April 27th, 2018

Prepared For: Daniel Hrycyna

Re: Scoped Environmental Impact Assessment for 20 Scott Street, Grand Valley, ON.

INTRODUCTION

North-South Environmental Inc. (NSE) was retained by Daniel Hrycyna to complete a scoped Environmental Impact Assessment for 20 Scott Street, Grand Valley, Ontario. Following a pre-consultation meeting with the Town of Grand Valley ("the Town"), the Town's Planner (Tracey Atkinson) and the Town's consultant (Lorraine Adderley, Terrestrial Ecologist with RJ Burnside) identified a requirement for a scoped Environmental Impact Assessment to address the candidacy of a wooded area as a natural heritage feature and to complete a Species at Risk screening in support of the proposed development (**Appendix A**).

SCOPE OF WORK

The approved scope of work is as follows:

1. Complete a Site Visit to characterize the Wooded Area
2. Complete a Species at Risk Screening for the Subject Property and submit an Information Request to the Ministry of Natural Resources and Forestry to obtain information on known or suspected Species at Risk in the area or those that are known to the Subject Property.
3. Summarize findings of assessment (Letter Report Format)
    a. Summarize field activities and outcome of assessment of the Wooded Area
    b. Determine significance if the Wooded Area is identified as a feature as described under the Dufferin County Official Plan and the Town of Grand Valley Official Plan.
    c. Review relevant policy
    d. Summarize outcome of Species at Risk Screening and append Ministry of Natural Resources and Forestry communications.

SITE VISIT SUMMARY

A site visit took place on December 20th, 2017 and April 18th, 2018. Species were documented in the hedgerow, cultural plantation, and deciduous forest communities on the site. **Appendix B** shows a list of flora and fauna that were documented on the site within these communities. Since it is not the appropriate season for surveying herbaceous flora and the area was covered in snow, additional species may occur on site. The woodland occurring on the property was characterized in terms of age (estimated from dbh) and

species composition. The areas adjacent were viewed from the property line or from the road to assess their potential for inclusion in the woodland are and for potential SAR habitat.

Characteristics of the Wooded Areas on the Subject Property

The understory of the cultural plantation appeared to be mowed. Approximately 40 Scots Pine (*Pinus sylvestris*) trees of the same age (20 to 30 cm dbh) occurred here. Few smaller deciduous trees/young shrubs (less than 10cm dbh) were scattered sparsely throughout the community, including Choke Cherry (*Prunus virginiana*).

The deciduous forest community also had approximately 40-50 trees above 10cm dbh on the property. This community extended further onto the neighbouring property where density increased slightly. This community was lowland and consisted of a mixture of deciduous species including Sugar Maple (*Acer saccharum*), Black Cherry (*Prunus serotina*), Yellow Birch (*Betula alleghaniensis*) and Willow (*Salix* sp.).

The hedgerow consisted of some large Sugar Maples over 50cm dbh, but most trees were 20-30 cm dbh. Species included Sugar Maple, Norway Maple (*Acer platanoides*) and Bur Oak (*Quercus macrocarp*a). Trees in the section adjacent to this community were between 5 cm to 30 cm dbh, with the majority being approximately 20cm. These were predominantly coniferous trees including Scots Pine (*Pinus sylvestris*), White Pine (*Pinus strobus*) and White Spruce (*Picea glauca*).

Policy

The following section summarizes the relevant policy with respect to the assessment of the candidacy of the wooded area as a woodland as well as the assessment of the significance of the feature. We would note that the subject property does not fall within the limits of the regulated area of the Grand River Conservation Authority.

Town of Grand Valley Official Plan

Section 4.2.1.5

Significant woodlands are:
a) Woodlands 20 hectares in size or larger;
b) Woodlands that have 2 ha or more of interior habitat; and/or
c) Woodlands located within a defined natural heritage system or providing a connecting link between two other woodlands having a minimum areas of 20 hectares each."

The identification of significant woodlands shall be undertaken through the completion of an Environmental Impact Assessment where development is proposed in, or adjacent to wooded areas meeting the criteria for significant woodlands, and as informed by Schedule B-1. Schedule A-1 and B-1 will be updated as significant woodlands are identified.

Development and site alteration shall not be permitted in or within 120 metres of significant woodlands unless it has been demonstrated through an Environmental Impact Assessment that there will be no negative impacts on the natural features or ecological functions.

Proposed development and site alteration in significant woodlands shall have site plan agreements containing specific management details regarding the protection of existing trees.

