIX I WILDLIFE HABITAT ASSESSMENT SUMMARY

Reference Number	Location	Habitats (ELC's)		Significant Wildlife	Habitat		Comments
			Seasonal Concentration of Animals ¹	Rare Vegetation Communities ² or Specialized Habitats to Wildlife ³	Species of Conservation Concern ⁴	Animal Movement Corridors ⁵	
W-HCL4	Between Huron Church Line and Huron Church Road	MAM	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Mammal corridors from MAM to CUT and SWD Small part of larger north-south bird migration corridor	Evidence that mammals crossing from MAM to ESA on north side of Huron Church Road
W-HCL5	Between Huron Church Line and Huron Church Road	SWD	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	Gray Catbird	Cahill Drain is a mammal corridor connecting W-ESA to W-HCL5	Cahill Drain flows east–west through south side of SWD Track and trail evidence showed muskrat, raccoon, red fox, coyote and white-tailed deer using Cahill Drain as a corridor year-round
W-HCL6	Between Huron Church Line and Huron Church Road	CUT	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	American Goldfinch	 Cahill Drain is a mammal corridor connecting W-ESA to W-HCL6 Snake corridors throughout center of CUT Small part of larger north-south bird migration corridor 	 Cahill Drain flows east—west along north side of CUT Track and trail evidence showed muskrat, raccoon, red fox, coyote and white-tailed deer using Cahill Drain as a corridor year-round Lots of eastern garter snakes foraging in grassy areas of CUT
W-HCL7	Between Huron Church Line and Huron Church Road	CUM	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	Savannah Sparrow	East-west mammal corridors connecting CUT to MAS and CUM to residences on south side Small part of larger north-south bird migration corridor	Entire CUM being cut in mid-June. Recommend not cutting until late July/early August when Savannah Sparrow young have fledged.
W-HCL8	Between Huron Church Line and Huron Church Road	MAS	 Land bird migratory stopover area amphibian breeding pond 	No areas that would contain wildlife uncommon or rare breeding pond/marsh habitat	No species of conservation concern were recorded	Mammal corridors connecting marsh to surrounding CUM Small part of larger north-south bird migration corridor	American toad and chorus frogs seasonal breeding area within 20 m of Talbot Road
W-ESA1	St. Clair College	CUT	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	Gray Catbird	Cahill Drain is a mammal corridor connecting W-ESA1 to W-HCL5 and W-HCL6 Mammal corridors throughout CUT connecting it to St. Clair College and residences	Lots of human influence throughout CUT from St. Clair College (jogging trails, aerobics fitness center)
W-HWY1	Highway 401	CUM	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	American Goldfinch	Mammal corridors connecting CUW east to residences west. Mammal corridors connecting CUM to agricultural areas south and east.	 Foraging zone for migratory land birds during spring and fall migrations.
W-HWY2	Highway 401	CUS	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	American Goldfinch Gray Catbird	Mammal corridors connecting CUS to surrounding agricultural lands and CUM Small part of larger north-south bird migration corridor	White-tailed deer foraging and bedding area
W-HWY3	Highway 401	CUW	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	American GoldfinchEastern KingbirdGray Catbird	Mammal corridors north-south through CUW rows giving protection and access to surrounding habitats	Tree rows next to open fields used for nesting
W-HWY4	Highway 401	OAO	Land bird migratory stopover area	No evidence	No species of conservation concern were recorded	Mammal corridors to and from pond continuous with surrounding tree rows	Green frog breeding pond

APPENDIX I WILDLIFE HABITAT ASSESSMENT SUMMARY

Reference Number	Location	Habitats (ELC's)		Significant Wildlife I	Habitat		Comments
			Seasonal Concentration of Animals ¹	Rare Vegetation Communities ² or Specialized Habitats to Wildlife ³	Species of Conservation Concern ⁴	Animal Movement Corridors ⁵	
W-HWY5	Highway 401	CUT	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	Gray Catbird	Mammal corridors along creek through woodlot and in ditches connecting both sides of Talbot Road and agricultural fields. Small part of larger north-south bird migration corridor	Thicket and creek combination is excellent habitat containing species such as Brown Thrasher, Song Sparrow, Northern Cardinal, Indigo Bunting
W-HWY6	Highway 401	CUM1-1	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	American Goldfinch	Mammal corridors in creek drain along north side of cemetery	Human influenced wildlife present
W-AGR1	Outer Drive	Agricultural	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	American GoldfinchHorned LarkSavannah Sparrow	Mammal corridors along field edges next to CUT and creek drains	 Abandoned fields from previous season are excellent nesting areas for bird species such as Killdeer, Horned Lark and Vesper Sparrow. Feeding area for geese, doves, blackbirds, etc.
W-AGR2	Outer Drive	Agricultural	No evidence	No areas that would contain wildlife uncommon or rare	no species of conservation concern were recorded	Mammal corridors along field edges next to CUT and creek drains	Field edges next to drain were nesting areas for geese and ducks
W-AGR3	Outer Drive	Agricultural	No evidence	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Mammal corridors along field edges next to CUT and creek drains	Abandoned fields from previous season are excellent nesting areas for bird species
W-AGR4	South Talbot Road east of Outer Drive	Agricultural	No evidence	Habitat suitable for breeding birds of conservation concern	Horned Lark Vesper Sparrow	Mammal corridors along field edges connecting to CUT and creek within	Abandoned fields from previous season are excellent nesting areas for bird species
W-RES1	Montgomery Drive	Urban	No evidence	Habitat suitable for breeding birds of conservation concern	American GoldfinchCarolina Wren	Mammal movements in and around residences	 Wildlife adapted to human presence (bird feeders, human structures for dwellings and surrounding woodlots as suitable nesting areas for migratory birds) Mammals, such as eastern cottontails, forage on residence lawns.
W-RES2	Chelsea Drive	Urban	No evidence	Habitat suitable for breeding birds of conservation concern	American Goldfinch Carolina Wren	Mammal movements in and around residences	 Wildlife adapted to human presence (bird feeders, human structures for dwellings and surrounding woodlots as suitable nesting areas for migratory birds) Mammals, such as eastern cottontails, forage on residence lawns.

Notes:

- Seasonal concentration of animals includes: winter deer yards; moose late winter habitat; colonial bird nesting areas; waterfowl stopover areas; landbird migratory stopover areas; raptor winter feeding and roosting areas; wild turkey winter range; turkey vulture summer roosting areas; reptile hibernacula; bat h
- ² Rare vegetation communities include: alvars; tall-grass prairies; savannahs; rare forest types; talus slopes; rock barrens; sand barrens; and, Great Lakes dunes.
- 3 Specialized habitats for wildlife include: habitat for area-sensitive species; forests providing a high diversity of habitats; old-growth or mature forest stands; foraging areas with abundant mast; amphibian woodland breeding ponds; turtle nesting habitat; specialized raptor nesting habitat; special moose habitat (calving areas, aquatic feeding areas and mineral licks); and, mink, otter, marten or fisher denning sites; cliffs and caves; and, seeps and springs.
- ⁴ Species of conservation concern include: globally rare; nationally rare; provincially rare; regionally rare; locally rare; and, species of concern to the planning authority.
- 5 Animal movement corridors include dwelling habitat for plants and animals; and, conduits for daily and seasonal movements of animals, dispersal of organisms and genes and long-distance range shifts of species.



EVALUATION	Factor: Pi	Protect the Natural Environment									Natural Alterna	tive 1A Plaza A										
											Segments-Malden Re	ad to North Talbot Rd										
				Malden Rd to Pulfo	ord	1	Pulford north of Lennon	Drain	North	h of Lennon Drain to Cou	sineau Rd	d	Cousineau Rd to Howa	ard Ave		Howard Ave to Highway	401		Highway 3 to North Ta	lbot Rd		
Performance Measure	Criteria/Indicator	Measurement/Units		G-H			Н-1			1-7			J-K			K-L			L-M			
			Name	Type/Area	Significance	Name	Type/Area	Significance	Name	Type/Area	Significance	Name	Type/Area	Significance	Name	Type/Area	Significance	Name	Type/Area	Significance	Total Area	Significance
		Landscape name, Type/Area and significance	Basin Drain	Stream Corridor	Low	Oakwood Bush to Spri		Low	Lennon Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low		1
	Landscapes		Youngstown Drain	Stream Corridor	Low	Garden ANSI Lennon Drain	Stream Corridor	Low	St. Clair College Prairie Remnant	Patch	Moderate	Collins Drain	Stream Corridor	Low	No Name Tributary of Wolfe Drain	Stream Corridor	Low					+
			Marentette Drain	Stream Corridor	Low				St. Clair college Prairie		Moderate	Burke Drain	Stream Corridor	Low	Wolle Dialii							
			Grand Marais Drain	Stream Corridor	Moderate				Remnant to Spring Gar Cahill Drain	Stream Corridor	Low	No Name Tributary of Burke Draine	Stream Corridor	Low								+
			North of Spring Garden	Matrix	Low							Howard Avenue Drain	Stream Corridor	Low								+
			Road									Benson Drain	Stream Corridor	Low								+
												Dickson Drain	Stream Corridor	Low								+
												No Name Tributary of	Stream Corridor	Low								+
				Total High	0		Total High	0		Total High	0	Dickson Drain	Total High	0		Total High	0		Total High	0	0	0 Total High
				Total Moderate	1		Total Moderate	0		Total Moderate	2		Total Moderate	0		Total Moderate	0		Total Moderate	0	3	3 Total Moderate
-	Communities/	Community Type/Area, area, significance and sensitivity	Area Displaced	Total Low 1.35	High	Area Displaced	Total Low	High	Area Displaced	Total Low 0.08	High	Area Displaced	Total Low	High	Area Displaced	Total Low	High	Area Displaced	0.00	1 High	1.43	19 Total Low 43 Total High
	Ecosystems		Area Displaced	6 29	Moderate	Area Displaced	0.30	Moderate	Area Displaced	0.66	Moderate	Area Displaced	0.00	Moderate	Area Displaced		Moderate	Area Displaced	0.00	Moderate	7 25	25 Total Moderate
			Area Displaced	6.29 10.11	Low	Area Displaced	0.30 2.51	Low	Area Displaced	3.06	Low	Area Displaced	0.00	Low	Area Displaced	0.66	Low	Area Displaced	0.00	Low	16.34	34 Total Low
			Total Area Displaced	17.75		Total Area Displaced	2.81		Total Area Displaced	3.81		Total Area Displaced	0.00		Total Area Displaced	0.66		Total Area Displaced	0.00		25.03	03 Total Area Displaced
	Impacts to Aquatic Communities/	Community Type/Area, area, significance and sensitivity	Basin Drain	0.11	Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low		
			Basin Drain	0.03	None	Basin Drain		None	Basin Drain		None	Basin Drain		None	Basin Drain		None	Basin Drain		None		+
			Cahill Drain		Low	Cahill Drain		Low	Cahill Drain	0.02	Low	Cahill Drain		Low	Cahill Drain		Low	Cahill Drain		Low		
			Cahill Drain Cahill Drain		Moderate Moderate	Cahill Drain Cahill Drain		Moderate Moderate	Cahill Drain Cahill Drain	0.01	Moderate Moderate	Cahill Drain Cahill Drain		Moderate Moderate	Cahill Drain Cahill Drain		Moderate Moderate	Cahill Drain Cahill Drain		Moderate Moderate		+
			Grand Marais Drain	0.09	Low	Grand Marais Drain		Low	Grand Marais Drain	0.00	Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain		Low		
			Lennon Drain		Moderate	Lennon Drain		Moderate	Lennon Drain	0.06	Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate		
			Marentette Drain Wolfe Drain	0.03	None Low	Marentette Drain Wolfe Drain		None Low	Marentette Drain Wolfe Drain	0.01	None Low	Marentette Drain Wolfe Drain	0.54	None Low	Marentette Drain Wolfe Drain		None Low	Marentette Drain Wolfe Drain		None Low		+
			Wolfe Drain		Moderate	Wolfe Drain		Moderate	Wolfe Drain	0.29	Moderate	Wolfe Drain	0.04	Moderate	Wolfe Drain		Moderate	Wolfe Drain		Moderate		+
			Youngstown Drain	0.08	Low	Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain		Low		
				0.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.39	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	0.39	39 Total Moderate B5 Total Low
				0.06	None	Area Displaced	0.00	None	Area Displaced	0.00	None	Area Displaced	0.00	None	Area Displaced	0.00	None	Area Displaced	0.00	None	0.06	06 Total None
			Total Area Displaced		0.34	Total Area Displaced	0.	00	Total Area Displaced		41	Total Area Displaced		0.54	Total Area Displaced	0.0		Total Area Displaced		0.00	1.29	29 Total Area Displaced
opulations/Species	Risk	Species name, Type/Area and significance	Provincially Rare Specimens/Colonies		85 High	Provincially Rare Specimens/Colonies		6 High	Provincially Rare Specimens/Colonies		51 High	Provincially Rare Specimens/Colonies		0 High	Provincially Rare Specimens/Colonies		0 High	Provincially Rare Specimens/Colonies		0 High	142	Total Provincially Rare 42 Specimens/Colonies
urface Water	Changes in surface wate conditions (quality and	erarea of surface drainage altered by each alternative																				
	quantity)	number of surface water drainages crossings																				1
		by stream Type/Area number of encroachments on or severances of																				+
		surface water drainages	1																			
		degree of compliance with Provincial and Federal Water Quality Guidelines and																				
roundwater	Change in ground:	Stormwater Management requirements area of infiltration zones affected	1	-		1	1	+	+	1	+	1	+	1	1	1	1	1	+			+
rounuwater	conditions (quality and	area of infiltration zones affected area of groundwater recharge affected	1	1		1	+	+	+	+	+	1	+	+	+	1	+	1	+			+
	quantity)	areas of seepage affected						1	1		1		1									+
		area of water table affected by each alternativ (draw down zone)	10																			
		proximity of alternative to public and private drinking water wells																				
ther Natural Resources	Impacts to mineral,	Area in ha within ROW	<u> </u>	-	+	1	1	1	1	1	+	1	+	1	+	1	+	1	+			+
ľ	petroleum, granular (quarry) lands/easement	ts																				
	l .	1	1	1		1						1				1						
actor Summary:		•																				

Access Route Data.xis: Natural-Airt A-Plaza A

PRACTICAL ALTERNATIVE EVALUATION	Factor: Pi	otect the Natural Environment									Natural Alternativ									
											Segments-Malden Ro	oad to North Talbot Rd								
				Malden Rd to Pulfo	ord		Pulford north of Lenno	n Drain	North o	of Lennon Drain to Co	usineau Rd	c	Cousineau Rd to Howa	ard Ave		Howard Ave to High	way 401		Highway 3 to North Talb	bot Rd
Performance Measure	Criteria/Indicator	Measurement/Units		G-H			H-I			Ы			J-K			K-L			L-M	
1			Name	Туре	Significance	Name	Type	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance
Ecological Landscapes	Impacts to Ecological	Landscape name, type and significance	Basin Drain	Stream Corridor	Low	Oakwood Bush to Spr	ing Strip Corridor	Low	Lennon Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low
1	Landscapes		Youngstown Drain	Stream Corridor	Low	Garden ANSI Lennon Drain	Stream Corridor	Low	St. Clair College Prairie	Patch	Moderate	Collins Drain	Stream Corridor	Low	No Name Tributary of	Stream Corridor	Low			
·									Remnant						Wolfe Drain					
! 			Marentette Drain	Stream Corridor	Low				St. Clair college Prairie Remnant to Spring Garde	Strip Corridor	Moderate	Burke Drain	Stream Corridor	Low						
· ·			Grand Marais Drain	Stream Corridor	Moderate				Cahill Drain	Stream Corridor	Low	No Name Tributary of	Stream Corridor	Low						
!			North of Spring Garden	Matrix	Low							Burke Draine Howard Avenue Drain	Stream Corridor	Low						
!			Road	Ividuix	LOW							noward Avenue Drain	Stream Comuon	Low						
! 												Benson Drain	Stream Corridor	Low						
ļ				+	_	+			1	+		Dickson Drain	Stream Corridor	Low	1			+		+
ļ				1																
ļ Ī												No Name Tributary of Dickson Drain	Stream Corridor	Low						
!				Total High	0		Total High	0		Total High	0	Dickson Diain	Total High	0		Total High	0		Total High	0
Į.				Total Moderate Total Low	1		Total Moderate Total Low	0		Total Moderate Total Low	2		Total Moderate Total Low	0		Total Moderate Total Low	0		Total Moderate Total Low	0
Communities/Ecosystems	Impacts to Terrestrial	Community type, area, significance and	Area Displaced	0.36	High	Area Displaced	0.00	High	Area Displaced	0.08	High	Area Displaced	0.00	High	Area Displaced	0.00	High	Area Displaced	0.00	High
	Communities/	sensitivity			,	.,			.,		,	,		, and the second				,		
·	Ecosystems		Area Displaced	2.18	Moderate	Area Displaced	0.30	Moderate	Area Displaced	0.66	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
1			Area Displaced	7.28	Low	Area Displaced	2.51	Low	Area Displaced	3.06	Low	Area Displaced	0.00	Low	Area Displaced	0.66	Low	Area Displaced	0.00	Low
			Total Area Displaced		LOW	Total Area Displaced		LOW	Total Area Displaced	3.81	LOW	Total Area Displaced		LOW	Total Area Displaced		LOW	Total Area Displaced	0.00	LOW
! 	Impacts to Aquatic	Community type, area, significance and	Basin Drain	0.04	Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low
l '			Cahill Drain Cahill Drain		Low Moderate	Cahill Drain Cahill Drain		Low Moderate	Cahill Drain	0.02	Low Moderate	Cahill Drain Cahill Drain		Low Moderate	Cahill Drain Cahill Drain		Low Moderate	Cahill Drain Cahill Drain		Low Moderate
			Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain Cahill Drain	0.03	Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate
i '			Grand Marais Drain	0.09	Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain		Low
1			Lennon Drain Marentette Drain	0.03	Moderate None	Lennon Drain Marentette Drain		Moderate None	Lennon Drain Marentette Drain	0.06	Moderate None	Lennon Drain Marentette Drain		Moderate None	Lennon Drain Marentette Drain		Moderate None	Lennon Drain Marentette Drain		Moderate None
1			Wolfe Drain	0.03	Low	Wolfe Drain		Low	Wolfe Drain	0.01	Low	Wolfe Drain	0.54	Low	Wolfe Drain		Low	Wolfe Drain		I ow
1			Wolfe Drain		Moderate	Wolfe Drain		Moderate	Wolfe Drain	0.29	Moderate	Wolfe Drain		Moderate	Wolfe Drain		Moderate	Wolfe Drain		Moderate
1			Youngstown Drain Area Displaced	0.04	Low Moderate	Youngstown Drain Area Displaced	0.00	Low Moderate	Youngstown Drain Area Displaced	0.39	Low Moderate	Youngstown Drain Area Displaced	0.00	Low Moderate	Youngstown Drain Area Displaced	0.00	Low Moderate	Youngstown Drain Area Displaced	0.00	Low Moderate
1			Area Displaced	0.17	Low	Area Displaced	0.00	Low	Area Displaced	0.02	Low	Area Displaced	0.54	Low	Area Displaced	0.00	Low	Area Displaced	0.00	Low
i '			Area Displaced			Area Displaced			Area Displaced			Area Displaced			Area Displaced			Area Displaced		
			Total Area Displaced	0.03	0.20 None	Total Area Displaced	0.00	None I.00	Total Area Displaced	0.00	0.41	Total Area Displaced	0.00	None 0.54	Total Area Displaced	0.00	0.00	Total Area Displaced	0.00	None
Populations/Species	Impacts to Species at	Species name, Type/Area and significance	Provincially Rare		45	Provincially Rare		6	Provincially Rare		51	Provincially Rare		0	Provincially Rare		0	Provincially Rare		0
r opulations/opecies	Risk	opecies manie, Type/Area and Significance	Specimens/Colonies		45	Specimens/Colonies			Specimens/Colonies		31	Specimens/Colonies			Specimens/Colonies		ŭ	Specimens/Colonies		
Surface Water	Changes in surface water	area of surface drainage altered by each																		
1	conditions (quality and quantity)	number of surface water drainages crossings																		
ļ Ī	1	by stream type		1																
i '		number of encroachments on or severances of surface water drainages																		
		degree of compliance with Provincial and																		
i '		Federal Water Quality Guidelines and																		
Groundwater	Change in groundwater	Stormwater Management requirements area of infiltration zones affected		+	+	+		_		+	-		+			+	_			_
!	conditions (quality and			1		1				1					1					
i i	quantity)	area of groundwater recharge affected		1	1						1									
!		areas of seepage affected																		
ļ I		areas or soehage arrected		1																
				1	1						1									
!		area of water table affected by each off		+	+	+		+			+	+			1			-		
 		area of water table affected by each alternativ (draw down zone)		1																
i i		<u> </u>		İ	1						İ									
i i		proximity of alternative to public and private																		
Other Natural Resources	Impacts to mineral,	drinking water wells Area in ha within ROW		†	+	+	+	+	+		+	+			1	+		+		+
Factor Summary:																				
Factor Score:																				

