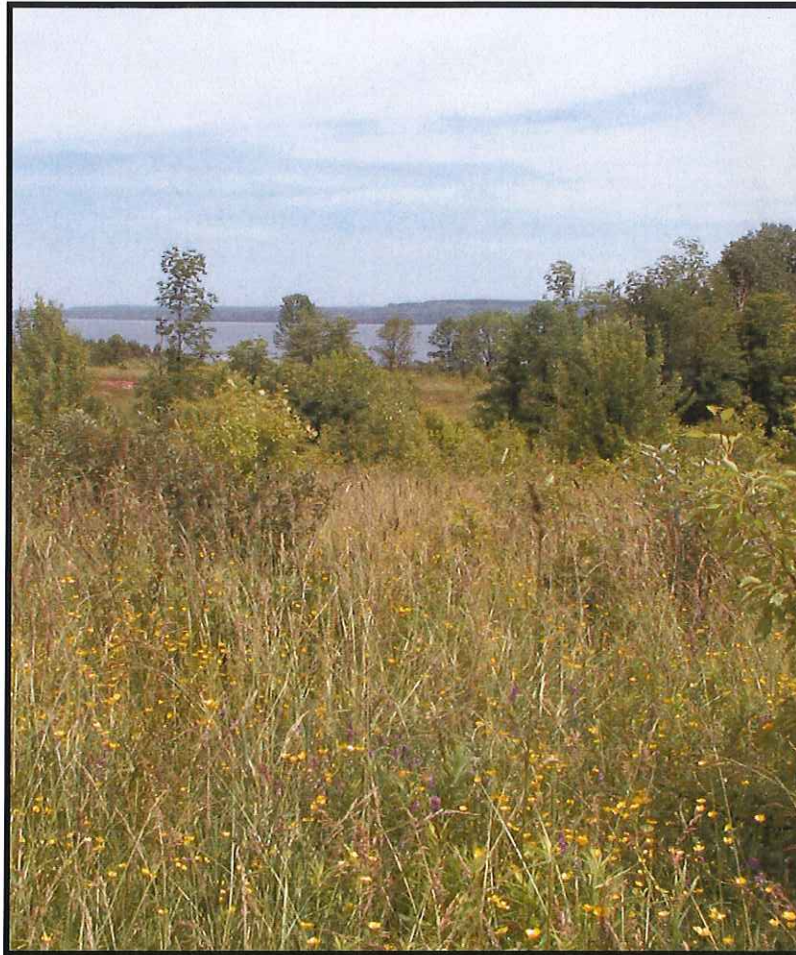


SCOPED ENVIRONMENTAL IMPACT STUDY

**WOODLOT 'C' AND PHASE 1 REVIEW
GEORGIAN VILLAS INC.**



Prepared for Mr. W. and Mr. R. McLeese
Georgian Villas Inc.

**Final Submission
August 1, 2006**

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MAP 1: NATURAL HERITAGE MODIFICATION TO PLAN

Attn: Mr. W. McLeese
Re: Scoped Environmental Impact Study
Georgian Villas Inc.

1.0 INTRODUCTION

Development of the Georgian Villas Inc. parcel is guided by an approved Secondary Plan. Environmental studies are required if development is contemplated within buffers to identified environmental protection (EP) zones. A portion of Phase II does encroach into valley features, and therefore SAAR was retained by Mr. W. McLeese to assess options for compatibility with the previously documented natural heritage features.

Phase II of the Georgian Villas Inc. development is being submitted at this time to facilitate servicing and roadwork. It currently puts forth a combination of single family residential lots, townhomes, and Environmental Protection as well as Open Space blocks for cultural and natural heritage. These land uses are being proposed amongst the approved and built out Cobble Beach Golf Links golf course.

Some of the proposed lot fabric encroached into valley landform and buffers to an EP Woodlot 'C'. The woodlot was earlier designated for conservation based upon species content and regional value of forest cover, supporting a seasonal creek feature, a regionally significant breeding bird, the Raven, and an area sensitive bird known as the Eastern Wood Pewee.

The purpose of the Scoped EIS is twofold:

- a) To establish the limit of setback from the ravine top of bank adjacent to EP Woodlot 'C' as requested. Part of this task benefited from preliminary pre consultation and discussion on site with the Grey Sauble Conservation Authority
- b) To confirm that no rare, threatened or endangered species or habitats are negatively impacted by the most recent development proposal, and to update any new species, habitat succession changes and/or conservation status of species first documented in original feasibility submissions at Official Plan level.

ENVIRONMENTAL INSPECTION DATES

Our team attended the site in April, June and July 2006 for a total of five seasonal wildlife inspections to observe and map the following potential wildlife events:

March 29	Herpetofaunal Function (Snake, Amphibian, Lizard and Salamander Activity)
April 9	" " " "
June 4, 18, 22	Breeding Bird Survey – 5:30 a.m. plus vegetation characterization, nest areas
July 12, 26	Summer Vegetation for Ecological Land Classification and ravine setbacks

2.0 POLICY FRAMEWORK

The build out of the Georgian Villas Inc. community must be consistent with the Township of Georgian Bluffs Secondary Plan and Official Plan Amendment 32 of the County of Grey, ensuring that the *"community develops in an environmentally sustainable, economically viable and socially appropriate manner"* (Secondary Plan).