Section 4.2.1.5.1

Other Wooded Areas a) Existing tree cover or other stabilizing vegetation should be maintained on slopes with grades in excess of 25 percent (1:4 slopes). b) The cutting of trees may be regulated by a tree cutting By-law passed by the County of Dufferin.

Schedule B-1 (Natural Heritage) of the Town of Grand Valley Official Plan identifies a portion of the subject property as containing a "Wooded Area less than four (4) hectares" in size. The Town's Official Plan states that the features depicted in Schedule B-1 must be considered through the development process.

Dufferin Region Official Plan

Section 5.3

This Official Plan does not contain criteria to determine whether the woodlands shown on Schedule E are significant. A woodland would be classified as being significant if it is determined to be 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.

The County will establish the criteria for determining significance at the time a natural heritage system strategy is undertaken. In the interim, at the time of application where woodlands have been identified, the determination of significance will be based on criteria provided in the Natural Heritage Reference manual and local municipal official plans.

Section 5.3.4

The intent of this Plan is to conserve existing woodlands and vegetation and prohibit incompatible land uses that deter their long term benefits. Woodlands are illustrated on Schedule E. Some areas may not be identified since the exact boundaries of mapped areas may change over time. Development and site alteration will not be permitted within or adjacent to significant woodlands unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions through the preparation of an EIS.

Schedule E (Natural Heritage Features) of the Dufferin County Official Plan identifies a portion of the subject property as containing a "Woodlands". The Town's Official Plan states that the features depicted in Schedule E should form the basis for the identification of the natural heritage system. Per Section 5.3 of the Dufferin County Official Plan, the location and significance of natural heritage features has yet to be determined in some cases. All of these features need to be considered when applications for development and site alteration are being evaluated. The boundaries of these features are considered to be approximate.

Schedule E1 (Natural Heritage System) of the Dufferin County Official Plan identifies a portion of the subject property as containing "County Preliminary Natural Heritage System".

The feature identified in Schedules E and E1 is approximately 0.74 acres.

Provincial Policy Statement

Section 6.0

> ***Woodlands****: means treed areas that provide environmental and economic benefits to both the private landowner and the general public, such as erosion prevention, hydrological and nutrient cycling, provision of clean air and the long-term storage of carbon, provision of wildlife habitat, outdoor recreational opportunities, and the sustainable harvest of a wide range of woodland products. Woodlands include treed areas, woodlots or forested areas and vary in their level of significance at the local, regional and provincial levels. Woodlands may be delineated according to the Forestry Act definition or the Province's Ecological Land Classification system definition for "forest."*
>
> ***Significant Woodland:*** *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. These are to be identified using criteria established by the Ontario Ministry of Natural Resources;*

Natural Heritage Reference Manual

Section 7.1

> *Woodlands: means treed areas that provide environmental and economic benefits to both the private landowner and the general public, such as erosion prevention, hydrological and nutrient cycling, provision of clean air and the long-term storage of carbon, provision of wildlife habitat, outdoor recreational opportunities, and the sustainable harvest of a wide range of woodland products. Woodlands include treed areas, woodlots or forested areas and vary in their level of significance at the local, regional and provincial levels."*

"Significant: means … 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; …

Assessment of the Wooded Area

The Town of Grand Valley Official Plan and the County of Dufferin Official Plan do not contain criteria for the identification of Woodlands nor do they contain information on the methodology used to identify Wooded Areas under Schedule B-1 and Woodlands under Schedule E, respectively. Given the absence of direction for the identification of Woodlands from the two Official Plans, the Provincial Policy Statement (2014) is used under this assessment. As cited under the policy heading, the Provincial Policy Statement identifies Woodlands as treed areas, woodlots or forested areas and vary in their level of significance at the local, regional and provincial levels. There is no specific size criteria identified under the PPS nor the Natural Heritage Reference Manual, Second Edition (2010), which provides technical guidance, criteria, and approaches for implementing the natural heritage policies of the PPS. Woodlands may be delineated according to the Forestry Act definition or the Province's Ecological Land Classification system definition for "forest." Woodland areas are considered to be generally continuous even if intersected by narrow gaps 20 m or less in width between crown edges.

As detailed earlier in the letter report, the subject property was characterized using Ecological Land Classification for Southern Ontario (Lee et al., 2008). Scots Pine plantation (CUP3-3), Dry-Fresh Sugar Maple-Black Cherry (FOD5-7), and a Hedgerow comprised primarily of Scots Pine and Sugar Maple with Bur Oak were identified on the subject property.