Access Route Data.xis: Natural-Alt1A-Plaza B or C Page 1 of 1

PRACTICAL ALTERNATIVE EVALUATION	Factor: P	rotect the Natural Environment								N	atural Alternative	·	а А							
											Segments-Malden Ro	oad to North Talbot Rd								
				Malden Rd to Pulfor	rd		Pulford north of Lenno	n Drain	North o	f Lennon Drain to Cou	sineau Rd	c	ousineau Rd to How	ard Ave	F	Howard Ave to Highw	ay 401		Highway 3 to North Tall	bot Rd
Performance Measure	Criteria/Indicator	Measurement/Units		G- H			H-I			ŀJ			J-K			K-L			L-M	
			Name	Туре	Significance	Name	Туре	Significance	Name	Type	Significance	Name	Type	Significance	Name	Type	Significance	Name	Type	Significance
Ecological Landscapes	Impacts to Ecological	Landscape name, type and significance	Basin Drain	Stream Corridor	Low	Oakwood Bush to Spr		Low	Lennon Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low
	Landscapes		Youngstown Drain	Stream Corridor	Low	Garden ANSI Lennon Drain	Stream Corridor	Low	St. Clair College Prairie Remnant	Patch	Moderate	Collins Drain	Stream Corridor	Low	No Name Tributary of Wolfe Drain	Stream Corridor	Low			
			Marentette Drain	Stream Corridor	Low				St. Clair college Prairie Remnant to Spring Garde	Strip Corridor	Moderate	Burke Drain	Stream Corridor	Low						
			Grand Marais Drain	Stream Corridor	Moderate				Cahill Drain	Stream Corridor	Low	No Name Tributary of Burke Draine	Stream Corridor	Low						
			North of Spring Garde Road	n Matrix	Low							Howard Avenue Drain	Stream Corridor	Low						
												Benson Drain	Stream Corridor	Low						
												Dickson Drain	Stream Corridor	Low						
												No Name Tributary of Dickson Drain	Stream Corridor	Low						
				Total High	0		Total High	0		Total High	0		Total High	0		Total High	0		Total High	0
				Total Moderate Total Low	4		Total Moderate Total Low	2		Total Moderate Total Low	2		Total Moderate Total Low	8		Total Moderate Total Low	2		Total Moderate Total Low	1
Communities/Ecosystems	Impacts to Terrestrial Communities/ Ecosystems	Community type, area, significance and sensitivity	Area Displaced	1.40	High	Area Displaced	0.00	High	Area Displaced	0.13	High	Area Displaced	0.00	High	Area Displaced	0.00	High	Area Displaced	0.00	High
	Ecosystems		Area Displaced	6.29	Moderate	Area Displaced	0.30	Moderate	Area Displaced	1.20	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced Total Area Displaced	10.21	Low	Area Displaced Total Area Displaced	2.51	Low	Area Displaced Total Area Displaced	3.94 5.26	Low	Area Displaced Total Area Displaced	0.00	Low	Area Displaced Total Area Displaced	0.66	Low	Area Displaced Total Area Displaced	0.00	Low
	Impacts to Aquatic	Community type, area, significance and	Basin Drain	0.11	Low	Basin Drain	2.01	Low	Basin Drain	5.20	Low	Basin Drain	0.04	Low	Basin Drain	0.00	Low	Basin Drain	0.00	Low
	Communities/	sensitivity																		
			Basin Drain Cahill Drain	0.03	None Moderate	Basin Drain Cahill Drain		None Moderate	Basin Drain Cahill Drain	0.01	None Moderate	Basin Drain Cahill Drain		None Moderate	Basin Drain Cahill Drain		None Moderate	Basin Drain Cahill Drain		None Moderate
			Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain	0.04	Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate
			Grand Marais Drain	0.09	Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain	0.09	Low	Grand Marais Drain		Low	Grand Marais Drain		Low
			Lennon Drain	0.03	Moderate	Lennon Drain Marentette Drain		Moderate	Lennon Drain Marentette Drain	0.06	Moderate None	Lennon Drain Marentette Drain	0.03	Moderate	Lennon Drain Marentette Drain		Moderate None	Lennon Drain Marentette Drain		Moderate None
			Marentette Drain Wolfe Drain	0.03	None Moderate	Wolfe Drain		None Moderate	Wolfe Drain	0.21	Moderate	Wolfe Drain	0.03	None Moderate	Wolfe Drain		Moderate	Wolfe Drain		Moderate
			Youngstown Drain	0.08	Low	Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain	0.04	Low	Youngstown Drain		Low	Youngstown Drain		Low
			Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.31	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced Area Displaced	0.28	Low None	Area Displaced Area Displaced	0.00	Low None	Area Displaced Area Displaced	0.00	Low None	Area Displaced Area Displaced	0.17	Low None	Area Displaced Area Displaced	0.00	Low None	Area Displaced Area Displaced	0.00	Low None
			Total Area Displaced		None	Total Area Displaced	0.00	None	Total Area Displaced	0.31	Notice	Total Area Displaced	0.20	Notice	Total Area Displaced	0.00	None	Total Area Displaced	0.00	None
Populations/Species	Impacts to Species at	Species name, type and significance	Provincially Rare	87.	00	Provincially Rare	6	6.00	Provincially Rare	41.	00	Provincially Rare		0.00	Provincially Rare		0.00	Provincially Rare	0	,.00
	Risk		Specimens/Colonies			Specimens/Colonies			Specimens/Colonies			Specimens/Colonies			Specimens/Colonies			Specimens/Colonies		
Surface Water	conditions (quality and	area of surface drainage altered by each alternative																		
	quantity)	number of surface water drainages crossings by stream type																		
		number of encroachments on or severances																		
		surface water drainages																		
		degree of compliance with Provincial and Federal Water Quality Guidelines and																		
		Stormwater Management requirements				1				1	İ		1			1	I			
Groundwater		area of infiltration zones affected																		
	conditions (quality and quantity)	area of groundwater recharge affected																		
	quantity)	areas of seepage affected											1							
		area of water table affected by each alternative (draw down zone)				<u> </u>			1						<u> </u>					
		proximity of alternative to public and private drinking water wells																		
Other Natural Resources	Impacts to mineral,	Area in ha within ROW			+	1		+		1		+	+	_	+	1		+	+	+
	petroleum, granular (quarry) lands/easement	g																		
Factor Summary:	+	1	<u> </u>			1			1	1			1		1	1				
actor Score:	1			1		1	1			1	1	1				1	1		1	$\overline{}$
		Neutral/No Impact 5-Low Benefit 6-Med	ium Donofit 7 High I	Renefit	•	•			•	•	•	•		•			•			

Access Route Data.xis: Natural-Alt1AOpt2-Plaza A

PRACTICAL ALTERNATIVE EVALUATION	Factor: P	otect the Natural Environment								Nati	ıral Alternative 1A	Option 2 Plaza B	or C							
											Segments-Malden Ro	ad to North Talbot R	d							
				Malden Rd to Pulfo	rd		Pulford north of Lennor	n Drain	North 6	of Lennon Drain to Cou			ousineau Rd to How	ard Ave	ı	Howard Ave to Highw	yay 401	ŀ	lighway 3 to North Talb	oot Rd
Performance Measure	Criteria/Indicator	Measurement/Units		G-H			H-I			ŀJ			J-K			K-L			L-M	
			Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance
Ecological Landscapes	Impacts to Ecological Landscapes	Landscape name, type and significance	Basin Drain	Stream Corridor	Low	Oakwood Bush to Sp Garden ANSI	oring Strip Corridor	Low	Lennon Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low
			Youngstown Drain	Stream Corridor	Low	Lennon Drain	Stream Corridor	Low	St. Clair College Prairie	Patch	Moderate	Collins Drain	Stream Corridor	Low	No Name Tributary of	Stream Corridor	Low			
			Marentette Drain	Stream Corridor	Low				Remnant St. Clair college Prairie	Strip Corridor	Moderate	Burke Drain	Stream Corridor	Low	Wolfe Drain					
									Remnant to Spring Garde	en										
			Grand Marais Drain	Stream Corridor	Moderate				Cahill Drain	Stream Corridor	Low	No Name Tributary of Burke Draine	Stream Corridor	Low						
			North of Spring Garden	Matrix	Low							Howard Avenue Drain	Stream Corridor	Low						
			Road									Benson Drain	Stream Corridor	Low						
												Dickson Drain	Stream Corridor	Low						
														Low						
												No Name Tributary of Dickson Drain	Stream Corridor	Low						
				Total High	0		Total High	0		Total High	0	Dioxidori Didiri	Total High	0		Total High	0		Total High	0
				Total Moderate Total Low	1		Total Moderate Total Low	0		Total Moderate Total Low	2		Total Moderate Total Low	0		Total Moderate Total Low	0		Total Moderate Total Low	0
Communities/Ecosystems	Impacts to Terrestrial	Community type, area, significance and	Area Displaced	0.37	High	Area Displaced	0.00	High	Area Displaced	0.13	High	Area Displaced	0.00	High	Area Displaced	0.00	High	Area Displaced	0.00	High
	Communities/ Ecosystems	sensitivity																		
	Loosystems		Area Displaced	2.18	Moderate	Area Displaced	0.30	Moderate	Area Displaced	1.20	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced Total Area Displaced	7.30	Low	Area Displaced Total Area Displaced	2.51 2.81	Low	Area Displaced Total Area Displaced	3.94	Low	Area Displaced Total Area Displaced	0.00	Low	Area Displaced Total Area Displaced	0.66	Low	Area Displaced Total Area Displaced	0.00	Low
	Impacts to Aquatic Communities/	Community type, area, significance and sensitivity	Basin Drain	0.04	Low	Basin Drain	2.01	Low	Basin Drain	5.20	Low	Basin Drain	0.00	Low	Basin Drain	0.00	Low	Basin Drain	0.00	Low
		,	Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain	0.01	Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate
			Cahill Drain Grand Marais Drain	0.09	Moderate Low	Cahill Drain Grand Marais Drain		Moderate Low	Cahill Drain Grand Marais Drain	0.04	Moderate Low	Cahill Drain Grand Marais Drain		Moderate Low	Cahill Drain Grand Marais Drain		Moderate Low	Cahill Drain Grand Marais Drain		Moderate Low
			Lennon Drain		Moderate	Lennon Drain		Moderate	Lennon Drain	0.06	Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate
			Marentette Drain Wolfe Drain	0.03	None Moderate	Marentette Drain Wolfe Drain		None Moderate	Marentette Drain Wolfe Drain	0.21	None Moderate	Marentette Drain Wolfe Drain		None Moderate	Marentette Drain Wolfe Drain		None Moderate	Marentette Drain Wolfe Drain		None Moderate
			Youngstown Drain	0.04	Low	Youngstown Drain		Low	Youngstown Drain	0.21	Low	Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain		Low
			Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.31	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low
			Area Displaced Area Displaced	0.03	None	Area Displaced	0.00	None	Area Displaced		None	Area Displaced	0.00	None	Area Displaced	0.00	None	Area Displaced	0.00	None
Populations/Species	Impacts to Species at	Section and significant	Total Area Displaced	0	.20	Total Area Displaced Provincially Rare	0	.00	Total Area Displaced Provincially Rare	0	31	Total Area Displaced Provincially Rare		0.00	Total Area Displaced Provincially Rare		0.00	Total Area Displaced Provincially Rare	0.	.00
Populations/Species	Risk	Species name, type and significance	Provincially Rare Specimens/Colonies		45	Specimens/Colonies		ь	Specimens/Colonies		+1	Specimens/Colonies		0	Specimens/Colonies		o .	Specimens/Colonies		0
Surface Water		area of surface drainage altered by each								1										
	conditions (quality and quantity)	alternative number of surface water drainages crossings										1								
	I	by stream type																		
1		number of encroachments on or severances surface water drainages	d	1					1											
1		degree of compliance with Provincial and		1		1	+	1	1			+	1	1	1	1		1		
		Federal Water Quality Guidelines and Stormwater Management requirements																		
Groundwater	Change in groundwater	Stormwater Management requirements area of infiltration zones affected				+	1		+	1		+	1			+				
1	conditions (quality and	area of groundwater recharge affected					1					1								
1	quantity)	areas of seepage affected																		
1		area of water table affected by each alternation (draw down zone)	v				1					1		1						
1		proximity of alternative to public and private				1			1			1	1			1				+
Other Natural Resources	Impacts to mineral,	drinking water wells Area in ha within ROW		-						1	1	1				+				
Other Natural Resources	petroleum, granular	Pred III III WILLIIII ROW														1				
	(quarry) lands/easement																			
Factor Summary:	-		<u> </u>	1			1		1	1	1	1	<u> </u>		<u> </u>			1	1	
Factor Score:	<u> </u>		<u> </u>																	

Factor Score:

1-High Impact 2-Medium Impact 3-Low Impact 4-Neutral/No Impact 5-Low Benefit 6-Medium Benefit 7-High Benefit

Access Route Data:xis: Natural-Alt1AOpt2-Plaza B or C Page 1 of 1

PRACTICAL ALTERNATIVE EVALUATION	Factor: Pr	rotect the Natural Environment									Natural Alterna	ative 1B Plaza A								
											Segments-Malden Ro	oad to North Talbot Rd								
				Malden Rd to Pulfor	rd		Pulford north of Lenno	n Drain	North o	f Lennon Drain to Cou	sineau Rd	c	Cousineau Rd to How	ard Ave	ı	Howard Ave to Highw	vay 401		Highway 3 to North Tal	bot Rd
Performance Measure	Criteria/Indicator	Measurement/Units		G-H			Н-1			I-J			J-K			K-L			L-M	
			Name	Type	Significance	Name	Type	Significance	Name	Type	Significance	Name	Type	Significance	Name	Type	Significance	Name	Type	Significance
Ecological Landscapes	Impacts to Ecological	Landscape name, type and significance	Basin Drain	Stream Corridor	Low	Oakwood Bush to Sp		Low	Lennon Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low
	Landscapes		Youngstown Drain	Stream Corridor	Low	Garden ANSI Lennon Drain	Stream Corridor	Low	St. Clair College Prairie Remnant	Patch	Moderate	Collins Drain	Stream Corridor	Low	No Name Tributary of Wolfe Drain	Stream Corridor	Low			+
			Marentette Drain	Stream Corridor	Low				St. Clair college Prairie Remnant to Spring Garde	Strip Corridor	Moderate	Burke Drain	Stream Corridor	Low						
			Grand Marais Drain	Stream Corridor	Moderate				Cahill Drain	Stream Corridor	Low	No Name Tributary of Burke Draine	Stream Corridor	Low						
			North of Spring Garde Road	en Matrix	Low							Howard Avenue Drain Benson Drain	Stream Corridor Stream Corridor	Low						
												Dickson Drain	Stream Corridor	Low						
												No Name Tributary of	Stream Corridor	Low						
				Total High	0		Total High	0		Total High	0	Dickson Drain	Total High	0		Total High	0		Total High	0
				Total Moderate	1		Total Moderate	0		Total Moderate	2		Total Moderate	0		Total Moderate	0		Total Moderate	0
Communities/Ecosystems	Impacts to Terrestrial Communities/	Community type, area, significance and sensitivity	Area Displaced	Total Low 1.40	High	Area Displaced	Total Low 0.00	2 High	Area Displaced	Total Low 0.06	2 High	Area Displaced	Total Low 0.00	8 High	Area Displaced	Total Low 0.00	2 High	Area Displaced	Total Low 0.00	High
	Ecosystems	sensitivity	Area Displaced	6.29	Moderate	Area Displaced	0.33	Moderate	Area Displaced	0.66	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced	10.65	Low	Area Displaced	2.91	Low	Area Displaced	2.82	Low	Area Displaced	0.00	Low	Area Displaced	0.66	Low	Area Displaced	0.00	Low
	Impacts to Aquatic	Community type, area, significance and	Total Area Displaced Basin Drain	18.34	Low	Total Area Displaced Basin Drain	3.24	Low	Total Area Displaced Basin Drain	3.54	Low	Total Area Displaced Basin Drain	0.00	Low	Total Area Displaced Basin Drain	0.66	Low	Total Area Displaced Basin Drain	0.00	Low
	Communities/	sensitivity	Basin Drain	0.11	Nee	Basin Drain		Need	Basin Drain					None			Nees	Basin Drain		
			Cahill Drain	0.03	None None	Cahill Drain		None None	Cahill Drain	0.01	None None	Basin Drain Cahill Drain		None None	Basin Drain Cahill Drain		None None	Cahill Drain		None None
			Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain	0.01	Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate
			Cahill Drain	0.00	Moderate	Cahill Drain		Moderate	Cahill Drain	0.03	Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate
			Grand Marais Drain Lennon Drain	0.09	Low Moderate	Grand Marais Drain Lennon Drain	0.02	Low Moderate	Grand Marais Drain Lennon Drain	0.06	Low Moderate	Grand Marais Drain Lennon Drain		Low Moderate	Grand Marais Drain Lennon Drain		Low Moderate	Grand Marais Drain Lennon Drain		Low Moderate
			Marentette Drain	0.04	None	Marentette Drain		None	Marentette Drain		None	Marentette Drain		None	Marentette Drain		None	Marentette Drain		None
			Wolfe Drain		Low	Wolfe Drain		Low	Wolfe Drain	0.01	Low	Wolfe Drain	0.54	Low	Wolfe Drain		Low	Wolfe Drain		Low
			Wolfe Drain Youngstown Drain	0.08	Moderate Low	Wolfe Drain Youngstown Drain		Moderate Low	Wolfe Drain Youngstown Drain	0.29	Moderate Low	Wolfe Drain Youngstown Drain		Moderate Low	Wolfe Drain Youngstown Drain		Moderate Low	Wolfe Drain Youngstown Drain		Moderate Low
			Area Displaced	0.00	Moderate	Area Displaced	0.02	Moderate	Youngstown Drain Area Displaced Area Displaced	0.39	Moderate	Area Displaced	0.00	Moderate	Youngstown Drain Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced	0.28	Low	Area Displaced	0.00	Low	Area Displaced	0.01	Low	Area Displaced	0.54	Low	Area Displaced	0.00	Low	Area Displaced	0.00	Low
			Area Displaced Total Area Displaced	0.07	None	Area Displaced Total Area Displaced	0.00	None 102	Area Displaced Total Area Displaced	0.01	None 41	Area Displaced Total Area Displaced	0.00	None 0.54	Area Displaced Total Area Displaced	0.00	None 0.00	Area Displaced Total Area Displaced	0.00	None 0.00
Populations/Species	Impacts to Species at	Species name, type and significance	Provincially Rare	0.	85	Provincially Rare	,	16	Provincially Rare	0.	51	Provincially Rare		0.54	Provincially Rare		0.00	Provincially Rare		0
, ,	Risk		Specimens/Colonies		-	Specimens/Colonies			Specimens/Colonies			Specimens/Colonies			Specimens/Colonies			Specimens/Colonies		
Surface Water	conditions (quality and quantity)																			
	quantity	number of surface water drainages crossings by stream type number of encroachments on or severances of																		
		surface water drainages degree of compliance with Provincial and																		
		Federal Water Quality Guidelines and Stormwater Management requirements																		
Groundwater		area of infiltration zones affected													İ	1				
	conditions (quality and quantity)	area of groundwater recharge affected																		
	quantity)	areas of seepage affected area of water table affected by each alternativ			 		-		<u> </u>			 			 			 	_	
		(draw down zone) proximity of alternative to public and private										1								+
		drinking water wells							1											
Other Natural Resources	Impacts to mineral, petroleum, granular (quarry) lands/easements	Area in ha within ROW																		
Factor Summary:		l	1	1	1	l	l	1	1	I	1	1	1		1	1		1		
Factor Score:	i						1		T		1	1			1					\neg