1.0 LAND USE BACKGROUND

The objective of the land use designations is to be consistent with Secondary Plan goals:

"To protect and preserve the natural environment of the area by establishing policies that maintain and enhance sensitive natural features and protect the surface, groundwater and shoreline resources"

By conducting three seasonal field inspections we assessed whether the proposed land use designations could be consistent with the Grey County Official Plan 2.8.1 direction on natural heritage, which directs new development outside of identified natural features such as Hazard Lands, Provincially Significant Wetlands, significant fish habitat, woodlands, valleylands, endangered and threatened species, wildlife habitat and aquifer recharge areas. Further, Grey County O.P. 2.8.1 goals are stated as maintaining natural linkages which on the Georgian Villas Inc. parcel are expressed as the key EP Woodlot core wildlife habitats and the wildlife linkages between them.

Our document was also prepared in consistency with the Natural Heritage Section 2.1 of the Provincial Policy Statement (PPS) under the Planning Act of Ontario. All field observations were tested against the Planning Act framework of "significance" as further described below in the excerpt from the Provincial Policy Statement (PPS).

Section 2.1.3 Development and site alteration shall not be permitted in:

- a) Significant habitat of endangered species and threatened species*
- b) Significant wetlands in Ecoregions 5E, 6E and 7E*
- c) Significant coastal wetlands*

Section 2.1.4 Development and site alteration shall not be permitted in:

- a) Significant wetlands in the Canadian Shield north of Ecoregions 5E, 6E and 7E*
- b) Significant woodlands south and east of the Canadian Shield*
- c) Significant valleylands south and east of the Canadian Shield*
- d) Significant wildlife habitat, and*
- e) Significant areas of natural and scientific interest*

Unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions.

Significance means:

- a) *in regard to wetlands, coastal wetlands and areas of natural and scientific interest, an area identified as provincially significant by the Ontario Ministry of Natural Resources using evaluation procedures established by the Province, as amended from time to time;*
- b) *in regard to the habitat of endangered species and threatened species, means the habitat, as approved by the Ontario Ministry of Natural Resources, that is necessary for the maintenance, survival, and/or the recovery of naturally occurring or reintroduced populations of endangered species or threatened species, and where those areas of occurrence are occupied or habitually occupied by the species during all or any part(s) of its life cycle;*
- c) *in regard to woodlands, an area which is ecologically important in terms of features such as species composition, age of trees and stand history, functionally important due to its contribution to the broader landscape because of its location, size or due to the amount of forest cover in the planning area; or economically important due to site quality, species composition, or past management history;*
- d) *in regard to other features and areas in policy 2.1, ecologically important in terms of features, functions, representation or amount, and contributing to the quality and diversity of an identifiable geographic area or natural heritage system*

Source: Provincial Policy Statement (March 2005)

3.0 STUDY APPROACH

3.1 PRECONSULTATION

SAAR Environmental Limited requested a joint site inspection with the Grey Sauble Conservation Authority. The June 2006 field audit proved helpful in discussing the conservation authority setback rationale from valley top of bank, and evaluating the character of the valley wall and top of bank in relation to the authority guidelines.

3.2 FIELD METHODOLOGY

April 2006 - Herpetofaunal (Frog, Salamander, Snake and Lizard) Surveys

Provincial and federal recommendations for herpetofauna consisted of a late evening census with head lamps and taped calls, moving cover blocks we had installed earlier in the event species sought shelter under them.

No salamander activity was noted, therefore pitfall traps beyond the cover blocks were not required. Herpetofaunal movement was assessed for snake species by attending the site during periods when snakes would be moving between wintering habitat of wetland to upland rocky areas for basking and gestation; sufficiently large ledgerock formations with areas to shelter snakes from sun were not found on this site.

There are a few locations of exposed limestone rock rubble in the grasslands and forest habitat, but based upon our other field sites, not sufficient in quantity or solar gain to support snakes including the Eastern Massasauga Rattlesnake.

Wood frogs in this area begin breeding as early as March and their breeding chorus is easily missed. Reconnaissance trips, Environment Canada (EC) information assisted us in pinpointing the correct breeding time. Some Wood Frogs are present in the EP lands and their habitat is indicated on Map 1 for retention.

June 2006 - Breeding Bird Survey

Canada Wildlife Service protocols recommend that breeding bird surveys are conducted in early morning bird chorus time (5:30 a.m. – 7 a.m.) on two occasions at least 10-15 days apart to confirm breeding species as opposed to birds flying by. These site visits were conducted by our team, one in tandem with the review agent.

July 2006 - Vegetation Characterization

Key findings from field inspections are found on Map 1, and listed in Technical Appendices. No rare species or habitats were located during the 2006 searches.

***G and S indicate Global and Provincial Conservation Status Ranking as Summarized Below**

G1 Extremely Rare, G2 Very Rare, G3 Rare to uncommon, G4 Common and G5 Very Common with provincial (S) corresponding ranks of S1 through S5 the same scale respectively. T indicates a subspecies or variety (Newmaster, 1998).

Note: Vegetation Classification is consistent with the accepted provincial standard Ecological Land Classification (ELC) system of Lee et al (1998) our senior biologist had input to.

4.0 SITE CHARACTER

GENERAL

Straight line transects were conducted by our team across the parcel to tie in the extent of the EP Lands. No threatened or endangered species were observed that require additional conservation in this plan.

Regionally uncommon species included the Western Ground Juniper (Map 1) observed during the joint site inspection by Mr. Sorensen of the GSCA. This shrub is considered uncommon using the regional lists prepared by the Owen Sound Field Naturalists and can be retained in the final lot layouts in this area.

Two weakly defined drainage swales run through Phase II in the base of well cut valley landform with riparian cover.

All drainage is indicated on Map 1.

GENERAL SITE CHARACTER

The majority (approximately 70%) of the site is an upland cultural meadow of predominantly weedy invasive species including grasses, Dandelions, Common Mullein, Milkweed, Buttercups, Sweet Clover and Cow Vetch.

BLOCK 37

This ravine feature supports Basswood-Sugar Maple-White Ash-Green Ash tree assemblages with lower understories of Alternate-leaved Dogwoods, Hawthorn at edges which were checked extensively for potential shrike nests, an endangered species.

The thorny hawthorn borders of the ravine feature are retained in the final plan for continued use and privacy screening by the breeding birds.

BLOCK 22

Bird support here includes feeding Bobolink, courting Yellow Warblers, Red-winged Blackbirds and Cedar Waxwings.

An uncommon juniper was noted and will be mapped and maintained in the final Site Plan for build out of a future specific lot in Block 22. The shrub is located adjacent to Nipissing Ridge and future lot limits at the mapped (Map 1) location for the plant within Block 22 will maintain it by a physical marker on site such as a boulder or cedar rail fence area; this also serves the dual function of maintaining Blue-eyed Grass, Red-ozier Dogwood, Elm and White Ash in the hedgerow along the ridge.

During the ground search we also paid particular attention to silvics since regionally similar early succession thickets in this EcoDistrict support in low numbers, the Butternut which has been elevated to endangered conservation status. No sapling or mature tree specimens were located in Phase II. Future Phase III within an already protected heritage block (Catherine Sutton marked site) supports an old hollow Butternut that survived a lightning strike. Although no mast was found during the original studies, Phase III will receive similar site level detail in the event that any saplings exist in healthy condition.

The following Color Plates further assist in describing the character of the lands.



Color Plate 1: The smaller American Goldfinch is warned off territory limits by Bobolinks.

The Bobolink nest 45m away from the area depicted in Color Plate 1, on the ground in open meadow. Hawthorn borders are helpful to screen the birds from larger predators and support insect food. This bird is considered to be a grassland Species in Decline by the province and their nest territory has been accommodated for within recommended changes to Phase II. Other birds in decline that use the rough areas of grassland adjacent to the denser Hawthorn thickets and designated EP Woodlot 'C' include the observed Vesper Sparrow,

Grasshopper Sparrow and the Blue-winged Warbler. Map 1 indicates the split zone option for rear lots in Block 14 to retain this grassland habitat. Common grassland and thicket breeders were also present during the breeding bird inventory and include the Brown Thrasher, Rose-breasted Grosbeak, Gray Catbird, Vesper Sparrow, Grasshopper Sparrow, and Upland Sandpiper.



Color Plate 2: Meadow habitats succeed into hawthorn thicket on Phase II lands. pproximately 70% of this site is as noted above, upland grassy meadow with Staghorn Sumac, Pincherry, Chokecherry, Common Buttercup, Cow Vetch, Carex alba, Hawthorn (*Crataegus* spp.).