Access Route Data.xis: Natural-Alt1B-Plaza A

PRACTICAL ALTERNATIVE EVALUATION	Factor: F	Protect the Natural Environment									Natural Alternativ		C							
											Segments-Malden Ro	oad to North Talbot Rd								
				Malden Rd to Pulfo	rd		Pulford north of Lennon	n Drain	North o	f Lennon Drain to Cou	sineau Rd	c	Cousineau Rd to How	ard Ave	Í	Howard Ave to Highw	ay 401	ŀ	lighway 3 to North Tall	oot Rd
Performance Measure	Criteria/Indicator	Measurement/Units		G-H			H-I			ŀJ			J-K			K-L			L-M	
			Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance
Ecological Landscapes	Impacts to Ecological	Landscape name, type and significance	Basin Drain	Stream Corridor	Low	Oakwood Bush to Sp		Low	Lennon Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low
	Landscapes		Youngstown Drain	Stream Corridor	Low	Garden ANSI Lennon Drain	Stream Corridor	Low	St. Clair College Prairie Remnant	Patch	Moderate	Collins Drain	Stream Corridor	Low	No Name Tributary of Wolfe Drain	Stream Corridor	Low			
			Marentette Drain	Stream Corridor	Low				St. Clair college Prairie	Strip Corridor	Moderate	Burke Drain	Stream Corridor	Low						
			Grand Marais Drain	Stream Corridor	Moderate				Remnant to Spring Garder Cahill Drain	Stream Corridor	Low	No Name Tributary of	Stream Corridor	Low						
			North of Spring Garder	n Matrix	Low							Burke Draine Howard Avenue Drain	Stream Corridor	Low						
			Road									Benson Drain	Stream Corridor	Low						
												Dickson Drain	Stream Corridor	Low						
												No Name Tributary of	Stream Corridor	Low						
				Total High	0		Total High	0		Total High	0	Dickson Drain	Total High	0		Total High	0		Total High	0
				Total Moderate	1		Total Moderate	0		Total Moderate	2		Total Moderate	0		Total Moderate	0		Total Moderate	0
Communities/Ecosystems			. B. I I	Total Low	4	1 0 1	Total Low	2	. B. I I	Total Low	2	h 5: 1 1	Total Low	8	A 8: 1 1	Total Low	2		Total Low	1
Communities/Ecosystems	Impacts to Terrestrial Communities/ Ecosystems	Community type, area, significance and sensitivity	Area Displaced	0.37	High	Area Displaced	0.00	High	Area Displaced	0.06	High	Area Displaced	0.00	High	Area Displaced	0.00	High	Area Displaced	0.00	High
			Area Displaced	2.18	Moderate	Area Displaced	0.33	Moderate Low	Area Displaced	0.66	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced Total Area Displaced	7.30 9.85	Low	Area Displaced Total Area Displaced	2.91 1 3.24	LOW	Area Displaced Total Area Displaced	2.82	Low	Area Displaced Total Area Displaced	0.00	Low	Area Displaced Total Area Displaced	0.66	Low	Area Displaced Total Area Displaced	0.00	Low
	Impacts to Aquatic Communities/	Community type, area, significance and sensitivity	Basin Drain	0.04	Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low
			Cahill Drain		Low	Cahill Drain		Low	Cahill Drain	0.01	Low	Cahill Drain		Low	Cahill Drain		Low	Cahill Drain		Low
			Cahill Drain Cahill Drain		Moderate Moderate	Cahill Drain Cahill Drain		Moderate Moderate	Cahill Drain Cahill Drain	0.01	Moderate Moderate	Cahill Drain Cahill Drain		Moderate Moderate	Cahill Drain Cahill Drain		Moderate Moderate	Cahill Drain Cahill Drain		Moderate Moderate
			Grand Marais Drain	0.09	Low	Grand Marais Drain		Low	Grand Marais Drain	0.03	Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain		Low
			Lennon Drain		Moderate	Lennon Drain	0.02	Moderate	Lennon Drain	0.06	Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate
			Marentette Drain	0.03	None	Marentette Drain		None	Marentette Drain		None	Marentette Drain	0.54	None	Marentette Drain		None	Marentette Drain		None
			Wolfe Drain Wolfe Drain		Low Moderate	Wolfe Drain Wolfe Drain		Low Moderate	Wolfe Drain Wolfe Drain	0.01	Low Moderate	Wolfe Drain Wolfe Drain	0.54	Low Moderate	Wolfe Drain Wolfe Drain		Low Moderate	Wolfe Drain Wolfe Drain		Low Moderate
			Youngstown Drain	0.04	Low	Youngstown Drain		Low	Youngstown Drain	0.23	Low	Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain		Low
			Area Displaced	0.00	Moderate	Area Displaced	0.02	Moderate	Area Displaced	0.39	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced Area Displaced	0.17	Low None	Area Displaced Area Displaced	0.00	Low None	Area Displaced Area Displaced	0.02	Low	Area Displaced Area Displaced	0.54	Low None	Area Displaced Area Displaced	0.00	Low None	Area Displaced Area Displaced	0.00	Low None
			Total Area Displaced		.20	Total Area Displaced		.02	Total Area Displaced	0.00		Total Area Displaced		0.54	Total Area Displaced	0.00	0.00	Total Area Displaced	0.00	00
Populations/Species	Impacts to Species at Risk	Species name, type and significance	Provincially Rare Specimens/Colonies		45	Provincially Rare Specimens/Colonies		16	Provincially Rare Specimens/Colonies		51	Provincially Rare Specimens/Colonies		0	Provincially Rare Specimens/Colonies		0	Provincially Rare Specimens/Colonies		0
Surface Water		e area of surface drainage altered by each									1									
	conditions (quality and quantity)			_		1														
	quantity)	number of surface water drainages crossings by stream type	1			1											1			
		number of encroachments on or severances	d	1		1				1										
		surface water drainages																		
		degree of compliance with Provincial and																		
		Federal Water Quality Guidelines and Stormwater Management requirements				1											1			
Groundwater	Change in groundwater	area of infiltration zones affected	1	1	1	1				İ	İ				İ		1			
	conditions (quality and	area of groundwater recharge affected																		
	quantity)	areas of seepage affected																		
		area of water table affected by each alternati (draw down zone)	v																	
		proximity of alternative to public and private drinking water wells																		
Other Natural Resources	Impacts to mineral,	Area in ha within ROW		+	+	+	+	+	+	1	+		+		1	+		+		+
	petroleum, granular (quarry) lands/easemen																			
						1														
Factor Summary:	<u> </u>		,	_							_					_				
Factor Score:			J						1		1					1				

1-High Impact 2-Medium Impact 3-Low Impact 4-Neutral/No Impact 5-Low Benefit 6-Medium Benefit 7-High Benefit

Access Route Data:xis: Natural-Alt1B-Plaza B or C

PRACTICAL ALTERNATIVE EVALUATION	Factor: Pr	otect the Natural Environment								N	atural Alternative	•	а А							
											Segments-Malden Ro	oad to North Talbot Rd								
				Malden Rd to Pulfor	d		Pulford north of Lenno	n Drain	North o	f Lennon Drain to Cou	sineau Rd	c	Cousineau Rd to How	ard Ave	ı	Howard Ave to Highw	vay 401		Highway 3 to North Tall	bot Rd
Performance Measure	Criteria/Indicator	Measurement/Units		G-H			Н-1			I-J			J-K			K-L			L-M	
			Name	Type	Significance	Name	Type	Significance	Name	Type	Significance	Name	Type	Significance	Name	Type	Significance	Name	Type	Significance
Ecological Landscapes	Impacts to Ecological	Landscape name, type and significance	Basin Drain	Stream Corridor	Low	Oakwood Bush to Sp		Low	Lennon Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low
	Landscapes		Youngstown Drain	Stream Corridor	Low	Garden ANSI Lennon Drain	Stream Corridor	Low	St. Clair College Prairie Remnant	Patch	Moderate	Collins Drain	Stream Corridor	Low	No Name Tributary of Wolfe Drain	Stream Corridor	Low			
			Marentette Drain	Stream Corridor	Low				St. Clair college Prairie Remnant to Spring Garde	Strip Corridor	Moderate	Burke Drain	Stream Corridor	Low						
			Grand Marais Drain	Stream Corridor	Moderate				Cahill Drain	Stream Corridor	Low	No Name Tributary of Burke Draine	Stream Corridor	Low						
			North of Spring Garde Road	n Matrix	Low							Howard Avenue Drain Benson Drain	Stream Corridor Stream Corridor	Low						
												Dickson Drain	Stream Corridor	Low						
												No Name Tributary of	Stream Corridor	Low						
				Total High	0		Total High	0		Total High	0	Dickson Drain	Total High	0		Total High	0		Total High	0
				Total Moderate	1		Total Moderate	0		Total Moderate	2		Total Moderate	0		Total Moderate	0		Total Moderate	0
Communities/Ecosystems	Impacts to Terrestrial	Community type, area, significance and	Area Displaced	Total Low 1.40	4 High	Area Displaced	Total Low 0.00	2 High	Area Displaced	Total Low 0.06	2 High	Area Displaced	Total Low 0.00	8 High	Area Displaced	Total Low 0.00	2 Ulah	Area Displaced	Total Low	1 Uigh
Communities/Ecosystems	Communities/ Ecosystems	sensitivity			3			nign						nign			nign	·	0.00	nign
			Area Displaced Area Displaced	6.29 10.65	Moderate Low	Area Displaced Area Displaced	0.33 2.91	Moderate Low	Area Displaced Area Displaced	0.66	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low
			Total Area Displaced	18.34	LOW	Total Area Displaced		LOW	Total Area Displaced	3.54	LOW	Total Area Displaced		LOW	Total Area Displaced	0.66	LOW	Total Area Displaced		Low
	Impacts to Aquatic	Community type, area, significance and	Basin Drain	0.11	Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low
	Communities/	sensitivity	Basin Drain	0.03	None	Basin Drain		None	Basin Drain		None	Basin Drain		None	Basin Drain		None	Basin Drain		None
			Cahill Drain Cahill Drain		Low Moderate	Cahill Drain Cahill Drain		Low Moderate	Cahill Drain Cahill Drain	0.01	Low Moderate	Cahill Drain Cahill Drain		Low Moderate	Cahill Drain Cahill Drain		Low Moderate	Cahill Drain Cahill Drain		Low Moderate
			Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain	0.03	Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate
			Grand Marais Drain	0.09	Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain		Low
			Lennon Drain	0.04	Moderate	Lennon Drain	0.02	Moderate	Lennon Drain	0.06	Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate
			Marentette Drain Wolfe Drain	0.04	None Low	Marentette Drain Wolfe Drain		None Low	Marentette Drain Wolfe Drain	0.01	None Low	Marentette Drain Wolfe Drain	0.54	None Low	Marentette Drain Wolfe Drain		None Low	Marentette Drain Wolfe Drain		None Low
			Wolfe Drain		Moderate	Wolfe Drain		Moderate	Wolfe Drain	0.29	Moderate	Wolfe Drain		Moderate	Wolfe Drain		Moderate	Wolfe Drain		Moderate
			Youngstown Drain	0.08	Low	Youngstown Drain		Low	Youngstown Drain Area Displaced Area Displaced		Low	Youngstown Drain		Low	Youngstown Drain Area Displaced		Low	Youngstown Drain		Low
			Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.02	Moderate Low	Area Displaced	0.39	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low
			Area Displaced	0.07	None	Area Displaced	0.00	None	Area Displaced	0.02	None	Area Displaced	0.00	None	Area Displaced	0.00	None	Area Displaced	0.00	None
			Total Area Displaced	0.	35	Total Area Displaced	(1.02	Total Area Displaced	0.	41	Total Area Displaced		0.54	Total Area Displaced		0.00	Total Area Displaced	0	1.00
Populations/Species	Impacts to Species at Risk	Species name, type and significance	Provincially Rare Specimens/Colonies		85	Provincially Rare Specimens/Colonies		16	Provincially Rare Specimens/Colonies		51	Provincially Rare Specimens/Colonies		0	Provincially Rare Specimens/Colonies		0	Provincially Rare Specimens/Colonies		0
Surface Water	conditions (quality and	area of surface drainage altered by each alternative																		
	quantity)	number of surface water drainages crossings by stream type																		
		number of encroachments on or severances of surface water drainages																		
		degree of compliance with Provincial and Federal Water Quality Guidelines and																		
Groundwater	Change in groundwater	Stormwater Management requirements area of infiltration zones affected			+	 		+	1											+
J. Januarrater		area of groundwater recharge affected			+	1			1		+						-			
	quantity)	areas of seepage affected																		
		area of water table affected by each alternativ (draw down zone)																		
		proximity of alternative to public and private drinking water wells																		
Other Natural Resources	Impacts to mineral,	Area in ha within ROW			+	†		+	1								<u> </u>			+
	petroleum, granular (quarry) lands/easements																			
Factor Summary:		<u> </u>	<u> </u>			<u> </u>			<u> </u>	<u> </u>		<u> </u>	<u> </u>		<u> </u>	<u> </u>				
Factor Score:									T		1	- I	The second secon		TI	T				

Access Route Data.xis: Natural-Alt1BOpt2-Plaza A

PRACTICAL ALTERNATIVE EVALUATION	Factor: Pr	otect the Natural Environment								Nati	ıral Alternative 1B	Option 2 Plaza B	or C							
											Segments-Malden Ro	ad to North Talbot R	d							
				Malden Rd to Pulfo	rd		Pulford north of Lennor	n Drain	North o	of Lennon Drain to Cou	sineau Rd	С	ousineau Rd to How	ard Ave		Howard Ave to Highw	ay 401	ı	lighway 3 to North Talb	oot Rd
Performance Measure	Criteria/Indicator	Measurement/Units		G-H			H-I			I-J			J-K			K-L			L-M	
			Name	Type	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance
Ecological Landscapes	Impacts to Ecological Landscapes	Landscape name, type and significance	Basin Drain	Stream Corridor	Low	Oakwood Bush to Sp Garden ANSI	oring Strip Corridor	Low	Lennon Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low
			Youngstown Drain	Stream Corridor	Low	Lennon Drain	Stream Corridor	Low	St. Clair College Prairie	Patch	Moderate	Collins Drain	Stream Corridor	Low	No Name Tributary of	Stream Corridor	Low			
			Marentette Drain	Stream Corridor	Low				Remnant St. Clair college Prairie	Strip Corridor	Moderate	Burke Drain	Stream Corridor	Low	Wolfe Drain					
									Remnant to Spring Garde	n										
			Grand Marais Drain	Stream Corridor	Moderate				Cahill Drain	Stream Corridor	Low	No Name Tributary of Burke Draine	Stream Corridor	Low						
			North of Spring Garder	Matrix	Low							Howard Avenue Drain	Stream Corridor	Low						
			Road									Benson Drain	Stream Corridor	Low						
												Dickson Drain	Stream Corridor	Low						
												No Name Tributary of	Stream Corridor	Low						
												Dickson Drain	Stream Comuoi	Low						
				Total High Total Moderate	0		Total High Total Moderate	0		Total High Total Moderate	0		Total High Total Moderate	0		Total High Total Moderate	0		Total High Total Moderate	0
				Total Low	4		Total Low	2		Total Low	2		Total Low	8		Total Low	2		Total Low	1
Communities/Ecosystems	Impacts to Terrestrial Communities/	Community type, area, significance and sensitivity	Area Displaced	0.41	High	Area Displaced	0.00	High	Area Displaced	0.13	High	Area Displaced	0.00	High	Area Displaced	0.00	High	Area Displaced	0.00	High
	Ecosystems	,																		
			Area Displaced Area Displaced	2.29 7.42	Moderate Low	Area Displaced Area Displaced	0.33 2.91	Moderate Low	Area Displaced Area Displaced	1.20 3.94	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low
			Total Area Displaced	10.12		Total Area Displaced		200	Total Area Displaced	5.26		Total Area Displaced	0.00	2011	Total Area Displaced	0.66		Total Area Displaced	0.00	
	Impacts to Aquatic Communities/	Community type, area, significance and sensitivity	Basin Drain	0.04	Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low
			Cahill Drain Cahill Drain		Moderate Moderate	Cahill Drain Cahill Drain		Moderate Moderate	Cahill Drain Cahill Drain	0.01	Moderate Moderate	Cahill Drain Cahill Drain		Moderate Moderate	Cahill Drain Cahill Drain		Moderate Moderate	Cahill Drain Cahill Drain		Moderate Moderate
			Grand Marais Drain	0.09	Low	Grand Marais Drain		Low	Grand Marais Drain	0.04	Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain		Low
			Lennon Drain Marentette Drain	0.03	Moderate None	Lennon Drain Marentette Drain	0.02	Moderate None	Lennon Drain Marentette Drain	0.06	Moderate None	Lennon Drain Marentette Drain		Moderate None	Lennon Drain Marentette Drain		Moderate None	Lennon Drain Marentette Drain		Moderate None
			Wolfe Drain	0.03	Moderate	Wolfe Drain		Moderate	Wolfe Drain	0.16	Moderate	Wolfe Drain		Moderate	Wolfe Drain		Moderate	Wolfe Drain		Moderate
			Youngstown Drain	0.04	Low	Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain		Low
			Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.02	Moderate Low	Area Displaced Area Displaced	0.27	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low
			Area Displaced	0.03	None	Area Displaced	0.00	None	Area Displaced	0.00	None	Area Displaced	0.00	None	Area Displaced	0.00	None	Area Displaced	0.00	None
			Total Area Displaced	0.	.21	Total Area Displaced	1 0	.02	Total Area Displaced	0.	27	Total Area Displaced		0.00	Total Area Displaced		0.00	Total Area Displaced	0.	.00
Populations/Species	Impacts to Species at Risk	Species name, type and significance	Provincially Rare Specimens/Colonies		46	Provincially Rare Specimens/Colonies		16	Provincially Rare Specimens/Colonies		11	Provincially Rare Specimens/Colonies		0	Provincially Rare Specimens/Colonies		0	Provincially Rare Specimens/Colonies		0
Surface Water		area of surface drainage altered by each				1	+									1	+			
		alternative number of surface water drainages crossings																		-
		by stream type													<u> </u>					
		number of encroachments on or severances surface water drainages	o																	
		degree of compliance with Provincial and		+	1	1	+	1	+		+	1	1		+	1	+	+	1	
		Federal Water Quality Guidelines and		1			1								1		1			
Groundwater	Change in groundwater	Stormwater Management requirements area of infiltration zones affected	-	-	+	+	-	+	 			+	-	+	1	+	+	+	+	+
o. oauwatei	conditions (quality and	area of groundwater recharge affected								1										
	quantity)	areas of seepage affected								<u> </u>						<u> </u>			<u> </u>	
		area of water table affected by each alternati	v												1	1		1		
		(draw down zone) proximity of alternative to public and private			+			+	+	+		+								+
Other Natural Resources	Impacts to mineral,	drinking water wells Area in ha within ROW		-			-		1		1	-			1	-	-			
Other Matural Resources	petroleum, granular (quarry) lands/easement:	A COLUMN TOWN																		
	(quarry) ranus/easement						1		ĺ					1	1		1	1		
Factor Summary:	1		1			1		<u> </u>	1	1	1	1			<u> </u>	1			1	
Factor Score:																				