5.0 MITIGATION SUMMARY

Table 1: Breeding Bird Mitigation to Maintain local ecological functions

SPECIES	NIDIOLOGY: NEST HABITAT REQUIREMENTS Source: <i>Breeding Birds of Ontario, Vol. I, 1983 and Vol. II, 1987</i>	MITIGATION
Mourning Dove	Breeds in a wide variety of habitats including shrubby fields, hawthorn meadows, deciduous woods, coniferous plantations, mixed woods, residential gardens, lawns, parks and marshes. Nests are usually newly constructed, however Morning Doves also use discarded nests of other bird species. The Mourning Dove breeds throughout the agricultural part of southern Ontario, but scarcely extends into the forested areas of the Canadian Shield.	Retain the hawthorn hedgerows and maximize retention of existing vegetation since the dove can select any for a nest. Adequate habitat including an overlap of habitat for the Upland Sandpiper exists off Block 22, and these species are not overly territorial with each other.
Great-crested Flycatcher	Breeds in a variety of habitats, although dry areas were preferred. Cavity nests were found in a variety of places, including both dead and living trees. Deciduous trees were greatly preferred to coniferous trees. Nests were in both natural cavities and those formed by woodpeckers, e.g. Northern Flicker and Pileated Woodpecker. The Great-crested Flycatcher is found throughout southern Ontario.	Retain the stub (6') dead standing wood within the valley limits slopes near the Raven Nest (Map 1) since the trees don't present a safety hazard to land use proposed on the uplands.
Eastern Kingbird	Breeds in a variety of habitats. Dry habitats were preferred to wet. Living trees and shrubs were much preferred to dead for nesting sites. Deciduous trees were greatly favored over coniferous. The Eastern Kingbird breeds regularly throughout southern Ontario.	Retain Red-ozier Dogwood with the existing rough grass borders at Block 14 rear lots as depicted on Map 1: Natural Heritage Modification.
Upland Sandpiper	SAAR data on this bird nesting at GVI and other sites in the EcoDistrict 6E confirm that wet hedgerows, swales and tall Reed Canary Grass and/or Blue-joint Grass borders support the ground nests and hide them very well.	Block 22 ravine setbacks and top of bank maintain the grassy border for this bird, and our sightings of it within the Pond 4 edges of the golf course confirm continued use of the habitat by the bird.
Blue-winged warbler	Breeds near edges of mixed or deciduous forest cover, or in open treed locations,	Like the Golden-winged warbler,

	some nests (3) noted in wet areas. One of the nest locations documented by the Royal Ontario Museum data summaries notes a blue-winged female with a golden-winged male.	this bird nests on the ground, and maintaining a "rough" edge of grasses and shrub at block borders of the Block 37 ravine features provides habitat suitable for nests. The Pond 4-Block 14 grassy edges will also provide adequate nest territory size, however rear lot lighting restrictions then become important and requisite in the later Site Plan conditions.
Yellow Warbler	Breeds in the overground fields and pasture habitats including hedges, fencerows and old orchards, gardens, cottage areas and water feature edges.	Habitat is abundant on the GVI site however at each phase of development, adequate territory sizes shall be left as a precautionary measure, here measured and provided for in Block 37, Block 14 and the golf course adjacent westerly "roughs" that the golf design team built out consistent with the earlier OPA study recommendations
Eastern Wood-Pewee	Nest records indicate the preference of deciduous trees for nesting, and on average 2-20 feet above ground.	Maintain the tree cover in the ravine blocks

SPECIES	NIDIOLOGY: NEST HABITAT REQUIREMENTS (Breeding Birds of Ontario, Vol. I, 1983 and Vol. II, 1987)	MITIGATION
Blue Jay	Breeds in open mixed, deciduous and coniferous areas, as well as urban and rural gardens, parks, fields and marsh, river and lake edges. The Blue Jay breeds throughout southern Ontario as well as the southerly portion of northern Ontario.	Stress tolerant, no mitigation required
American Crow	Breeds in coniferous, deciduous, mixed, unspecified woodlands, farmland fencerows, fields, urban and residential areas. The American Crow breeds throughout the province but may be scarce or absent from heavily forested and tundra areas.	Stress tolerant., no mitigation required
American Robin	Breeds in a wide variety of habitats in urban, rural, and wilderness areas. The American Robin breeds throughout Ontario.	Stress tolerant, no mitigation required
Gray Catbird	Breeds in pastures, deciduous, coniferous and mixed woodlands, in urban areas, wet areas, beaver meadows and marshes. The Gray Catbird breeds throughout southern Ontario	Conserve hedgerow thicket that borders Block 37; it currently houses this bird and it is nesting.
European Starling	Breeds in deciduous, mixed, and coniferous woods and swamps, farmlands, urban and rural areas and marshes and wet meadows. Most tree nests are in natural cavities or old woodpecker cavities. The European Starling breeds throughout Ontario, mainly in farmlands and urban centers.	Appears stress tolerant
Cedar Waxwing	Breeds in a variety of habitats. The Cedar Waxwing breeds throughout the province at least as far north as Favorable Lake.	Retain a percentage of the abundant hawthorns used by the waxwings
Yellow Warbler	Breeds in overgrown fields and pastures, at lake/slough/river shorelines and in flood plains, in woods and woodland edges, at marsh edges, hedges and bogs. Nests are often near water in low shrub. The Yellow Warbler breeds throughout Ontario.	Feeding in and near Block 37 and Block 22; therefore maintain the hawthorn and grass rough edges as the golf course has done and will increase, along eastern edges of Pond 4

SPECIES	NIDIOLOGY: NEST HABITAT REQUIREMENTS (Breeding Birds of Ontario, Vol. I, 1983 and Vol. II, 1987)	MITIGATION
Common Yellowthroat	Breeds usually in wet areas which include sedge/grass/rush meadows and other marshy ground. Although rather scarce in most parts of its range that lie in the Boreal and Hudson Bay Lowland forest regions, the Common Yellowthroat breeds across the province almost as far north as Big Trout Lake.	Retain both valley systems (Block 37 and Raven ravine) as dedicated in original OPA submissions
Red-winged Blackbird	Breeds in cattail marshes, rural areas including fields, abandoned pastures, river flood plains, gravel pits, beaver ponds and in sand dunes. The Red-winged Blackbird breeds throughout southern Ontario.	Stress tolerant but requires no manicuring of the tall grass borders to wet areas along Pond 4
Brown-headed Cowbird	Breeding habitats are farming areas, fields, woodland areas, swamps, cattail marshes and sedge meadows. The Brown-headed Cowbird breeds throughout southern Ontario.	Stress tolerant invader and parasitizer is breeding across this site. No known controls to limit the predation of other forest bird nesting species.
Swamp Sparrow	The Swamp Sparrow breeds in wet areas; marshes, bogs, fens, swamps, wet pastures and beaver ponds. The Swamp Sparrow breeds throughout Ontario.	Fairly stress tolerant, uses wetlands.
American Goldfinch	Breeds in farming areas, including overgrown fields, pastures, hawthorn meadows, orchards, fencerows, shorelines of rivers/ponds/marshes, sand-dune areas, residential streets and farmyards. Woodlands are usually open or nests are at their edges. The American Goldfinch breeds across the province as far north as Kenora and Cochrane, but seldom, if ever, farther north.	Stress tolerant breeder, no mitigation required

6.0 CONCLUSIONS

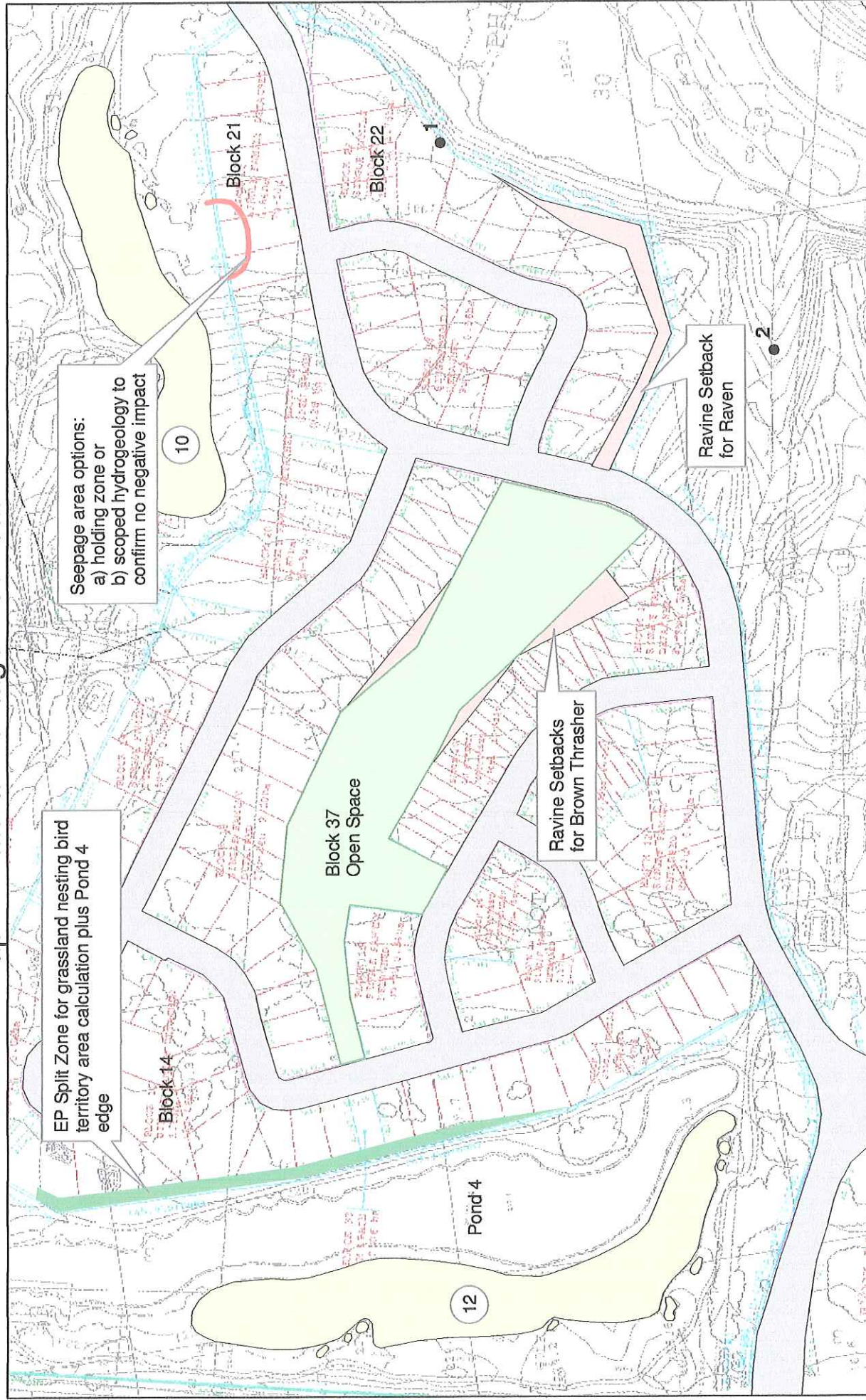
No rare, threatened or endangered species were observed during the 2006 seasonal inspections.