Factor Score:

1-High Impact 2-Medium Impact 3-Low Impact 4-Neutral/No Impact 5-Low Benefit 6-Medium Benefit 7-High Benefit

Access Route Data:xis: Natural-Alt1BOpt2-Plaza B or C

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protec	t the Natural Environment									Natural Altern	ative 2A Plaza A								
											Segments-Malden R	oad to North Talbot Rd								
				Malden Rd to Pulf	ford	Р	ulford north of Lennor	Drain	North o	f Lennon Drain to Cou	ineau Rd	d	ousineau Rd to Howa	rd Ave		Howard Ave to Highwa	y 401		Highway 3 to North Talk	oot Rd
Performance Measure	Criteria/Indicator	Measurement/Units		G-H			H-I			I-J			J-K			K-L			L-M	
			Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance
cological Landscapes	Impacts to Ecological Landscapes	Landscape name, type and significance	Basin Drain	Stream Corridor	Low	Oakwood Bush to Spring Garden ANSI	Strip Corridor	Low	Lennon Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low
	Landscapes	significance	Youngstown Drain	Stream Corridor	Low	Lennon Drain	Stream Corridor	Low	St. Clair College Prairie	Patch	Moderate	Collins Drain	Stream Corridor	Low	No Name Tributary of	Stream Corridor	Low			
			Marentette Drain	Stream Corridor	Low				Remnant St. Clair college Prairie	Strip Corridor	Moderate	Burke Drain	Stream Corridor	Low	Wolfe Drain					
					2011				Remnant to Spring Garder	i i										
			Grand Marais Drain	Stream Corridor	Moderate				Cahill Drain	Stream Corridor	Low	No Name Tributary of Burke Draine	Stream Corridor	Low						
			North of Spring Garden	Matrix	Low							Howard Avenue Drain	Stream Corridor	Low	-					
			Roau									Benson Drain	Stream Corridor	Low						
												Dickson Drain	Stream Corridor	Low						
												No Name Tributary of Dickson Drain	Stream Corridor	Low						
				Total High	0		Total High	0		Total High	0		Total High	0		Total High	0		Total High	0
				Total Moderate Total Low	4		Total Moderate Total Low	2		Total Moderate Total Low	2		Total Moderate Total Low	8		Total Moderate Total Low	2		Total Moderate Total Low	1
ommunities/Ecosystems	Impacts to Terrestrial Communities/ Ecosystems	Community type, area, significance and sensitivity	Area Displaced	1.61	High	Area Displaced	0.25	High	Area Displaced	0.36	High	Area Displaced	0.00	High	Area Displaced	0.00	High	Area Displaced	0.00	High
			Area Displaced	6.31	Moderate	Area Displaced	0.29	Moderate	Area Displaced	1.04	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced Total Area Displaced	11.01	Low	Area Displaced Total Area Displaced	4.23	Low	Area Displaced Total Area Displaced	2.46	Low	Area Displaced Total Area Displaced	0.00	Low	Area Displaced Total Area Displaced	0.66	Low	Area Displaced Total Area Displaced	0.00	Low
ļ	Impacts to Aquatic Communities/	Community type, area, significance and sensitivity		0.11	Low	Basin Drain	5.77	Low	Basin Drain	5.00	Low	Basin Drain	0.00	Low	Basin Drain	0.00	Low	Basin Drain	0.00	Low
		,	Basin Drain	0.03	None	Basin Drain		None	Basin Drain		None	Basin Drain		None	Basin Drain		None	Basin Drain		None
			Cahill Drain Cahill Drain		Low Moderate	Cahill Drain Cahill Drain		Low Moderate	Cahill Drain Cahill Drain	0.02	Low Moderate	Cahill Drain Cahill Drain		Low Moderate	Cahill Drain Cahill Drain		Low Moderate	Cahill Drain		Low Moderate
			Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain	0.04	Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain Cahill Drain		Moderate
			Grand Marais Drain Lennon Drain	0.06	Low Moderate	Grand Marais Drain Lennon Drain		Low Moderate	Grand Marais Drain Lennon Drain	0.05	Low Moderate	Grand Marais Drain Lennon Drain		Low Moderate	Grand Marais Drain Lennon Drain		Low Moderate	Grand Marais Drain Lennon Drain		Low Moderate
ļ			Marentette Drain	0.02	None	Marentette Drain		None	Marentette Drain	0.03	None	Marentette Drain		None	Marentette Drain		None	Marentette Drain		None
ļ			Wolfe Drain		Low	Wolfe Drain		Low	Wolfe Drain	0.01	Low	Wolfe Drain	0.58	Low	Wolfe Drain		Low	Wolfe Drain		Low
ļ			Wolfe Drain	0.00	Moderate	Wolfe Drain		Moderate	Wolfe Drain	0.29	Moderate	Wolfe Drain		Moderate	Wolfe Drain		Moderate	Wolfe Drain		Moderate
ļ			Youngstown Drain Area Displaced	0.09	Low Moderate	Youngstown Drain Area Displaced	0.00	Low Moderate	Youngstown Drain Area Displaced	0.38	Low Moderate	Youngstown Drain Area Displaced	0.00	Low Moderate	Youngstown Drain Area Displaced	0.00	Low Moderate	Youngstown Drain Area Displaced	0.00	Low Moderate
ļ			Area Displaced	0.26	Low	Area Displaced	0.00	Low	Area Displaced	0.02	Low	Area Displaced	0.58	Low	Area Displaced	0.00	Low	Area Displaced	0.00	Low
ļ			Area Displaced Total Area Displaced	0.05	0.31	Area Displaced Total Area Displaced	0.00	None .00	Area Displaced	0.00	None 40	Area Displaced Total Area Displaced	0.00	None	Area Displaced Total Area Displaced	0.00	None	Area Displaced Total Area Displaced	0.00	None
opulations/Species	Impacts to Species at	Species name, type and significance			94	Provincially Rare		35	Total Area Displaced Provincially Rare		33	Provincially Rare		0	Provincially Rare	0	0	Provincially Rare	0	0
surface Water	Changes in surface water	area of surface drainage altered by							,						,			,		
ľ	conditions (quality and quantity)	number of surface water drainages																		
		crossings by stream type number of encroachments on or severances of surface water																		
		degree of compliance with Provincia and Federal Water Quality																		
		Guidelines and Stormwater																		
	Change in groundwater conditions (quality and	area of infiltration zones affected area of groundwater recharge		1		1	1		-		+	+						-	+	
ļ	quantity)	areas of seepage affected		+							+							_	+	
		area of water table affected by each																		
		alternative (draw down zone) proximity of alternative to public and																		
		private drinking water wells		1		1	<u> </u>				1	1								
Other Natural Resources	Impacts to mineral, petroleum, granular (quarry) lands/easements	Area in ha within ROW																		
ı	(quarry) larius/easements	1																		
actor Summary:	(quarry) lanus/easements																			

1-High Impact 2-Medium Impact 3-Low Impact 4-Neutral/No Impact 5-Low Benefit 6-Medium Benefit 7-High Benefit

Access Route Data.xls: Natural-Alt2A-Plaza A

PRACTICAL ALTERNATIVE EVALUATION	Factor: F	rotect the Natural Environment									Natural Alternativ		;							
											Segments-Malden Ro	oad to North Talbot Rd			,					
				Malden Rd to Pulfor	d		Pulford north of Lennon	Drain	North o	of Lennon Drain to Cou	ineau Rd	c	ousineau Rd to Howa	rd Ave	1	Howard Ave to Highwa	ay 401	1	Highway 3 to North Tall	oot Rd
Performance Measure	Criteria/Indicator	Measurement/Units		G-H			Н-1			ы			J-K			K-L			L-M	
			Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance
Ecological Landscapes	Impacts to Ecological	Landscape name, type and significance	Basin Drain	Stream Corridor	Low	Oakwood Bush to Spr	ing Strip Corridor	Low	Lennon Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low
	Landscapes		Youngstown Drain	Stream Corridor	Low	Garden ANSI Lennon Drain	Stream Corridor	Low	St. Clair College Prairie	Patch	Moderate	Collins Drain	Stream Corridor	Low	No Name Tributary of	Stream Corridor	Low			
			Marentette Drain	Stream Corridor	Low				Remnant St. Clair college Prairie	Strip Corridor	Moderate	Burke Drain	Stream Corridor	1	Wolfe Drain					
			Marentette Dialii	Stream Comuoi	Low				Remnant to Spring Garde	n	Woderate		Stream Comuo	LOW						
			Grand Marais Drain	Stream Corridor	Moderate				Cahill Drain	Stream Corridor	Low	No Name Tributary of Burke Draine	Stream Corridor	Low						
			North of Spring Garder	n Matrix	Low				1			Howard Avenue Drain	Stream Corridor	Low						
			Road									Benson Drain	Stream Corridor	Low						
												Dickson Drain	Stream Corridor	Low						
												No Name Tributary of	Stream Corridor	Low						
				Total High	0		Total High	0		Total High	0	Dickson Drain	Total High	0		Total High	0		Total High	0
				Total Moderate	1		Total Moderate	0		Total Moderate	2		Total Moderate	0		Total Moderate	0		Total Moderate	0
				Total Low	4		Total Low	2		Total Low	2		Total Low	8		Total Low	2		Total Low	1
Communities/Ecosystems	Impacts to Terrestrial Communities/ Ecosystems	Community type, area, significance and sensitivity	Area Displaced	0.58	High	Area Displaced	0.25	High	Area Displaced	0.36	High	Area Displaced	0.00	High	Area Displaced	0.00	High	Area Displaced	0.00	High
	Loosystems		Area Displaced	2.31	Moderate	Area Displaced	0.29	Moderate	Area Displaced	1.04	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced Total Area Displaced	7.57 10.46	Low	Area Displaced Total Area Displaced	4.23 4.77	Low	Area Displaced Total Area Displaced	2.46 3.86	Low	Area Displaced Total Area Displaced	0.00	Low	Area Displaced Total Area Displaced	0.66	Low	Area Displaced Total Area Displaced	0.00	Low
	Impacts to Aquatic	Community type, area, significance and	Basin Drain	0.04	Low	Basin Drain	4.77	Low	Basin Drain	3.00	Low	Basin Drain	0.00	Low	Basin Drain	0.00	Low	Basin Drain	0.00	Low
	Communities/	sensitivity																		
			Cahill Drain Cahill Drain		Low Moderate	Cahill Drain Cahill Drain		Low	Cahill Drain Cahill Drain	0.02	Low Moderate	Cahill Drain Cahill Drain		Low Moderate	Cahill Drain Cahill Drain		Low Moderate	Cahill Drain Cahill Drain		Low Moderate
			Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain	0.04	Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate
			Grand Marais Drain	0.06	Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain		Low
			Lennon Drain Marentette Drain	0.02	Moderate None	Lennon Drain Marentette Drain		Moderate None	Lennon Drain Marentette Drain	0.05	Moderate None	Lennon Drain Marentette Drain		Moderate None	Lennon Drain Marentette Drain		Moderate None	Lennon Drain Marentette Drain		Moderate None
			Wolfe Drain	0.02	Low	Wolfe Drain		Low	Wolfe Drain	0.01	Low	Wolfe Drain	0.58	Low	Wolfe Drain		Low	Wolfe Drain		Low
			Wolfe Drain		Moderate	Wolfe Drain		Moderate	Wolfe Drain	0.29	Moderate	Wolfe Drain		Moderate	Wolfe Drain		Moderate	Wolfe Drain		Moderate
			Youngstown Drain Area Displaced	0.00	Low Moderate	Youngstown Drain Area Displaced	0.00	Low Moderate	Youngstown Drain Area Displaced	0.38	Low Moderate	Youngstown Drain Area Displaced	0.00	Low Moderate	Youngstown Drain Area Displaced	0.00	Low Moderate	Youngstown Drain Area Displaced	0.00	Low Moderate
			Area Displaced	0.11	Low	Area Displaced	0.00	Low	Area Displaced	0.02	Low	Area Displaced	0.58	Low	Area Displaced	0.00	Low	Area Displaced	0.00	Low
			Area Displaced Total Area Displaced	0.02	None 13	Area Displaced Total Area Displaced	0.00	None	Area Displaced Total Area Displaced	0.00	None	Area Displaced Total Area Displaced	0.00	None	Area Displaced Total Area Displaced	0.00	None 0.00	Area Displaced Total Area Displaced	0.00	None .00
Populations/Species	Impacts to Species at	Species name, type and significance	Provincially Rare		54	Provincially Rare	0.0	35	Provincially Rare		13	Provincially Rare		0	Provincially Rare	,	0	Provincially Rare	•	0
Surface Water		area of surface drainage altered by each				·														
	conditions (quality and quantity)	alternative number of surface water drainages crossings																		
		by stream type																		
		number of encroachments on or severances surface water drainages	9																	
		degree of compliance with Provincial and				1				1										
		Federal Water Quality Guidelines and																		
C	Observation 1	Stormwater Management requirements			+	+		1		+		1	1			1		+		
Groundwater	Change in groundwater conditions (quality and	area of infiltration zones affected area of groundwater recharge affected			+	+				+		+		_				+		
	quantity)	areas of seepage affected				1						1								
Ì		area of water table affected by each alternative			1	1				1		1	1			İ				
		(draw down zone) proximity of alternative to public and private																		
		drinking water wells																		
Other Natural Resources	Impacts to mineral,	Area in ha within ROW	_																	
	petroleum, granular (quarry) lands/easemen	S																		
Factor Summary:	1	1	<u> </u>			<u> </u>		<u> </u>	1	<u> 1 </u>	1	<u> </u>			<u> </u>				1	
Factor Summary: Factor Score:	+				1	1				1		1	1			1				
300.0.	1		1	1		1		1	1					1	1					1

Factor Score:

1-High Impact 2-Medium Impact 3-Low Impact 4-Neutral/No Impact 5-Low Benefit 6-Medium Benefit 7-High Benefit