Local ecological features and functions require consideration below for consistency with the Secondary Plan and the Grey County Official Plan:

1. Block 14 landowners are directed to maintaining a back portion of rear lots in native grassland there today. This can be effected through an EP split zone since the grassland area plus Pond 4 eastern limits is required to maintain representative grassland nesting birds on site. Confirmed nesters in 2006 include Bobolink, Vesper Sparrow, Grasshopper Sparrow and Blue-winged Warbler. The Upland Sandpiper also nests west of Pond 4 and feeds in these grasslands.
2. A portion of Block 21 supports a seepage area identified in our original studies. Consistent with our recommendations at the OPA level, a hydrogeologist should inspect the area and confirm that development will have no negative impact on the groundwater resource and to advise on the appropriate number of lots in the area.
3. The two riparian creeks require added setback of Block 37 and Block 22 rear lot limits (5m to 7.5m) to ensure bank stabilization, related creek water quality and adequate nest territory for the previously identified Raven nest, and finally the Wood Frogs censused in 2006 (See Map 1).
4. All rear lots adjacent to natural areas require night sky lighting consistent with the Secondary Plan recommendations. Landowners are guided to select hooded downward directed lights in their backyards for patios and amenity areas instead of any high intensity tall light standards that illuminate small mammals for larger predators.

Map 1: Natural Heritage Modification

DRAFT



Legend

- Fairway
- EP Split Zone
- Ravine Setbacks
- Proposed Roads
- 1 Juniper
- 2 Wood Frogs

SAAR
Environmental Limited

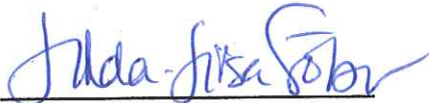
6-133 Highway #60
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Scale Is Approximate

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Metres

Please address comments to the author as referenced below.

Yours truly,



Linda Liisa Söber, H.B.Sc.
Field Biologist
SAAR Environmental Limited
LLS:ki

TECHNICAL APPENDICES

HERPETOFAUNA

Common Name	Scientific Name	Rank	COSEWIC	MNR	ON SITE
Mudpuppy	<i>Necturus maculosus</i>	G5S4	NAR	NIAC	
Red-spotted Newt	<i>Notophthalmus viridescens viridescens</i>	G5S5			
Blue-spotted Salamander	<i>Ambystoma laterale</i>	G5S4			
Spotted Salamander	<i>Ambystoma maculatum</i>	G5S4			
Four-toed Salamander	<i>Hemidactylium scutatum</i>	G5S4	NAR	NIAC	
Eastern Red-backed Salamander	<i>Plethodon cinereus</i>	G5S5			X
Eastern American Toad	<i>Bufo americanus americanus</i>	G5S5			X
Tetraploid Gray Treefrog	<i>Hyla versicolor</i>	G5S5			
Northern Spring Peeper	<i>Pseudacris crucifer crucifer</i>	G5S5			X
Wood Frog	<i>Rana sylvatica</i>	G5S5			X
Northern Leopard Frog	<i>Rana pipiens</i>	G5S5	NAR	NIAC	X
Green Frog	<i>Rana clamitans melanota</i>	G5S4			
Chorus Frog	<i>Pseudacris triseriata</i>				X
Mink Frog	<i>Rana septentrionalis</i>	G5S5			
Bullfrog	<i>Rana catesbeiana</i>	G5S4			
Common Snapping Turtle	<i>Chelydra serpentina serpentina</i>	G5S5			
Common Musk Turtle	<i>Sternotherus odoratus</i>	G5S4			
Midland Painted Turtle	<i>Chrysemys picta marginata</i>	G5S5			
Common Map Turtle	<i>Graptemys geographica</i>	G5S4			
Blanding's Turtle	<i>Emydoidea blandingii</i>	G4S3			
Wood Turtle	<i>Clemmys insculpta</i>	G4S2	SC	VUL	
Spotted Turtle	<i>Clemmys guttata</i>	G5S3	SC	VUL	
Northern Water Snake	<i>Nerodia sipedon sipedon</i>	G5S5			
Northern Redbelly Snake	<i>Storeria occipitomaculata occipitomaculata</i>	G5S5			X
Brown Snake	<i>Storeria dekayi</i>	G5S5			
Smooth Green Snake	<i>Liochlorophis vernalis</i>	G5S4			
Northern Ringneck Snake	<i>Diadophis punctatus edwardsi</i>	G5S4			
Eastern Hognose Snake	<i>Heterodon platirhinos</i>	G5S3	THR	THR	
Eastern Milk Snake	<i>Lampropeltis triangulum triangulum</i>	G5S4			
Totals					7

Rank: G = Global rank, S = Provincial rank

COSEWIC (Committee on the Status of Endangered Wildlife In Canada)

MNR (Ontario Ministry of Natural Resources) ranking

March-June 2006 observations. See July 2006 attachment for all wildlife listings.