Access Route Data:xis: Natural-Alt2A-Plaza B or C

Ecological Landscapes Impacts to Ecological Landscape name, ty	Natural Environment								N	atural Alternative	•	a A							
Impacts to Ecological Landscape name, ty										Segments-Malden Ro	oad to North Talbot Rd								
Ecological Landscapes Impacts to Ecological Landscape name, ty Impacts to Terrestrial Community type, are sensitivity Impacts to Aquatic Communities/ Ecosystems Impacts to Aquatic Community type, are sensitivity Impacts to Aquatic Community type, are sensitivity Populations/Species Impacts to Aquatic Community type, are sensitivity Communities/ Ecosystems Communities/ Community type, are sensitivity Communities/ Communities/ Community type, are sensitivity Communities/ Community type, are sensitivity Community type, are sensitivity Communities/ Community type, are sensitivity Community type, are sensitivity Communities/ Community type, are sensitivity Community type, are sensitivity Communities/ Community type, are sensitivity Community type, are sensitivit			Malden Rd to Pulfo	ord		Pulford north of Lennor	n Drain	North o	of Lennon Drain to Cou	sineau Rd	c	ousineau Rd to Howa	rd Ave	1	Howard Ave to Highw	ay 401	ı	Highway 3 to North Tal	bot Rd
Communities/Ecosystems Impacts to Terrestrial Community type, are sensitivity Communities/ Communities/ Communities/ Communities/ Communities/ Communities/ Community type, are sensitivity Communities/ Community type, are sensitivity Communities/ Community type, are sensitivity Communities/ Community type, are sensitivity Communities/ Community type, are sensitivity Communities/ Community type, are sensitivity Community type, are sensitivi	Measurement/Units		G- H			н-і			ŀJ			J-K			K-L			L-M	
Communities/Ecosystems Impacts to Terrestrial Communities/ Ecosystems Impacts to Aquatic Communities/ Ecosystems Communities/ Empacts to Aquatic Communities/ Surface Water Changes in surface water area of surface drair conditions (quality and quantity) Groundwater Change in groundwater Change in groundwater Change in groundwater Change in groundwater Change in groundwater area of sepage af area of water table a (draw down zone) proximity of alternatit dirinking water wells Groundwater Change in groundwater area of sepage af area of water table a (draw down zone) proximity of alternatit dirinking water wells	e name, type and significance	Name Basin Drain	Type Stream Corridor	Significance	Name Oakwood Bush to Spri	Type ing Strip Corridor	Significance Low	Name Lennon Drain	Type Stream Corridor	Significance Low	Name Wolfe Drain	Type Stream Corridor	Significance Low	Name Wolfe Drain	Type Stream Corridor	Significance Low	Name Wolfe Drain	Type Stream Corridor	Significance Low
Communities Sensitivity Sensitivity		Youngstown Drain	Stream Corridor	Low	Garden ANSI Lennon Drain	Stream Corridor	Low	St. Clair College Prairie	Patch	Moderate	Collins Drain	Stream Corridor	Low	No Name Tributary of	Stream Corridor	Low			
Communities/ Ecosystems Impacts to Aquatic Community type, are sensitivity Populations/Species Impacts to Species at Species name, type Granges in surface wate area of surface drain quantity) Surface Water Changes in surface wate area of surface drain quantity and quantity Oranges of compliance Federal Water Quantity Change in groundwater Change in groundwater Change in groundwater Change in groundwater area of sepage af area of infiltration zo groundwater conditions (quality and quantity) area of water table is (draw down zone) proximity of alternati drinking water wells filtration and groundwater area of sepage af area of water table is (draw down zone) proximity of alternati drinking water wells		Marentette Drain	Stream Corridor	Low				Remnant St. Clair college Prairie Remnant to Spring Garde	Strip Corridor	Moderate	Burke Drain	Stream Corridor	Low	Wolfe Drain					
Communities/ Ecosystems Impacts to Aquatic Community type, are sensitivity Populations/Species Impacts to Species at Species name, type Granges in surface wate area of surface drain quantity) Surface Water Changes in surface wate area of surface drain quantity and quantity Oranges of compliance Federal Water Quantity Change in groundwater Change in groundwater Change in groundwater Change in groundwater area of sepage af area of infiltration zo groundwater conditions (quality and quantity) area of water table is (draw down zone) proximity of alternati drinking water wells filtration and groundwater area of sepage af area of water table is (draw down zone) proximity of alternati drinking water wells		Grand Marais Drain	Stream Corridor	Moderate				Cahill Drain	Stream Corridor	Low	No Name Tributary of Burke Draine	Stream Corridor	Low						
Communities/ Ecosystems Impacts to Aquatic Community type, are sensitivity Populations/Species Impacts to Species at Species name, type sensitivity Changes in surface wate area of surface drain quantity) Surface Water Changes in surface wate area of surface drain quantity number of surface wate surface wate from the surface wate from the surface water drain degree of compliance Federal Water Quantity Change in groundwater area of infiltration zo conditions (quality and quantity) area of water table is (draw down zone) proximity of alternati drinking water wells		North of Spring Garder Road	n Matrix	Low							Howard Avenue Drain		Low						
Communities/ Ecosystems Impacts to Aquatic Community type, are sensitivity Populations/Species Impacts to Species at Species name, type sensitivity Changes in surface wate area of surface drain quantity) Surface Water Changes in surface wate area of surface drain quantity number of surface wate surface wate from the surface wate from the surface water drain degree of compliance Federal Water Quantity Change in groundwater area of infiltration zo conditions (quality and quantity) area of water table is (draw down zone) proximity of alternati drinking water wells											Benson Drain Dickson Drain	Stream Corridor Stream Corridor	Low						
Communities/ Ecosystems Impacts to Aquatic Community type, are sensitivity Populations/Species Impacts to Species at Species name, type sensitivity Changes in surface wate area of surface drain quantity) Surface Water Changes in surface wate area of surface drain quantity number of surface wate surface wate from the surface wate from the surface water drain degree of compliance Federal Water Quantity Change in groundwater area of infiltration zo conditions (quality and quantity) area of water table is (draw down zone) proximity of alternati drinking water wells											No Name Tributary of	Stream Corridor	Low						
Communities Sensitivity Sensitivity			Total High	0		Total High	0		Total High	0	Dickson Drain	Total High	0		Total High	0		Total High	0
Communities/ Ecosystems Impacts to Aquatic Community type, are sensitivity Populations/Species Impacts to Species at Species name, type sensitivity Changes in surface wate area of surface drain conditions (quality and quaritity) alternative number of surface wate surface wate surface wate from the surface wate from the surface water from			Total Moderate Total Low	4		Total Moderate Total Low	2		Total Moderate Total Low	2		Total Moderate Total Low	0 8		Total Moderate Total Low	0 2		Total Moderate Total Low	0
Populations/Species Impacts to Species at Species name, type Surface Water Changes in surface water and surface drain alternative number of surface water surface water surface water surface water surface water frain degree of compliant Federal Water Quality and grant water conditions (quality and quantity) Groundwater Change in groundwater area of groundwater area of sepage af area of water table area	ty type, area, significance and	Area Displaced	1.61	High	Area Displaced	0.25	High	Area Displaced	0.36	High	Area Displaced	0.00	High	Area Displaced	0.00	High	Area Displaced	0.00	High
Populations/Species Impacts to Species at Species name, type Surface Water Changes in surface water and surface drain alternative number of surface water surface water surface water number of surface water surface water surface water frain degree of compliance Federal Water Quality and quantity) Groundwater Change in groundwater area of groundwater conditions (quality and quantity) area of water tables (draw down zone) proximity of alternati drinking water wells		Area Displaced Area Displaced	6.31 10.78	Moderate Low	Area Displaced Area Displaced	0.29 4.23	Moderate Low	Area Displaced Area Displaced	1.19 3.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00 0.66	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low
Populations/Species Impacts to Species at Species name, type Surface Water Changes in surface waterarea of surface drain conditions (quality and quantity) guantity the stream type in the surface water draina degree of compliance water draina degree of compliance water draina degree of compliance and conditions (quality and quantity) Groundwater Change in groundwater area of infiltration zo conditions (quality and area of water table a ((draw down zone)) proximity of alternati drinking water wells	ty type, area, significance and	Total Area Displaced Basin Drain	0.11	Low	Total Area Displaced Basin Drain	4.77	Low	Total Area Displaced Basin Drain	4.55	Low	Total Area Displaced Basin Drain	0.00	Low	Total Area Displaced Basin Drain	0.66	Low	Total Area Displaced Basin Drain	0.00	Low
Surface Water Changes in surface wate area of surface drain conditions (quality and quarity) number of surface w by stream type number of sorroads surface water draina degree of compliance Federal Water Quality and quantity) Groundwater Change in groundwater conditions (quality and quantity) area of groundwater areas of seepage af area of water table e (draw down zone) proximity of alternati dirinking water wells		Basin Drain Cahill Drain	0.03	None Moderate	Basin Drain Cahill Drain		None Moderate	Basin Drain Cahill Drain	0.04	None Moderate	Basin Drain Cahill Drain		None	Basin Drain 7 Cahill Drain		None Moderate	Basin Drain Cahill Drain		None Moderate
Surface Water Changes in surface wate area of surface drain conditions (quality and quantity) In unimber of surface we by stream type number of surface we sufface we sufface we sufface water draina degree of compliance Federal Water Quality and quantity) Groundwater Change in groundwater conditions (quality and quantity) area of groundwater areas of seepage affarea of water table e (draw down zone) proximity of alternati drinking water wells		Grand Marais Drain	0.06	Low	Grand Marais Drain		Low	Grand Marais Drain	0.04	Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain		Low
Surface Water Changes in surface wate area of surface drain conditions (quality and quantity) In the property of surface we by stream type number of surface we by stream type number of encroach surface water draina degree of compliance Federal Water Quality and quantity) Groundwater Change in groundwater conditions (quality and quantity) area of groundwater areas of seepage af area of water table e (draw down zone) proximity of alternati dirinking water wells		Lennon Drain		Moderate	Lennon Drain		Moderate	Lennon Drain	0.05	Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate
Surface Water Changes in surface wate area of surface drain conditions (quality and quantity) In the property of surface we by stream type number of surface we by stream type number of encroach surface water draina degree of compliance Federal Water Quality and quantity) Groundwater Change in groundwater conditions (quality and quantity) area of groundwater areas of seepage af area of water table e (draw down zone) proximity of alternati dirinking water wells		Marentette Drain	0.02	None Low	Marentette Drain		None Low	Marentette Drain		None Low	Marentette Drain		None Low	Marentette Drain		None Low	Marentette Drain		None Low
Surface Water Changes in surface wate area of surface drain conditions (quality and quantity) In the property of surface we by stream type number of surface we by stream type number of encroach surface water draina degree of compliance Federal Water Quality and quantity) Groundwater Change in groundwater conditions (quality and quantity) area of groundwater areas of seepage af area of water table e (draw down zone) proximity of alternati dirinking water wells		Youngstown Drain Area Displaced	0.00	Moderate	Youngstown Drain Area Displaced	0.00	Moderate	Youngstown Drain Area Displaced	0.08	Moderate	Youngstown Drain Area Displaced	0.00	Moderate	Youngstown Drain Area Displaced	0.00	Moderate	Youngstown Drain Area Displaced	0.00	Moderate
Surface Water Changes in surface wate area of surface drain conditions (quality and quantity) In the property of surface we by stream type number of surface we by stream type number of encroach surface water draina degree of compliance Federal Water Quality and quantity) Groundwater Change in groundwater conditions (quality and quantity) area of groundwater areas of seepage af area of water table e (draw down zone) proximity of alternati dirinking water wells		Area Displaced	0.26	Low	Area Displaced	0.00	Low	Area Displaced	0.00	Low	Area Displaced	0.00	Low	Area Displaced	0.00	Low	Area Displaced	0.00	Low
Surface Water Changes in surface wate area of surface drain conditions (quality and quantity) In the property of surface wate by stream type number of surface water draina degree of complianc Federal Water Quality and quantity) Groundwater Change in groundwater conditions (quality and quantity) area of groundwater areas of seepage af area of water table e (draw down zone) proximity of alternati dirinking water wells		Area Displaced	0.05	None	Area Displaced	0.00	None	Area Displaced	0.00	None	Area Displaced	0.00	None	Area Displaced	0.00	None	Area Displaced	0.00	None
Surface Water Changes in surface wate area of surface drain conditions (quality and quantity) In the property of surface we by stream type number of surface we by stream type number of encroach surface water draina degree of compliance Federal Water Quality and quantity) Groundwater Change in groundwater conditions (quality and quantity) area of groundwater areas of seepage af area of water table e (draw down zone) proximity of alternati dirinking water wells		Total Area Displaced	(.31	Total Area Displaced	0	.00	Total Area Displaced		08	Total Area Displaced	(0.00	Total Area Displaced		0.00	Total Area Displaced	(1.00
conditions (quality and quantity) alternative humber of surface we by stream type number of encroach surface water drained degree of compliane Federal Water Quality Stormwater Manage of conditions (quality and quantity) Groundwater Change in groundwater conditions (quality and quantity) area of groundwater (draw down zone) proximity of alternati drinking water wells in the proximation of the proximation o		Provincially Rare		94	Provincially Rare		35	Provincially Rare		26	Provincially Rare		0	Provincially Rare		0	Provincially Rare		0
by stream type number of encroach surface water draine Groundwater Change in groundwater conditions (quality and quantity) area of groundwater area of seepage af area of water table (draw down zone) proximity of alternati drinking water wells	· '																		
Groundwater Change in groundwater conditions (quality and quantity) Groundwater Change in groundwater conditions (quality and quantity) area of groundwater area of water table a (draw down zone) proximity of alternati dirinking water wells	75-																		
Groundwater Change in groundwater conditions (quality and quantity) area of inilitation zo area of groundwater areas of groundwater areas of seepage af area of water table e (draw down zone) proximity of alternati drinking water wells	•																		
Groundwater Change in groundwater conditions (quality and quantity) area of groundwater quantity) area of groundwater area of groundwater area of water table a (draw down zone) proximity of alternating drinking water wells	/ater Quality Guidelines and er Management requirements																		
conditions (quality and area of groundwater areas of seepage aff area of water table e (draw down zone) proximity of alternati dirinking water wells	filtration zones affected	1	1		1	†	1	1	1	1	†	1	1	1	†	1	1	1	1
quantity) areas of seepage af area of water table a (draw down zone) proximity of alternatic drinking water wells	oundwater recharge affected		1			1	1				1	1		1	1				
area of water table a (draw down zone) proximity of alternati drinking water wells			+		1						1	1			1				
proximity of alternati drinking water wells	ater table affected by each alternativ																		
ű	of alternative to public and private																		
petroleum, granular			1		1			1											
(quarry) lands/easements						1													
Factor Summary:		•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•
Factor Score:																			

Access Route Data.xis: Natural-Alt2AOpt2-Plaza A Page 1 of 1

Detroit River International Crossing Project DRAFT FOR DISCUSSION PURPOSES ONLY

PRACTICAL ALTERNATIVE EVALUATION	Factor: Pr	rotect the Natural Environment								Nat	ural Alternative 2A	•								
											Segments-Malden R	oad to North Talbot Rd								
				Malden Rd to Pulfor	rd		Pulford north of Lennor	Drain	North	of Lennon Drain to Cou	sineau Rd		Cousineau Rd to Howa	ard Ave		Howard Ave to High	way 401		Highway 3 to North Ta	bot Rd
Performance Measure	Criteria/Indicator	Measurement/Units		G-H			H-I			ы			Ј-К			K-L			L-M	
			Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance
Ecological Landscapes		Landscape name, type and significance	Basin Drain	Stream Corridor	Low	Oakwood Bush to Sp Garden ANSI	ring Strip Corridor	Low	Lennon Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low
	Landscapes		Youngstown Drain	Stream Corridor	Low	Lennon Drain	Stream Corridor	Low	St. Clair College Prairie	Patch	Moderate	Collins Drain	Stream Corridor	Low	No Name Tributary of	Stream Corridor	Low			
			Marentette Drain	Stream Corridor	1				Remnant St. Clair college Prairie	Strip Corridor	Moderate	Burke Drain	Stream Corridor	Low	Wolfe Drain					
			Marentette Drain	Stream Corndor	Low				Remnant to Spring Garde		woderate	Burke Drain	Stream Corndor	LOW						
			Grand Marais Drain	Stream Corridor	Moderate				Cahill Drain	Stream Corridor	Low	No Name Tributary of Burke Draine	Stream Corridor	Low						
			North of Spring Garde	en Matrix	Low							Howard Avenue Drain	Stream Corridor	Low						
			Road																	
												Benson Drain	Stream Corridor	Low						
												Dickson Drain	Stream Corridor	Low						
												No Name Tributary of	Stream Corridor	Low						
												Dickson Drain								
				Total High Total Moderate	1		Total High Total Moderate	0		Total High Total Moderate	2		Total High Total Moderate	0		Total High Total Moderate	0		Total High Total Moderate	0
				Total Low	4		Total Low	2		Total Low	2		Total Low	8		Total Low	2		Total Low	1
Communities/Ecosystems	Impacts to Terrestrial Communities/ Ecosystems	Community type, area, significance and sensitivity	Area Displaced	0.58	High	Area Displaced	0.25	High	Area Displaced	0.36	High	Area Displaced	0.00	High	Area Displaced	0.00	High	Area Displaced	0.00	High
			Area Displaced	2.31	Moderate	Area Displaced	0.29	Moderate	Area Displaced	1.19	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced Total Area Displaced	7.57	Low	Area Displaced Total Area Displaced	4.23	Low	Area Displaced Total Area Displaced	3.00 4.55	Low	Area Displaced Total Area Displaced	0.00	Low	Area Displaced Total Area Displaced	0.66	Low	Area Displaced Total Area Displaced	0.00	Low
	Impacts to Aquatic	Community type, area, significance and	Basin Drain	0.04	Low	Basin Drain	4.77	Low	Basin Drain	4.55	Low	Basin Drain	0.00	Low	Basin Drain	0.00	Low	Basin Drain	0.00	Low
	Communities/	sensitivity	Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain	0.04	Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain		Madazeta
			Grand Marais Drain	0.06	Low	Grand Marais Drain		Low	Grand Marais Drain	0.04	Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain		Moderate Low
			Lennon Drain		Moderate	Lennon Drain		Moderate	Lennon Drain	0.05	Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate
			Marentette Drain Youngstown Drain	0.02	None Low	Marentette Drain Youngstown Drain		None Low	Marentette Drain Youngstown Drain		None Low	Marentette Drain Youngstown Drain		None Low	Marentette Drain Youngstown Drain		None Low	Marentette Drain Youngstown Drain		None Low
			Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.08	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced	0.16	Low	Area Displaced	0.00	Low	Area Displaced	0.00	Low	Area Displaced	0.00	Low	Area Displaced	0.00	Low	Area Displaced	0.00	Low
			Area Displaced Total Area Displaced	0.02	None 17	Area Displaced Total Area Displaced	0.00	None 00	Area Displaced Total Area Displaced	0.00	None .08	Area Displaced Total Area Displaced		None 0.00	Area Displaced Total Area Displaced	0.00	0.00 None	Area Displaced Total Area Displaced		None 0.00
Populations/Species		Species name, type and significance	Provincially Rare		55	Provincially Rare		35	Provincially Rare		26	Provincially Rare		0	Provincially Rare		0	Provincially Rare		0
Surface Water		area of surface drainage altered by each alternative																		
	conditions (quality and quantity)	number of surface water drainages crossings																		
		by stream type																		
		number of encroachments on or severances or surface water drainages																		
		degree of compliance with Provincial and		+								+	+			+				
		Federal Water Quality Guidelines and		1												Ī			1	
Groundwater	Change in groundwater	Stormwater Management requirements area of infiltration zones affected	-	+		-		1		1		+	+	_		+	-	-	-	
Oroundwater	conditions (quality and	area of groundwater recharge affected										+	+			+				
	quantity)	areas of seepage affected	1	1				1		1	1	1				1		1	1	
		area of water table affected by each alternative																	1	
		(draw down zone) proximity of alternative to public and private		+				+			-	1	-			+		1	+	_
		drinking water wells										1	1			1				
Other Natural Resources	Impacts to mineral,	Area in ha within ROW		1												1				
	petroleum, granular (quarry) lands/easements																			
Factor Summary:	<u> </u>	<u>I</u>	<u> </u>									_1								
					_				_	_										

Access Route Data.xls: Natural-Alt2AOpt2-Plaza B orC Page 1 of 1

PRACTICAL ALTERNATIVE EVALUATION	Factor: P	rotect the Natural Environment									Natural Alterna	tive 2B Plaza A								
											Segments-Malden Ro	oad to North Talbot Rd								
				Malden Rd to Pulfo	rd		Pulford north of Lennon	Drain	North o	f Lennon Drain to Cou	sineau Rd	С	ousineau Rd to How	ard Ave	ŀ	Howard Ave to Highwa	ay 401		Highway 3 to North Tall	ot Rd
Performance Measure	Criteria/Indicator	Measurement/Units		G- H			H-I			ŀJ			J-K			K-L			L-M	
			Name	Туре	Significance	Name	Type	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance
Ecological Landscapes	Impacts to Ecological	Landscape name, type and significance	Basin Drain	Stream Corridor	Low	Oakwood Bush to Sp		Low	Lennon Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low
	Landscapes		Youngstown Drain	Stream Corridor	Low	Garden ANSI Lennon Drain	Stream Corridor	Low	St. Clair College Prairie Remnant	Patch	Moderate	Collins Drain	Stream Corridor	Low	No Name Tributary of Wolfe Drain	Stream Corridor	Low			
			Marentette Drain	Stream Corridor	Low				St. Clair college Prairie	Strip Corridor	Moderate	Burke Drain	Stream Corridor	Low	Wolfe Dialii					
			Grand Marais Drain	Stream Corridor	Moderate				Remnant to Spring Garder Cahill Drain	Stream Corridor	Low	No Name Tributary of	Stream Corridor	Low						
					moderate				Odrilli Didili	oucum comaci	2011	Burke Draine		2011						
			North of Spring Garder Road	n Matrix	Low							Howard Avenue Drain	Stream Corridor	Low						
												Benson Drain	Stream Corridor	Low						
												Dickson Drain	Stream Corridor	Low						
												No Name Tributary of Dickson Drain	Stream Corridor	Low						
				Total High	0		Total High	0		Total High	0		Total High	0		Total High	0		Total High	0
				Total Moderate Total Low	1		Total Moderate Total Low	0		Total Moderate Total Low	2		Total Moderate Total Low	0		Total Moderate Total Low	0		Total Moderate Total Low	0
Communities/Ecosystems	Impacts to Terrestrial Communities/ Ecosystems	Community type, area, significance and sensitivity	Area Displaced	1.41	High	Area Displaced	0.09	High	Area Displaced	0.36	High	Area Displaced	0.00	High	Area Displaced	0.00	High	Area Displaced	0.00	High
	Loosystems		Area Displaced	6.29	Moderate	Area Displaced	0.27	Moderate	Area Displaced	1.04	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced Total Area Displaced	10.91	Low	Area Displaced Total Area Displaced	3.58	Low	Area Displaced Total Area Displaced	2.46 3.86	Low	Area Displaced Total Area Displaced	0.00	Low	Area Displaced Total Area Displaced	0.66	Low	Area Displaced Total Area Displaced	0.00	Low
	Impacts to Aquatic	Community type, area, significance and sensitivity	Basin Drain	0.11	Low	Basin Drain	3.94	Low	Basin Drain	3.00	Low	Basin Drain	0.00	Low	Basin Drain	0.00	Low	Basin Drain	0.00	Low
	Communities/	sensitivity	Basin Drain	0.03	None	Basin Drain		None	Basin Drain		None	Basin Drain		None	Basin Drain		None	Basin Drain		None
			Cahill Drain		Low	Cahill Drain		Low	Cahill Drain	0.02	Low	Cahill Drain		Low	Cahill Drain		Low	Cahill Drain		Low
			Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain	0.00	Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate
			Cahill Drain Grand Marais Drain	0.06	Moderate Low	Cahill Drain Grand Marais Drain		Moderate Low	Cahill Drain Grand Marais Drain	0.05	Moderate Low	Cahill Drain Grand Marais Drain		Moderate Low	Cahill Drain Grand Marais Drain		Moderate Low	Cahill Drain Grand Marais Drain		Moderate Low
			Lennon Drain		Moderate	Lennon Drain		Moderate	Lennon Drain	0.05	Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate
			Marentette Drain	0.02	None	Marentette Drain		None	Marentette Drain		None	Marentette Drain		None	Marentette Drain		None	Marentette Drain		None
			Wolfe Drain Wolfe Drain		Low Moderate	Wolfe Drain Wolfe Drain		Low Moderate	Wolfe Drain Wolfe Drain	0.01	Low Moderate	Wolfe Drain Wolfe Drain	0.59	Low Moderate	Wolfe Drain Wolfe Drain		Low Moderate	Wolfe Drain Wolfe Drain		Low Moderate
			Youngstown Drain	0.09	Low	Youngstown Drain		Low	Youngstown Drain	0.23	Low	Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain		Low
			Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Youngstown Drain Area Displaced	0.38	Moderate	Area Displaced	0.00	Moderate	Youngstown Drain Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced Area Displaced	0.26	Low None	Area Displaced Area Displaced	0.00	Low	Area Displaced Area Displaced	0.02	Low None	Area Displaced Area Displaced	0.59	Low None	Area Displaced Area Displaced	0.00	Low None	Area Displaced Area Displaced	0.00	Low
			Total Area Displaced		32	Total Area Displaced		00	Total Area Displaced		40	Total Area Displaced		0.59	Total Area Displaced		0.00	Total Area Displaced	0.00	00
Populations/Species	Impacts to Species at	Species name, type and significance	Provincially Rare		89	Provincially Rare		23	Provincially Rare		33	Provincially Rare		0	Provincially Rare		0	Provincially Rare	-	0
Surface Water	conditions (quality and	area of surface drainage altered by each alternative																		
	quantity)	number of surface water drainages crossings by stream type																		
		number of encroachments on or severances surface water drainages	0																	
		degree of compliance with Provincial and Federal Water Quality Guidelines and																		
		Stormwater Management requirements												1					1	
Groundwater	Change in groundwater	area of infiltration zones affected				1							1			İ				
	conditions (quality and quantity)	area of groundwater recharge affected																		
	quantity)	areas of seepage affected																		
		area of water table affected by each alternati (draw down zone)	1	1																
		proximity of alternative to public and private drinking water wells																		
Other Natural Resources	Impacts to mineral,	Area in ha within ROW	1	+	+	 		+	+	1		+	 			1	+	+	+	
	petroleum, granular (quarry) lands/easement	s																		
Factor Summary:		1	<u> </u>	l	_1	<u> </u>		1	1	<u> </u>	1	<u> </u>	<u> </u>		l	1		l		1
Factor Score:	+					1				1			1		I	1				
		Neutral/No Impact 5-Low Renefit 6-Med							1				II.		1	1		1	_1	

Factor Score:

1-High Impact 2-Medium Impact 3-Low Impact 4-Neutral/No Impact 5-Low Benefit 6-Medium Benefit 7-High Benefit

Access Route Data:xls: Natural-Alt2B-Plaza A

PRACTICAL ALTERNATIVE EVALUATION	Factor: P	Protect the Natural Environment									Natural Alternativ		С							
											Segments-Malden Ro	oad to North Talbot Rd								
				Malden Rd to Pulfor	d		Pulford north of Lennon	Drain	North o	of Lennon Drain to Cou	ineau Rd	d	Cousineau Rd to How	ard Ave	1	Howard Ave to Highwa	ay 401		Highway 3 to North Tal	bot Rd
Performance Measure	Criteria/Indicator	Measurement/Units		G-H			Н-1			ŀJ			J-K			K-L			L-M	
			Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Type	Significance	Name	Туре	Significance	Name	Туре	Significance
Ecological Landscapes	Impacts to Ecological	Landscape name, type and significance	Basin Drain	Stream Corridor	Low	Oakwood Bush to Spri	ng Strip Corridor	Low	Lennon Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low
	Landscapes		Youngstown Drain	Stream Corridor	Low	Garden ANSI Lennon Drain	Stream Corridor	Low	St. Clair College Prairie	Patch	Moderate	Collins Drain	Stream Corridor	Low	No Name Tributary of	Stream Corridor	Low			
									Remnant						Wolfe Drain					
			Marentette Drain	Stream Corridor	Low				St. Clair college Prairie Remnant to Spring Garde	Strip Corridor	Moderate	Burke Drain	Stream Corridor	Low						
			Grand Marais Drain	Stream Corridor	Moderate				Cahill Drain	Stream Corridor	Low	No Name Tributary of	Stream Corridor	Low						
			North of Spring Garder	n Matrix	Low							Burke Draine Howard Avenue Drain	Stream Corridor	Low						
			rtoud									Benson Drain	Stream Corridor	Low						
												Dickson Drain	Stream Corridor	Low						
												No Name Tributary of Dickson Drain		Low						
				Total High Total Moderate	1		Total High Total Moderate	0		Total High Total Moderate	0		Total High Total Moderate	0		Total High Total Moderate	0		Total High Total Moderate	0
				Total Low	4		Total Low	2		Total Low	2		Total Low	8		Total Low	2		Total Low	1
Communities/Ecosystems	Impacts to Terrestrial Communities/ Ecosystems	Community type, area, significance and sensitivity	Area Displaced	0.37	High	Area Displaced	0.09	High	Area Displaced	0.36	High	Area Displaced	0.00	High	Area Displaced	0.00	High	Area Displaced	0.00	High
	Loodystomo		Area Displaced	2.29	Moderate	Area Displaced	0.27	Moderate	Area Displaced	1.04	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced Total Area Displaced	7.58	Low	Area Displaced Total Area Displaced	3.58	Low	Area Displaced Total Area Displaced	2.46 3.86	Low	Area Displaced Total Area Displaced	0.00	Low	Area Displaced Total Area Displaced	0.66 0.66	Low	Area Displaced Total Area Displaced	0.00	Low
	Impacts to Aquatic	Community type, area, significance and	Basin Drain	0.04	Low	Basin Drain	3.34	Low	Basin Drain	5.00	Low	Basin Drain	0.00	Low	Basin Drain	0.00	Low	Basin Drain	0.00	Low
	Communities/	sensitivity	Cahill Drain		Low	Cahill Drain		Low	Cahill Drain	0.02	Low	Cahill Drain		Low	Cahill Drain		Low	Cahill Drain		Low
			Cahill Drain Cahill Drain		Moderate Moderate	Cahill Drain Cahill Drain		Moderate Moderate	Cahill Drain Cahill Drain	0.00	Moderate Moderate	Cahill Drain Cahill Drain		Moderate Moderate	Cahill Drain Cahill Drain		Moderate Moderate	Cahill Drain Cahill Drain		Moderate Moderate
			Grand Marais Drain	0.06	Low	Grand Marais Drain		Low	Grand Marais Drain	0.00	Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain		Low
			Lennon Drain		Moderate	Lennon Drain		Moderate	Lennon Drain	0.05	Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate
			Marentette Drain Wolfe Drain	0.02	None Low	Marentette Drain Wolfe Drain		None Low	Marentette Drain Wolfe Drain	0.01	None Low	Marentette Drain Wolfe Drain	0.59	None Low	Marentette Drain Wolfe Drain		None Low	Marentette Drain Wolfe Drain		None Low
			Wolfe Drain		Moderate	Wolfe Drain		Moderate	Wolfe Drain	0.29	Moderate	Wolfe Drain	0.00	Moderate	Wolfe Drain		Moderate	Wolfe Drain		Moderate
			Youngstown Drain	0.05	Low Moderate	Youngstown Drain	0.00	Low	Youngstown Drain	0.00	Low Moderate	Youngstown Drain	0.00	Low	Youngstown Drain	0.00	Low	Youngstown Drain		Low
			Area Displaced Area Displaced	0.00	Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.36	Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low
			Area Displaced	0.02	None	Area Displaced	0.00	None	Area Displaced	0.00	None	Area Displaced	0.00	None	Area Displaced	0.00	None	Area Displaced	0.00	None
Populations/Species	Impacts to Coories at	Species name, type and significance	Total Area Displaced Provincially Rare	0.	18	Total Area Displaced Provincially Rare	0.0	23	Total Area Displaced Provincially Rare	0.4	10	Total Area Displaced Provincially Rare		0.59	Total Area Displaced Provincially Rare	(0.00	Total Area Displaced Provincially Rare	(.00
Surface Water		el area of surface drainage altered by each		<u> </u>			+		1 Tovincially Ivare	+		cvindally Italië		Ť	1.04IIIOlally Ivale	+	Ť	Svincially Ivaid		Ť
	conditions (quality and	alternative				<u>1</u>	<u> </u>		1	1		1				<u> </u>		<u> </u>		
	quantity)	number of surface water drainages crossings by stream type																		
		number of encroachments on or severances	d			+						+				+				+
		surface water drainages																		
		degree of compliance with Provincial and																		
		Federal Water Quality Guidelines and Stormwater Management requirements				1										1				
Groundwater	Change in groundwater	area of infiltration zones affected																		
	conditions (quality and quantity)	0	ļ			-									ļ				-	
	1	areas of seepage affected area of water table affected by each alternati	,	-	+	 	+	1	 			+	1		-	+		+		+
		(draw down zone)																		
<u> </u>		proximity of alternative to public and private drinking water wells																		
Other Natural Resources	Impacts to mineral,	Area in ha within ROW																		
	petroleum, granular (quarry) lands/easemen	ts																		
Factor Summary:	<u> </u>	L	1	1	1	1	1	1	1	1	1	1	1		1	1		1		1
Factor Score:	1		1							1	1	1			1			1		1

1-High Impact 2-Medium Impact 3-Low Impact 4-Neutral/No Impact 5-Low Benefit 6-Medium Benefit 7-High Benefit

Access Route Data:xis: Natural-Alt2B-Plaza B or C

PRACTICAL ALTERNATIVE EVALUATION	Factor: P	rotect the Natural Environment								N	atural Alternative	•	a A							
											Segments-Malden Ro	oad to North Talbot Rd								
				Malden Rd to Pulfo	rd		Pulford north of Lennon	Drain	North o	f Lennon Drain to Cou	sineau Rd	С	ousineau Rd to How	ard Ave		Howard Ave to Highwa	ay 401		lighway 3 to North Talb	ot Rd
Performance Measure	Criteria/Indicator	Measurement/Units		G -H			H-I			ŀJ			J-K			K-L			L-M	
			Name	Туре	Significance	Name	Type	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance
Ecological Landscapes	Impacts to Ecological	Landscape name, type and significance	Basin Drain	Stream Corridor	Low	Oakwood Bush to Sp		Low	Lennon Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low
	Landscapes		Youngstown Drain	Stream Corridor	Low	Garden ANSI Lennon Drain	Stream Corridor	Low	St. Clair College Prairie Remnant	Patch	Moderate	Collins Drain	Stream Corridor	Low	No Name Tributary of Wolfe Drain	Stream Corridor	Low			
			Marentette Drain	Stream Corridor	Low				St. Clair college Prairie	Strip Corridor	Moderate	Burke Drain	Stream Corridor	Low	Wollo Dialii					
			Grand Marais Drain	Stream Corridor	Moderate				Remnant to Spring Garder Cahill Drain	Stream Corridor	Low	No Name Tributary of	Stream Corridor	Low						
					moderate				Odrilli Didili	oucum comaci	2011	Burke Draine		2011						
			North of Spring Garder Road	n Matrix	Low							Howard Avenue Drain	Stream Corridor	Low						
												Benson Drain	Stream Corridor	Low						
												Dickson Drain	Stream Corridor	Low						
												No Name Tributary of Dickson Drain	Stream Corridor	Low						
				Total High	0		Total High	0		Total High	0		Total High	0		Total High	0		Total High	0
				Total Moderate Total Low	1		Total Moderate Total Low	0		Total Moderate Total Low	2		Total Moderate Total Low	0		Total Moderate Total Low	0		Total Moderate Total Low	0
Communities/Ecosystems	Impacts to Terrestrial Communities/ Ecosystems	Community type, area, significance and sensitivity	Area Displaced	1.41	High	Area Displaced	0.09	High	Area Displaced	0.36	High	Area Displaced	0.00	High	Area Displaced	0.00	High	Area Displaced	0.00	High
	Ecosystems		Area Displaced	6.29	Moderate	Area Displaced	0.27	Moderate	Area Displaced	1.19	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced	10.91	Low	Area Displaced	3.57	Low	Area Displaced	3.09	Low	Area Displaced	0.00	Low	Area Displaced	0.66	Low	Area Displaced	0.00	Low
	Impacts to Aquatic	Community type, area, significance and	Total Area Displaced Basin Drain	18.61	Low	Total Area Displaced Basin Drain	3.93	Low	Total Area Displaced Basin Drain	4.64	Low	Total Area Displaced Basin Drain	0.00	Low	Total Area Displaced Basin Drain	0.66	Low	Total Area Displaced Basin Drain	0.00	Low
	Communities/	sensitivity	Dadiii Didiii	0.11	2511			2011	Buoin Brain		2011	Daoin Diam		2011	Baoin Brain		2011	Buoin Brain		254
			Basin Drain Cahill Drain	0.03	None Low	Basin Drain Cahill Drain		None Low	Basin Drain Cahill Drain	0.02	None Low	Basin Drain Cahill Drain		None Low	Basin Drain Cahill Drain		None Low	Basin Drain Cahill Drain		None Low
			Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain	0.02	Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate
			Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain	0.05	Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate
			Grand Marais Drain	0.06	Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain		Low
			Lennon Drain	0.00	Moderate	Lennon Drain		Moderate	Lennon Drain	0.05	Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate
			Marentette Drain Wolfe Drain	0.02	None Low	Marentette Drain Wolfe Drain		None Low	Marentette Drain Wolfe Drain	0.01	None Low	Marentette Drain Wolfe Drain	0.59	None Low	Marentette Drain Wolfe Drain		None Low	Marentette Drain Wolfe Drain		None Low
			Wolfe Drain		Moderate	Wolfe Drain		Moderate	Wolfe Drain	0.29	Moderate	Wolfe Drain	0.00	Moderate	Wolfe Drain		Moderate	Wolfe Drain		Moderate
			Youngstown Drain	0.09	Low	Youngstown Drain		Low	Youngstown Drain Area Displaced		Low	Youngstown Drain		Low	Youngstown Drain Area Displaced		Low	Youngstown Drain		Low
			Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.38	Moderate	Area Displaced	0.00	Moderate		0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced Area Displaced	0.26	Low None	Area Displaced Area Displaced	0.00	Low	Area Displaced Area Displaced	0.02	Low None	Area Displaced Area Displaced	0.00	Low None	Area Displaced Area Displaced	0.00	Low None	Area Displaced Area Displaced	0.00	Low None
			Total Area Displaced		32	Total Area Displaced		00	Total Area Displaced	0.	40	Total Area Displaced		0.59	Total Area Displaced	(0.00	Total Area Displaced	0.	00
Populations/Species		Species name, type and significance	Provincially Rare		89	Provincially Rare		23	Provincially Rare		33	Provincially Rare		0	Provincially Rare		0	Provincially Rare		0
Surface Water	conditions (quality and	area of surface drainage altered by each alternative																		
	quantity)	number of surface water drainages crossings by stream type																		
		number of encroachments on or severances surface water drainages	9																	
		degree of compliance with Provincial and Federal Water Quality Guidelines and																		
	1	Stormwater Management requirements									1									1
Groundwater	Change in groundwater	area of infiltration zones affected																		
	conditions (quality and quantity)	area of groundwater recharge affected																		
	qualitity)	areas of seepage affected																		
		area of water table affected by each alternation (draw down zone)	1																	
		proximity of alternative to public and private drinking water wells		-																
Other Natural Resources	Impacts to mineral, petroleum, granular	Area in ha within ROW																		
	(quarry) lands/easement	9																		
Factor Summary:	1	1	1			1			1	1		1	1		1	1		1		
Factor Score:																				
		Neutral/No Impact 5-Low Renefit 6-Med	fium Renefit 7-High P													•				

Factor Score:

1-High Impact 2-Medium Impact 3-Low Impact 4-Neutral/No Impact 5-Low Benefit 6-Medium Benefit 7-High Benefit