Bird List

Scientific Name	Common Name	Family	GRANK	SRANK
Agelaius phoeniceus	Red-winged Blackbird	Icteridae	G5	S5B, SZN
Ammodramus savannarum	Grasshopper Sparrow	Emberizidae	G5	S4B, SZN
Bartamia longicauda	Upland Sandpiper	Scolopacidae	G5	S4B, SZN
Bombycilla cedrorum	Cedar Waxwing	Bombycillidae	G5	S5B, SZN
Cardinalis cardinalis	Northern Cardinal	Cardinalidae	G5	S5
Carduelis tristis	American Goldfinch	Fringillidae	G5	S5B, SZN
Ceryle alcyon	Belted Kingfisher	Alcedinidae	G5	S5B, SZN
Contopus virens	Eastern Wood-pewee	Tyrannidae	G5	S5B, SZN
Corvus brachyrhynchos	American Crow	Corvidae	G5	S5B, SZN
Corvus corax	Common Raven	Corvidae	G5	S5
Cyanocitta cristata	Blue Jay	Corvidae	G5	S5
Dendroica pensylvanica	Chestnut-sided Warbler	Parulidae	G5	S5B, SZN
Dendroica petechia	Yellow Warbler	Parulidae	G5	S5B, SZN
Dolichonyx oryzivorus	Bobolink	Icteridae	G5	S4B, SZN
Dumetella carolinensis	Gray Catbird	Mimidae	G5	S5B, SZN
Geothlypis trichas	Common Yellowthroat	Parulidae	G5	S5B, SZN
Larus delawarensis	Ring-billed Gull	Laridae	G5	S5B, SZN
Melospiza georgiana	Swamp Sparrow	Emberizidae	G5	S5B, SZN
Molothrus ater	Brown-headed Cowbird	Icteridae	G5	S5B, SZN
Myiarchus crinitus	Great Crested Flycatcher	Tyrannidae	G5	S5B, SZN
Pipilo erythrophthalmus	Eastern Towhee	Emberizidae	G5	S4B, SZN
Poocetes gramineus	Vesper Sparrow	Emberizidae	G5	S4B, SZN

Scientific Name	Common Name	Family	GRANK	SRANK
Sayornis phoebe	Eastern Phoebe	Tyrannidae	G5	S5B, SZN
Setophaga ruticilla	American Redstart	Parulidae	G5	S5B, SZN
Spizella passerina	Chipping Sparrow	Emberizidae	G5	S5B, SZN
Sturnus vulgaris	European Starling	Sturnidae	G5	SE
Toxostoma rufum	Brown Thrasher	Mimidae	G5	S5B, SZN
Turdus migratorius	American Robin	Turdidae	G5	S5B, SZN
Tyrannus tyrannus	Eastern Kingbird	Tyrannidae	G5	S5B, SZN
Vermivora pinus	Blue-winged Warbler	Parulidae	G5	S4B, SZN
Wilsonia citrina	Hooded Warbler	Parulidae	G5	S3B, SZN
Zenaida macroura	Mourning Dove	Columbidae	G5	S5B, SZN

Vascular Plant List

Scientific Name	Common Name	Family	GRANK	SRANK
<i>Acer saccharum</i> ssp. <i>saccharum</i>	Sugar Maple	Aceraceae	G5T5	S5
<i>Aralia nudicaulis</i>	Wild Sarsaparilla	Araliaceae	G5	S5
<i>Carex brunnescens</i>	Brownish Sedge	Cyperaceae	G5	S5
<i>Carex crinita</i>	Fringed Sedge	Cyperaceae	G5	S5
<i>Carex gracillima</i>	Graceful Sedge	Cyperaceae	G5	S5
<i>Chrysanthemum leucanthemum</i>	Oxeye Daisy	Asteraceae	G?	SE5
<i>Cirsium arvense</i>	Creeping Thistle	Asteraceae	G?	SE5
<i>Clinopodium vulgare</i>	Field Basil	Lamiaceae	G5	S5
<i>Cornus alternifolia</i>	Alternate-leaf Dogwood	Cornaceae	G5	S5
<i>Cornus canadensis</i>	Bunchberry	Cornaceae	G5	S5
<i>Cornus stolonifera</i>	Red-osier Dogwood	Cornaceae	G5	S5
<i>Crataegus</i> spp.	Hawthorn	Rosaceae		
<i>Dactylis glomerata</i>	Orchard Grass	Poaceae	G?	SE5
<i>Daucus carota</i>	Wild Carrot	Apiaceae	G?	SE5
<i>Eupatorium maculatum</i> ssp. <i>maculatum</i>	Spotted Joe-pye Weed	Asteraceae	G5T?	S5
<i>Fragaria virginiana</i>	Virginia Strawberry	Rosaceae	G5	S5
<i>Fraxinus americana</i>	White Ash	Oleaceae	G5	S5
<i>Fraxinus pennsylvanica</i>	Green Ash	Oleaceae	G5	S5
<i>Geranium robertianum</i>	Herb-robert	Geraniaceae	G5	SE5
<i>Geum canadense</i>	White Avenes	Rosaceae	G5	S5
<i>Hieracium caespitosum</i>	Field Hawkweed	Asteraceae	G?	SE5
<i>Ilex verticillata</i>	Black Holly	Aquifoliaceae	G5	S5
<i>Juniperus communis</i>	Ground Juniper	Cupressaceae	G5	S5
<i>Juniperus horizontalis</i>	Creeping Juniper	Cupressaceae	G5	S5