Access Route Data:xis: Natural-Alt2BOpt2-Plaza A

PRACTICAL ALTERNATIVE EVALUATION	Factor: Pr	otect the Natural Environment								Natu	ral Alternative 2B	Option 2 Plaza B	or C							
											Segments-Malden Ro	ad to North Talbot Rd								
				Malden Rd to Pulfor	d		Pulford north of Lennon	Drain	North o	f Lennon Drain to Cous	ineau Rd	Co	ousineau Rd to Howa	rd Ave	н	loward Ave to Highwa	y 401	Н	ighway 3 to North Talb	oot Rd
Performance Measure	Criteria/Indicator	Measurement/Units		G-H	_		H-I	_		ŀJ			J-K			K-L			L-M	
			Name	Type	Significance	Name	Type	Significance	Name	Туре	Significance	Name	Type	Significance	Name	Type	Significance	Name	Type	Significance
	Impacts to Ecological Landscapes	Landscape name, type and significance	Basin Drain	Stream Corridor	Low	Oakwood Bush to Spr Garden ANSI	ing Strip Corridor	Low	Lennon Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low
			Youngstown Drain	Stream Corridor	Low	Lennon Drain	Stream Corridor	Low	St. Clair College Prairie	Patch	Moderate	Collins Drain	Stream Corridor	Low		Stream Corridor	Low			
			Marentette Drain	Stream Corridor	Low				Remnant St. Clair college Prairie	Strip Corridor	Moderate	Burke Drain	Stream Corridor	Low	Wolfe Drain					
									Remnant to Spring Garder	i .	Moderate			2011						
			Grand Marais Drain	Stream Corridor	Moderate				Cahill Drain	Stream Corridor	Low	No Name Tributary of Burke Draine	Stream Corridor	Low						
			North of Spring Garden	Matrix	Low							Howard Avenue Drain	Stream Corridor	Low						
			Road									Benson Drain	Stream Corridor	Low						
														2011						
			ĺ									Dickson Drain	Stream Corridor	Low				1		
													Stream Corridor	Low						
				Total High	0		Total High	0		Total High	0	Dickson Drain	Total High	0		Total High	0		Total High	0
				Total Moderate	1		Total Moderate	0		Total Moderate	2		Total Moderate	0		Total Moderate	0		Total Moderate	0
Communities/Ecosystems	Impacts to Terrestrial	Community type, area, significance and	Area Displaced	Total Low	4 Uigh	Area Displaced	Total Low 0.09	2 Ulah	Area Displaced	Total Low	2 High	Area Displaced	Total Low 0.00	8 High	Area Displaced	Total Low	2 Ulah	Area Displaced	Total Low	1 High
,	Communities/ Ecosystems	sensitivity		0.37	High	Ţ,		riigil	·	0.36	High	,		High	,	0.00	High	·	0.00	High
			Area Displaced Area Displaced	2.29	Moderate Low	Area Displaced Area Displaced	0.27	Moderate Low	Area Displaced Area Displaced	1.19	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low
				10.24	LOW	Total Area Displaced		LOW	Total Area Displaced	4.64	LOW		0.00	LOW		0.66	LOW	Total Area Displaced	0.00	LOW
	Impacts to Aquatic Communities/	Community type, area, significance and sensitivity	Basin Drain	0.04	Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low
ľ	Communities/	sensitivity	Cahill Drain		Low	Cahill Drain		Low	Cahill Drain	0.02	Low	Cahill Drain	-	Low	Cahill Drain		Low	Cahill Drain		Low
			Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain	0.00	Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate
			Cahill Drain Grand Marais Drain	0.06	Moderate Low	Cahill Drain Grand Marais Drain		Moderate Low	Cahill Drain Grand Marais Drain	0.05	Moderate Low	Cahill Drain Grand Marais Drain		Moderate Low	Cahill Drain Grand Marais Drain		Moderate Low	Cahill Drain Grand Marais Drain		Moderate Low
			Lennon Drain	0.00	Moderate	Lennon Drain		Moderate	Lennon Drain	0.05	Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate
			Marentette Drain	0.02	None	Marentette Drain		None	Marentette Drain	0.04	None	Marentette Drain	0.50	None	Marentette Drain		None	Marentette Drain		None
			Wolfe Drain Wolfe Drain		Low Moderate	Wolfe Drain Wolfe Drain		Low Moderate	Wolfe Drain Wolfe Drain	0.01	Low Moderate	Wolfe Drain Wolfe Drain	0.59	Low Moderate	Wolfe Drain Wolfe Drain		Low Moderate	Wolfe Drain Wolfe Drain		Low Moderate
			Youngstown Drain	0.05	Low	Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain		Low
			Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.38	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low
			Area Displaced	0.02	None	Area Displaced	0.00	None	Area Displaced	0.00	None	Area Displaced	0.00	None	Area Displaced	0.00	None	Area Displaced	0.00	None
DI-ti/Ci	l	Ci	Total Area Displaced	0.	18	Total Area Displaced	0.0	00	Total Area Displaced	0.4	3	Total Area Displaced	0	.59	Total Area Displaced	0	.00	Total Area Displaced	0.0	.00
		Species name, type and significance area of surface drainage altered by each	Provincially Rare	+ '	10	Provincially Rare	1		Provincially Rare	1	1	Provincially Rare	1	-	Provincially Rare	 	-	Provincially Rare	 	
	conditions (quality and	alternative																		
(quantity)	number of surface water drainages crossings by stream type	1	1														1		
		number of encroachments on or severances		1		+			<u> </u>	 						<u> </u>		†	 	
		surface water drainages																1		
		degree of compliance with Provincial and Federal Water Quality Guidelines and	ĺ													1		1		
		Stormwater Management requirements																		
		area of infiltration zones affected area of groundwater recharge affected	-	+		1			-	1						-		1	1	
	quantity)	areas of seepage affected	1	+	1	+	-	-	1	1						 		1	1	-
		area of water table affected by each alternative		1							1							1		
		(draw down zone)		1		1				1	ļ							1	1	
		proximity of alternative to public and private drinking water wells	ĺ																	
Other Natural Resources	Impacts to mineral,	Area in ha within ROW	 	+		+		+	1	1	<u> </u>		 	1		 	1	1	1	
	petroleum, granular		1	1										1		1	1	1		
	(quarry) lands/easements																			
	(quarry) lands/easements																			

1-High Impact 2-Medium Impact 3-Low Impact 4-Neutral/No Impact 5-Low Benefit 6-Medium Benefit 7-High Benefit

Access Route Data:xis: Natural-Alt2BOpt2-Plaza B orC
Page 1 of 1

PRACTICAL ALTERNATIVE EVALUATION	Factor: P	rotect the Natural Environment									Natural Alterna	ative 3 Plaza A								
											Segments-Malden Ro	oad to North Talbot Rd								
				Malden Rd to Pulfore	d	F	ulford north of Lenn	on Drain	North o	f Lennon Drain to Cou	sineau Rd		Cousineau Rd to Howard	Ave		Howard Ave to Highw	vay 401		Highway 3 to North Talb	ot Rd
Performance Measure	Criteria/Indicator	Measurement/Units		G- H			H-I			ŀJ			Ј-К			K-L			L-M	
			Name	Type	Significance	Name	Type	Significance	Name	Type	Significance	Name	Type	Significance	Name	Type	Significance	Name	Type	Significance
Ecological Landscapes	Impacts to Ecological	Landscape name, type and significance	Basin Drain	Stream Corridor	Low	Oakwood Bush to Sprin		Low	Lennon Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low
	Landscapes		Youngstown Drain	Stream Corridor	Low	Garden ANSI Lennon Drain	Stream Corridor	Low	St. Clair College Prairie Remnant	Patch	Moderate	Collins Drain	Stream Corridor	Low	No Name Tributary of Wolfe Drain	Stream Corridor	Low			
			Marentette Drain	Stream Corridor	Low				St. Clair college Prairie Remnant to Spring Garder	Strip Corridor	Moderate	Burke Drain	Stream Corridor	Low						
			Grand Marais Drain	Stream Corridor	Moderate				Cahill Drain	Stream Corridor	Low	No Name Tributary of Burke Draine	Stream Corridor	Low						
			North of Spring Gard	len Matrix	Low							Howard Avenue Drain	Stream Corridor	Low						
			Roau									Benson Drain	Stream Corridor	Low						+
												Dickson Drain	Stream Corridor	Low						+
												No Name Tributary of	Stream Corridor	Low						
				Total High	0		Total High	0		Total High	0	Dickson Drain	Total High	0		Total High	0		Total High	0
				Total Moderate Total Low	1		Total Moderate Total Low	0		Total Moderate Total Low	2		Total Moderate Total Low	0		Total Moderate Total Low	0		Total Moderate Total Low	0
Communities/Ecosystems	Impacts to Terrestrial Communities/	Community type, area, significance and sensitivity	Area Displaced	1.40	High	Area Displaced	0.00	High	Area Displaced	0.09	High	Area Displaced	0.00	High	Area Displaced	0.00	High	Area Displaced	0.00	High
	Ecosystems		Area Displaced	6.29	Moderate	Area Displaced	0.26	Moderate	Area Displaced	0.85	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced Total Area Displaced		Low	Area Displaced Total Area Displaced	2.09	Low	Area Displaced Total Area Displaced	3.38	Low	Area Displaced Total Area Displaced		Low	Area Displaced Total Area Displaced	0.66	Low	Area Displaced Total Area Displaced	0.00	Low
	Impacts to Aquatic Communities/	Community type, area, significance and sensitivity	Basin Drain	0.11	Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low
	Communica	Solisiuvity	Basin Drain	0.03	None	Basin Drain		None	Basin Drain		None	Basin Drain		None	Basin Drain		None	Basin Drain		None
			Cahill Drain Cahill Drain		Low Moderate	Cahill Drain Cahill Drain		Low Moderate	Cahill Drain Cahill Drain	0.00	Low Moderate	Cahill Drain Cahill Drain		Low Moderate	Cahill Drain Cahill Drain		Low Moderate	Cahill Drain Cahill Drain		Low Moderate
			Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain	0.03	Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate
			Grand Marais Drain	0.08	Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain		Low
			Lennon Drain Marentette Drain	0.03	Moderate None	Lennon Drain Marentette Drain		Moderate None	Lennon Drain Marentette Drain	0.05	Moderate None	Lennon Drain Marentette Drain		Moderate None	Lennon Drain Marentette Drain		Moderate None	Lennon Drain Marentette Drain		Moderate None
			Wolfe Drain	0.03	Low	Wolfe Drain		Low	Wolfe Drain	0.01	Low	Wolfe Drain	0.12	Low	Wolfe Drain		Low	Wolfe Drain		Low
			Wolfe Drain		Moderate	Wolfe Drain		Moderate	Wolfe Drain	0.29	Moderate	Wolfe Drain		Moderate	Wolfe Drain		Moderate	Wolfe Drain		Moderate
			Youngstown Drain	0.08	Low	Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain		Low
			Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.37	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low
			Area Displaced	0.06	None	Area Displaced	0.00	None	Area Displaced	0.00	None	Area Displaced	0.00	None	Area Displaced	0.00	None	Area Displaced	0.00	None
			Total Area Displaced		32	Total Area Displaced		0.00	Total Area Displaced		38	Total Area Displaced	0.1	2	Total Area Displaced		0.00	Total Area Displaced	0.	<i>J</i> O
Populations/Species	Impacts to Species at	Species name, type and significance	Provincially Rare	8	34	Provincially Rare		6	Provincially Rare		11	Provincially Rare		0	Provincially Rare		0	Provincially Rare		0
Surface Water	Changes in surface water conditions (quality and quantity)																			
	quantity)	number of surface water drainages crossings by stream type																		
		number of encroachments on or severances of surface water drainages	1																	
		degree of compliance with Provincial and Federal Water Quality Guidelines and																		
	1	Stormwater Management requirements							ļ					1				1		
Groundwater	Change in groundwater conditions (quality and	area of infiltration zones affected area of groundwater recharge affected	 	-						1		1		+				+	-	+
	quantity)	areas of seepage affected		+		+	1	+	1	1			1	+	+	1		+		+
	1	area of water table affected by each alternativ			1		1		1	1	1		+	1	+	1		1	1	+
	1	(draw down zone)]						1					İ				1		
		proximity of alternative to public and private drinking water wells																		
Other Natural Resources	Impacts to mineral, petroleum, granular	Area in ha within ROW				1				1		1								†
	(quarry) lands/easement																			
Factor Summary:		<u>I</u>	<u> </u>		1	1	1	<u> </u>	1	1	1	1	_1	1		1	<u> </u>	1		
Factor Score:	İ																			T
L	1		I	1		1	1		1	1	1	1	1		1	1	1	1	1	1

1-High Impact 2-Medium Impact 3-Low Impact 4-Neutral/No Impact 5-Low Benefit 6-Medium Benefit 7-High Benefit

Access Route Data:xis: Natural-Alt3-Plaza A

PRACTICAL ALTERNATIVE EVALUATION	Factor: F	Protect the Natural Environment									Natural Alternati	ive 3 Plaza B or C	:							
											Segments-Malden R	oad to North Talbot Rd								
				Malden Rd to Pulfo	rd		Pulford north of Lenno	on Drain	North o	of Lennon Drain to Cou	sineau Rd	C	Cousineau Rd to How	ard Ave	ı	Howard Ave to Highw	yay 401		Highway 3 to North Tall	oot Rd
Performance Measure	Criteria/Indicator	Measurement/Units		G-H			H-I			I-J			J-K			K-L			L-M	
			Name	Type	Significance	Name	Type	Significance	Name	Type	Significance	Name	Type	Significance	Name	Type	Significance	Name	Type	Significance
Ecological Landscapes	Impacts to Ecological	Landscape name, type and significance	Basin Drain	Stream Corridor	Low	Oakwood Bush to Spi	-74-	Low	Lennon Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low
	Landscapes		Youngstown Drain	Stream Corridor	Low	Garden ANSI Lennon Drain	Stream Corridor	Low	St. Clair College Prairie Remnant	Patch	Moderate	Collins Drain	Stream Corridor	Low	No Name Tributary of Wolfe Drain	Stream Corridor	Low			
			Marentette Drain	Stream Corridor	Low				St. Clair College Prairie Remnant to Spring Garde	Strip Corridor	Moderate	Burke Drain	Stream Corridor	Low						
			Grand Marais Drain	Stream Corridor	Moderate				Cahill Drain	Stream Corridor	Low	No Name Tributary of Burke Draine	Stream Corridor	Low						
			North of Spring Garde	en Matrix	Low							Howard Avenue Drain	Stream Corridor	Low						
			Road									Benson Drain	Stream Corridor	Low						
									+			Dickson Drain	Stream Corridor	Low	+			1		
												No Name Tributary of	0. 0							
				Total High	0		Total High	0		Total High	0	Dickson Drain	Stream Corridor Total High	Low		Total High	0		Total High	0
				Total Moderate	1		Total Moderate	0		Total Moderate	2		Total Moderate	0		Total Moderate	0		Total Moderate	0
				Total Low	4		Total Low	2		Total Low	2		Total Low	8		Total Low	2		Total Low	1
Communities/Ecosystems	Impacts to Terrestrial Communities/ Ecosystems	Community type, area, significance and sensitivity	Area Displaced	0.41	High	Area Displaced	0.00	High	Area Displaced	0.09	High	Area Displaced	0.00	High	Area Displaced	0.00	High	Area Displaced	0.00	High
			Area Displaced	2.29	Moderate	Area Displaced	0.26	Moderate	Area Displaced	0.85	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced Total Area Displaced	6.53	Low	Area Displaced Total Area Displaced	1.82	Low		2.44 3.38	Low	Area Displaced Total Area Displaced	0.00	Low	Area Displaced Total Area Displaced	0.66 0.66	Low	Area Displaced Total Area Displaced	0.00	Low
	Impacts to Aquatic Communities/ Ecosystems	Community type, area, significance and sensitivity	Basin Drain	0.04	Low	Basin Drain	2.09	Low	Basin Drain	3.36	Low	Basin Drain	0.00	Low	Basin Drain	0.00	Low	Basin Drain	0.00	Low
	Loosystems		Cahill Drain		Low	Cahill Drain		Low	Cahill Drain	0.00	Low	Cahill Drain		Low	Cahill Drain		Low	Cahill Drain		Low
			Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain	0.00	Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate
			Cahill Drain Grand Marais Drain	0.08	Moderate Low	Cahill Drain Grand Marais Drain		Moderate Low	Cahill Drain Grand Marais Drain	0.03	Moderate Low	Cahill Drain Grand Marais Drain		Moderate Low	Cahill Drain Grand Marais Drain		Moderate Low	Cahill Drain Grand Marais Drain		Moderate Low
			Lennon Drain	0.00	Moderate	Lennon Drain		Moderate	Lennon Drain	0.05	Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate
			Marentette Drain	0.02	None	Marentette Drain		None	Marentette Drain	0.04	None	Marentette Drain	0.40	None	Marentette Drain		None	Marentette Drain		None
			Wolfe Drain Wolfe Drain		Low Moderate	Wolfe Drain Wolfe Drain		Low Moderate	Wolfe Drain Wolfe Drain	0.01	Low Moderate	Wolfe Drain Wolfe Drain	0.12	Low Moderate	Wolfe Drain Wolfe Drain		Low Moderate	Wolfe Drain Wolfe Drain		Low Moderate
			Youngstown Drain	0.03	Low	Youngstown Drain		Low	Youngstown Drain	0.20	Low	Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain		Low
			Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.37	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced Area Displaced	0.15 0.02	Low None	Area Displaced Area Displaced	0.00	Low None	Area Displaced Area Displaced	0.01	Low None	Area Displaced Area Displaced	0.12	Low None	Area Displaced Area Displaced	0.00	Low None	Area Displaced Area Displaced	0.00	Low None
			Total Area Displaced		None	Total Area Displaced		Notic	Total Area Displaced	0.38	None	Total Area Displaced		INOTIE	Total Area Displaced	0.00	None	Total Area Displaced	0.00	None
Populations/Species	Impacts to Species at	Species name, type and significance	Provincially Rare	45	.00	Provincially Rare	(6.00	Provincially Rare	41	.00	Provincially Rare		0.00	Provincially Rare		0.00	Provincially Rare	0	.00
Surface Water	Changes in surface water conditions (quality and	e area of surface drainage altered by each alternative														ľ				
	quantity)	number of surface water drainages crossings	5																	
		by stream type number of encroachments on or severances		+		1	1	1		1	1			_						1
		number of encroachments on or severances surface water drainages	1							1									1	
		degree of compliance with Provincial and																		
		Federal Water Quality Guidelines and Stormwater Management requirements		1			1	1		1				1						
Groundwater	Change in groundwater		 	+	+	+	+	+		+	+	+	+	+	+	+	-		+	+
Ì	conditions (quality and	area of groundwater recharge affected														1				
	quantity)	areas of seepage affected																		
		area of water table affected by each alternati (draw down zone)	v																	
		proximity of alternative to public and private drinking water wells																		
Other Natural Resources	Impacts to mineral,	Area in ha within ROW	1	+	+	+	+	-	+	+	+	1	+		+	+		+	+	+
	petroleum, granular (quarry) lands/easemen																			
	ļ	1								1										
Factor Summary:	ļ		1			_			1		1	1	1		1	1		1	1	1
actor Score:	1		1			1	1		1	1	1	1	1	1	1	1			1	1