Scientific Name	Common Name	Family	GRANK	SRANK
<i>Juniperus virginiana</i>	Eastern Red Cedar	Cupressaceae	G5	S5
<i>Lonicera dioica</i>	Mountain Honeysuckle	Caprifoliaceae	G5	S5
<i>Malus pumila</i>	Common Apple	Rosaceae	G5	SE5
<i>Matteuccia struthiopteris</i>	Ostrich Fern	Dryopteridaceae	G5	S5
<i>Melilotus alba</i>	White Sweet Clover	Fabaceae	G5	SE5
<i>Onoclea sensibilis</i>	Sensitive Fern	Dryopteridaceae	G5	S5
<i>Ostrya virginiana</i>	Eastern Hop-hornbeam	Betulaceae	G5	S5
<i>Panicum Acuminatum</i>	Panic Grass	Poaceae	G5	S5
<i>Phalaris arundinacea</i>	Reed Canary Grass	Poaceae	G5	S5
<i>Phleum pratense</i>	Meadow Timothy	Poaceae	G?	SE5
<i>Pinus resinosa</i>	Red Pine	Pinaceae	G5	S5
<i>Pinus strobus</i>	Eastern White Pine	Pinaceae	G5	S5
<i>Pinus sylvestris</i>	Scotch Pine	Pinaceae	G?	SE5
<i>Poa compressa</i>	Canada Bluegrass	Poaceae	G?	SE5
<i>Populus balsamifera</i>	Balsam Poplar	Salicaceae	G5	S5
<i>Populus tremuloides</i>	Trembling Aspen	Salicaceae	G5	S5
<i>Potentilla fruticosa</i>	Shrubby Cinquefoil	Rosaceae	G5	S5
<i>Potentilla recta</i>	Sulphur Cinquefoil	Rosaceae	G?	SE5
<i>Prunus pensylvanica</i>	Pin Cherry	Rosaceae	G5	S5
<i>Prunus virginiana</i>	Choke Cherry	Rosaceae	G5	S5
<i>Ranunculus acris</i>	Tall Butter-cup	Ranunculaceae	G5	SE5
<i>Rhamnus cathartica</i>	Buckthorn	Rhamnaceae	G?	SE5
<i>Rhus radicans</i>	Poison Ivy	Anacardiaceae	G5	S5
<i>Rhus typhina</i>	Staghorn Sumac	Anacardiaceae	G5	S5
<i>Ribes cynosbati</i>	Prickly Gooseberry	Grossulariaceae	G5	S5
<i>Robinia pseudo-acacia</i>	Black Locust	Fabaceae	G5	SE5

Lepidoptera List

Scientific Name	Common Name	Family	GRANK	SRANK
Colias philodice	Clouded Sulphur	Pieridae	G5	S5
Danaus plexippus	Monarch	Nymphalidae	G4	S4
Limenitis archippus	Viceroy	Nymphalidae	G5	S5
Papilio glaucus	Eastern Tiger Swallowtail	Papilionidae	G5	S4S5
Pieris rapae	Cabbage White	Pieridae	G5	SE

Key to Species Lists

COSEWIC = Committee on the Status of Endangered Wildlife in Canada

COSSARO = Committee on the Significant Species at Risk in Ontario

SRANK Definition

SX	Presumed Extirpated
SH	Possibly Extirpated (Historical)
S1	Critically Imperiled
S2	Imperiled
S3	Vulnerable
S4	Apparently Secure
S5	Secure
SNR	Unranked
SU	Unrankable
SNA	Not Applicable
S#S#	Range Rank
SZN	Non-breeding migrants/vagrants.

GRANK Definition

G1	Extremely rare
G2	Very rare
G3	Rare to uncommon
G4	Common
G5	Very common
GH	Historic
GU	Status uncertain
GX	Globally extinct
?	Denotes inexact numeric rank (i.e. G4?).
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