Access Route Data:xis: Natural-Alt3-Plaza B or C

Properties Pro	PRACTICAL ALTERNATIVE	Factor: Protect th	e Natural Environment					N	latural Plazas	and Crossings					
Commentation Comm	EVALUATION								Pla	aza A					
Name				F	rom Crossing A		F	rom Crossing B		F	rom Crossing C		F	From Crossing C	
Program Prog	Performance Measure	Criteria/ Indicator	Measurement/ Units		A-G			B-G			C-E-G			C-G	
Probability Probability				Name		Significance	Name	Type/Area	Significance	Name	Type/Area	Significance	Name		Significance
Permit of Americal Steed North of Americ									Ŭ.						
Part						Low	Healy Drain	Stream Corridor	Low	McKee Creek	Stream Corridor	Low	McKee Creek	Stream Corridor	Low
Revision MARIS Revision M				North of Amanda Street	Matrix	Moderate	North of Amanda Street	Matrix	Moderate	Healy Drain	Stream Corridor	Low	North of Amanda Street	Matrix	Moderate
Communication Projects to Summary Projects of Summary Proj					Strip Corridor	Moderate		Strip Corridor	Moderate	North of Amanda Street	Matrix	Moderate		Strip Corridor	Moderate
Deposits to Aquatic Conversition Security (Security					Patch	Low		Patch	Low		Strip Corridor	Moderate			
Impacts to Community Systems Community Sys										Sterling Marine Fuels	Patch	Low			
Exceptions Exc		Terrestrial	significance and												
Page 15 August August August Community Spr. and August Spr. and August			Sensitivity	Area Displaced	2.98	High	Area Displaced	2.70	High	Area Displaced	2.69	High	Area Displaced	2.70	High
Foundation Fou						Moderate		1.82		<u> </u>	2.74	Moderate			Moderate
Projects to Aquatic Community type, area Significance and Sign						Low			Low			Low			Low
Communities Species Species rame, type and Provincial Rare Species rame, type and Provincial Rare Species rame				·	32.58		'			·			Total Area Displaced		
McKee Drain 0.11 None McKee Drain 0.05 Moderate McKee Drain 0.15 None McKee Drain 0.05 Moderate McKee Drain 0.15 None McKee Drain 0.05 Moderate McKee Drain 0.05 Moderate McKee Drain 0.05 Moderate McKee Drain 0.05 Moderate McKee Drain 0.15 None McKee Drain 0.15 None None No Name Tributary 0.01 Le				Healy Drain	0.01	Low	Healy Drain	0.03	Low	Healy Drain	0.03	Low	McKee Creek	0.03	Moderate
Financial Control Principle Princi													-		Moderate
Derroit River															None
Per															Moderate Low
Area Displaced 0.01 1.0				Detroit River	F 161	Moderate							No Name Indutary	0.01	LOW
Area Displaced 1.11 None Area Displaced 0.15 None Area Displaced 0.15 None Area Displaced 0.11 None Area Displaced 0.15 None Area Displaced 0.11 None Area Displaced 0.11 None Area Displaced 0.15 None				Area Displaced	0.10	Moderate	Area Displaced	0.10	Moderate	Area Displaced		Moderate	Area Displaced	0.13	Moderate
Populations/ Species Impacts to Species at Risk at Ris															Low
Populations/ Species Impacts to Species Species name, type and Provincially Rare 232 High Provincially Rare 233 High Provincially Rare 231															None
at Risk Change in surface Water Conditions (quality and quantity) Forumdwater Change in gloundwater Conditions (quality) and quantity) and size of sepage are as of water table affected by each proximity of alternative to public and private perfoleum, granular (quarry) and size of sepage are as of sepage are as of water table affected by each proximity of alternative to public and private perfoleum, granular (quarry) and size of sepage are as of sepage are as of sepage are as of water table affected by each proximity of alternative to public and private perfoleum, granular (quarry) and size of sepage are as of sepage are as of water table affected by each proximity of alternative to public and private are as of water table affected by each proximity of alternative to public and private are as of water table affected by each proximity of alternative to public and private are as of water table affected by each proximity of alternative to public and private are as of water table affected by each proximity of alternative to public and private are as of water table affected by each proximity of alternative to public and private are as of water table affected by each proximity of alternative to public and private are as of water table affected by each are as of water table affected by each are as of water table affected by each are as of water table affected by each are as of water table affected by each are as of water table affected by each are as of water table affected by each are as of water table affected by each are as of water table affected by each are as of water table affected by	Panulations/ Species	Impacts to Species	Species name type and				· ·			·					
water conditions aftered by each (quality and quantity) number of surface water drainages crossings by number of encreachments on or degree of compliance with Provincial and Federal Water Quality end quantity) are a of inflitration zones area of water table affected by each proximity of alternative to public and private perfoleur, granular (quarry) ands/easements	Populations/ Species				23	High		22.	a High		23	High		10	36 mign
(quality and quantity) number of surface water	Surface Water														
Inumber of encroachments on or encroachments on or degree of compliance with Provincial and Federal Water Quality Groundwater Change in groundwater conditions (quality) and quantity) The provincial and provincial			number of surface water												
degree of compliance with Provincial and Federal Water Quality Groundwater groundwater conditions (quality and quantity) Afficient and province with Provincial and provincial and provincial and groundwater area of infiltration zones ar			number of												+
with Provincial and Federal Water Quality Groundwater Conditions (quality and quantity) And quantity Other Natural Resources petroleum, granular (quarry) lands/easements with Provincial and Federal Water Quality area of infiltration zones area of groundwater area of seepage area of seepage area of water table affected by each proximity of alternative to public and private Area in ha within ROW Factor Summary:									1						
Change in groundwater conditions (quality and quantity) Approximity of alternative to public and private (quarry) lands/easements Factor Summary: Change in groundwater area of infiltration zones area of groundwater area of groundwater area of groundwater area of seepage area of water table area of wa			with Provincial and												
groundwater conditions (quality and quantity) and quantity) The proximity of alternative to public and private The petroleum, granular (quarry) lands/easements The proximity of alternative to public and private The petroleum, granular (quarry) lands/easements The petroleum of the within ROW lands and private lands are of groundwater area															
Conditions (quality and quantity) areas of seepage area of water table affected by each proximity of alternative to public and private Other Natural Resources petroleum, granular (quarry) lands/easements Factor Summary:		· ·													
and quantity) area of water table affected by each proximity of alternative to public and private Nesources Pactor Summary: Area in ha within ROW Pactor Summary: Pa		·													
affected by each proximity of alternative to public and private Other Natural Resources petroleum, granular (quarry) lands/easements Factor Summary:															
public and private Other Natural Impacts to mineral, petroleum, granular (quarry) Iands/easements Factor Summary:		, , , , , , , , , , , , , , , , , , , ,													
Resources petroleum, granular (quarry) lands/easements Factor Summary:															
(quarry) lands/easements Factor Summary:			<u> </u>			1									+
Factor Summary:		(quarry)													
		lands/easements													
Factor Score: 1-High Impact 2-Medium Impact 3-Low Impact 4-Neutral/No Impact 5-Low Benefit 6-Medium Benefit 7-High Benefit 7-	Factor Score:		-												

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1-High Impact 2-Medium Impact 3-Low Impact 4-Neutral/No Impact 5-Low Benefit 6-Medium Benefit 7-High Benefit

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect the	e Natural Environment					N	atural Plazas	and Crossings					
								Plaz	za A					
			Fr	om Crossing A		F	rom Crossing B		Fi	rom Crossing C		Fr	rom Crossing C	
Performance Measure	Criteria/ Indicator	Measurement/ Units		A-G			B-G			C-E-G			C-G	
			Name	Type/Area	Significance	Name	Type/Area	Significance	Name	Type/Area	Significance	Name	Type/Area	Significance

Detroit River International Crossing Project

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PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect th	e Natural Environment				Natural Pl	azas and Cro	ssings			
							Plaza B				
						F	rom Crossing C				
Performance Measure	Criteria/ Indicator	Measurement/ Units		C-E			E-F			F-G	
			Name	Type/Area	Significance	Name	Type/Area	Significance	Name	Type/Area	Significance
•		Landscape name, type and significance	Detroit River	Stream Corridor	High	Broadway Drain	Stream Corridor	Low	McKee Drain	Stream Corridor	Low
			McKee Creek	Stream Corridor	Low				Titcombe Drain	Stream Corridor	Low
			Healy Drain	Stream Corridor	Low				North of Amanda Street	Matrix	Moderate
			Broadway Drain	Stream Corridor	Low				Malden park to Prairie Remnants ANSI	Strip Corridor	Moderate
			Sterling Marine Fuels NHF	Patch	Moderate						
Communities/	Impacts to	Community type, area,			High						
Ecosystems -	Terrestrial	significance and sensitivity			i ngi						
	Ecosystems		Area Displaced	1.12		Area Displaced	0.01	High	Area Displaced	0.89	High
			Area Displaced	0.90	Moderate	Area Displaced	0.70	Moderate	Area Displaced	0.49	Moderate
			Area Displaced	16.83	Low	Area Displaced	6.18	Low	Area Displaced	13.55	Low
			Total Area Displaced	18.86		Total Area Displaced	6.89		Total Area Displaced	14.93	
	Impacts to Aquatic Communities/	Community type, area, significance and	Broadway Drain	0.05	Low	Healy Drain	0.03	None	McKee Drain	0.02	Moderate
			Healy Drain	0.08	Low	McKee Drain	0.07	Moderate	McKee Drain	0.11	None
			Healy Drain	0.16	None	McKee Drain	0.07	Moderate	Titcombe Draine	0.02	Moderate
			McKee Creek	0.03	Moderate						
			Detroit River	Pier	Moderate						
			No Name Tributary	0.00	Low						
			Area Diaplaced	0.03	Moderate	Area Diaplaced	0.44	Moderate	Area Displaced	0.04	Moderate
			Area Displaced Area Displaced	0.03	Low	Area Displaced Area Displaced	0.14	Low	Area Displaced	0.04	Low
			Area Displaced Area Displaced	0.16	None	Area Displaced Area Displaced	0.03	None	Area Displaced Area Displaced	0.11	None
			Total Area Displaced	0.32		Total Area Displaced	0.17		Total Area Displaced	0.15	
Populations/ Species		Species name, type and significance	Provincially Rare Specimens/Colonies		High	Provincially Rare Specimens/Colonies	30	High	Provincially Rare Specimens/Colonies	82	High
		area of surface drainage									
•		altered by each									
		number of surface water									
		drainages crossings by									
		number of				1			1		
		encroachments on or									
		degree of compliance			†			†			
		with Provincial and									
		Federal Water Quality									
Groundwater (area of infiltration zones									

Detroit River International Crossing Project

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PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect th	e Natural Environment				Natural P	lazas and Cro	ssings			
							Plaza B				
						ı	From Crossing C				
Performance Measure	Criteria/ Indicator	Measurement/ Units		C-E			E-F			F-G	
			Name	Type/Area	Significance	Name	Type/Area	Significance	Name	Type/Area	Significance
	groundwater	area of groundwater									
	conditions (quality	areas of seepage									
	and quantity)	area of water table affected by each									
		proximity of alternative to public and private									
Other Natural Resources	Impacts to mineral, petroleum, granular (quarry) lands/easements	Area in ha within ROW									
Factor Summary:			-	-			-				-
Factor Score:		ulmpoet 4 Noutral/No Imp									

¹⁻High Impact 2-Medium Impact 3-Low Impact 4-Neutral/No Impact 5-Low Benefit 6-Medium Benefit 7-High Benefit

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect the Natural Environment		Natural Plazas and Crossings													
EVALUATION			Plaza B1													
				rossing B		From Crossing C										
Performance Measure	e Criteria/ Indicator	Measurement/ Units	B-F			F-G			C-F			F-G				
			Name	Type/Area	Significance	Name	Type/Area	Significance	Name	Type/Area	Significance	Name	Type/Area	Significance		
Ecological Landscapes	Impacts to Ecological	Landscape name, type and significance	Detroit River	Stream Corridor	High	McKee Drain	Stream Corridor	Low	Detroit River	Stream Corridor	High	McKee Drain	Stream Corridor	Low		
			Healy Drain	Stream Corridor	Low	Titcombe Drain	Stream Corridor	Low	McKee Creek	Stream Corridor	Low	Titcombe Drain	Stream Corridor	Low		
			Broadway Drain	Stream Corridor	Low	North of Amanda Street	Matrix	Moderate	Healy Drain	Stream Corridor	Low	North of Amanda Street	Matrix	Moderate		
			Ontario Power Generation NHF	Patch	Low	Malden Park to Prairie	Strip Corridor	Moderate	Broadway Drain	Stream Corridor	Low	Malden Park to Prairie	Strip Corridor	Moderate		
			Generation NHF			Remnants ANSI			Sterling Marine Fuels NHF	Patch	Low	Remnants ANSI				
Communities/ Ecosystems	Impacts to Terrestrial Communities/	Community type, area, significance and sensitivity														
	Ecosystems	Schollivity	Area Displaced	0.20	High	Area Displaced	0.89	High	Area Displaced	0.20	High	Area Displaced	0.89	High		
			Area Displaced	0.70	Moderate	Area Displaced	0.49	Moderate	Area Displaced	1.60	Moderate	Area Displaced	0.49	Moderate		
			Area Displaced Total Area Displaced	28.58 29.48	Low	Area Displaced Total Area Displaced	14.21 15.59	Low	Area Displaced Total Area Displaced	27.77 29.57	Low	Area Displaced Total Area Displaced	14.21 15.59	Low		
	Impacts to Aquatic	Community type, area, significance and	Healy Drain	0.07	Low	McKee Drain	0.02	Moderate	Healy Drain	0.05	Low	McKee Drain	0.02	Moderate		
	Communities/	significance and	Healy Drain	0.24	None	McKee Drain	0.11	None	Healy Drain	0.22	None	McKee Drain	0.11	None		
			McKee Drain	0.06	Moderate	Titcombe Drain	0.02	Moderate	McKee Creek	0.03	Moderate	Titcombe Drain	0.02	Moderate		
			McKee Drain	0.07	Moderate				McKee Drain	0.06	Moderate					
			Detroit River	Pier	Moderate				McKee Drain	0.07	Moderate					
									Detroit River No Name Tributary	Pier 0.00	Moderate Low			+		
			Area Displaced	0.13	Moderate	Area Displaced	0.04	Moderate	Area Displaced	0.16	Moderate	Area Displaced	0.04	Moderate		
			Area Displaced	0.07	Low	Area Displaced	0.00	Low	Area Displaced	0.05	Low	Area Displaced	0.00	Low		
			Area Displaced	0.24	None	Area Displaced	0.11	None	Area Displaced	0.22	None	Area Displaced	0.11	None		
			Total Area Displaced	0.4		Total Area Displaced	0.1		Total Area Displaced	0.43		Total Area Displaced	0.1			
Populations/ Species	Impacts to Species at Risk	Species name, type and significance	Provincially Rare Specimens/Colonies	10	0 High	Provincially Rare Specimens/Colonies	8	High	Provincially Rare Specimens/Colonies	100	High	Provincially Rare Specimens/Colonies	8	High		
Surface Water	Changes in surface water conditions	area of surface drainage altered by each										·		1		
		number of surface water			1									+		
		drainages crossings by											1	 		
		number of encroachments on or														
		degree of compliance												+		
		with Provincial and Federal Water Quality														
Groundwater	Change in	area of infiltration zones								+			1	+		
0.04.14.14.0.	groundwater conditions (quality and quantity)	area of groundwater											+	+		
		areas of seepage	1						†				†	+		
		area of water table affected by each														
		proximity of alternative to public and private														
Other Natural	Impacts to mineral,	Area in ha within ROW				1				1				+		
Resources	petroleum, granular (quarry)															
	lands/easements															
Factor Summary:	<u> </u>		·			<u> </u>	1	1	1		<u> </u>	1				
Factor Score:	<u></u>	w Impact 4-Neutral/No I	5 Low Donath	. O.Mardiana Barra	## 7 Park Dame##	<u>!</u>	ļ	ļ	<u> </u>	<u> </u>	<u>!</u>		<u> </u>	┸		

1-High Impact 2-Medium Impact 3-Low Impact 4-Neutral/No Impact 5-Low Benefit 6-Medium Benefit 7-High Benefit

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect the Natural Environment		Natural Plazas and Crossings												
			Plaza B1												
Performance Measure	Criteria/ Indicator	Measurement/ Units			From Cro	ossing B		From Crossing C							
			B-F			F-G			C-F			F-G			
			Name	Type/Area	Significance	Name	Type/Area	Significance	Name	Type/Area	Significance	Name	Type/Area	Significance	

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PRACTICAL ALTERNATIVE	Factor: Protect the Natural Environment		Natural Plazas and Crossings													
EVALUATION				Plaza C												
			From Crossing C													
Performance Measure	Criteria/ Indicator	Measurement/ Units	C-D			D-E				E-F		F-G				
			Name	Type/Area	Significance	Name	Type/Area	Significance	Name	Type/Area	Significance	Name	Type/Area	Significance	Total Area	Significance
Ecological Landscapes	Impacts to Ecological Landscapes	and significance	Detroit River	Stream Corridor	High	Healy Drain	Stream Corridor	Low				McKee Drain	Stream Corridor	Low		
			McKee Creek	Stream Corridor	Low	Ontario Power Generation NHF	Patch	Low				Titcombe Drain	Stream Corridor	Low		
			Healy Drain	Stream Corridor	Low							North of Amanda Street	Matrix	Moderate		
			Sterling Marine Fuels NHF	Patch	Low							Malden Park to Prairie Remnants ANSI	Strip Corridor	Moderate		
Communities/	Impacts to Terrestria	Community type, area,														
•	Communities/ Ecosystems	significance and sensitivity													16.16	Total High
			Area Displaced Area Displaced	0.00 1.62	High Moderate	Area Displaced Area Displaced	0.00	High Moderate	Area Displaced Area Displaced	0.00	High Moderate	Area Displaced Area Displaced	0.89	High Moderate	16.60	Total Moderate
			Area Displaced Area Displaced	6.97	Low	Area Displaced	2.76	Low	Area Displaced	10.09	Low	Area Displaced	13.41	Low		
			Total Area Displaced	8.59		Total Area Displaced	2.76		Total Area Displaced	10.09		Total Area Displaced	14.79		200.05	Total Area Displaced
	Impacts to Aquatic Communities/	Community type, area, significance and	Healy Drain	0.02	None	Healy Drain	0.05	None	Healy Drain	0.04	Low	McKee Drain	0.02	Moderate		•
		Ü	McKee Drain	0.07	Moderate							McKee Drain	0.11	None		
			McKee Drain	0.08	Moderate							Titcombe Drain	0.02	Moderate		
			Detroit River No Name Tributary	Pier 0.15	Moderate Low											
			No Name Tributary	0.13	LOW											
			Area Displaced	0.15	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.04	Moderate	1 22	Total Moderate
			Area Displaced Area Displaced	0.15	Low	Area Displaced Area Displaced	0.00	Low	Area Displaced	0.04	Low	Area Displaced Area Displaced	0.04	Low		Total Low
			Area Displaced	0.02	None	Area Displaced	0.05	None	Area Displaced	0.00	None	Area Displaced	0.11	None	1.71	Total None
			Total Area Displaced	0.3		Total Area Displaced	0.0		Total Area Displaced	0.04		Total Area Displaced	0.1			Total Area
Populations/ Species	Impacts to Species at Risk	Species name, type and significance	Provincially Rare Specimens/Colonies	2	5 High	Provincially Rare Specimens/Colonies	4	3 High	Provincially Rare Specimens/Colonies	-	3 High	Provincially Rare Specimens/Colonies	8	32 High		Total Provincially Rare
Surface Water	Changes in surface water conditions	area of surface drainage	opening, coloring									opecimens, edicines				
		altered by each number of surface water														
		drainages crossings by														
		number of encroachments on or														
		degree of compliance														
		with Provincial and Federal Water Quality														
Groundwater	Change in	area of infiltration zones			+											
	groundwater conditions (quality and quantity)	area of groundwater	1		1		1			1		†	1			
		areas of seepage			1							1				
		area of water table														
		affected by each					1									
		proximity of alternative to public and private														
	Impacts to mineral,	Area in ha within ROW		1			Ī									
	petroleum, granular (quarry)															
	lands/easements															
Factor Summary:																
Factor Score:		<u> </u>														

¹⁻High Impact 2-Medium Impact 3-Low Impact 4-Neutral/No Impact 5-Low Benefit 6-Medium Benefit 7-High Benefit

Crossings and Plazas Data.xls: Natural Page 1 of 1



