The subject property contains ELC ecosites that qualify as Woodlands (CUP3-3 and FOD5-7). When considering the definition of Woodland under the PPS, it is prudent to include adjacent Woodlands that are bisected from the Woodlands on the subject property by less than 20 m between the canopies. To this extent, using aerial imagery for the treed areas to the north of the subject property, an approximate boundary has been assigned to the Woodland parcel that partially falls within the subject property. **Figure 1** shows the ELC ecosites and the boundary of the Woodland identified as part of this assessment.

Assessment of Significance

Under the Town of Grand Valley Official Plan, Significant Woodlands are:

a) Woodlands 20 hectares in size or larger;
b) Woodlands that have 2 ha or more of interior habitat; and/or
c) Woodlands located within a defined natural heritage system or providing a connecting link between two other woodlands having a minimum areas of 20 hectares each."

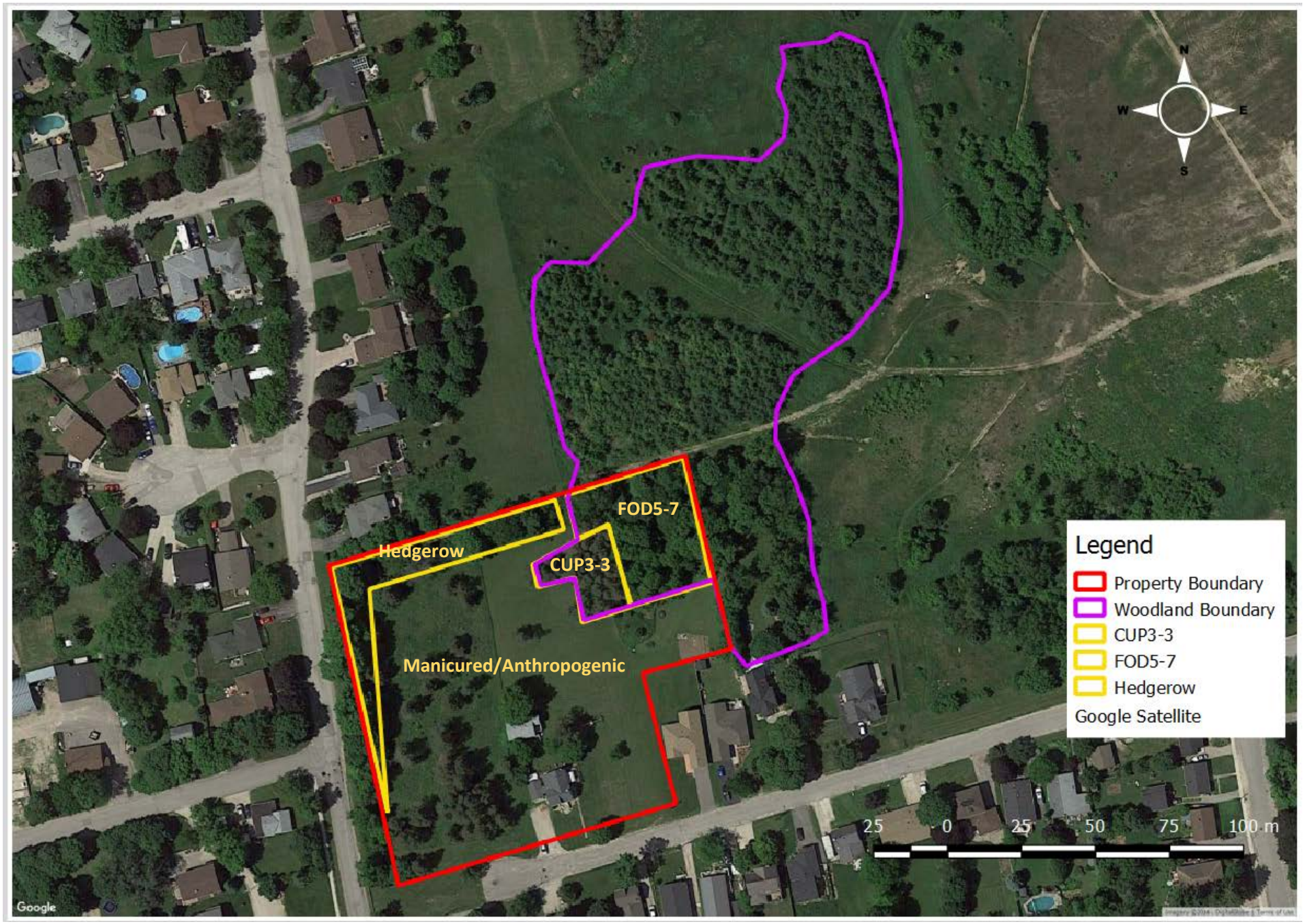


Figure 1. Ecological Land Classification and assessed boundary of Woodland

Schedule B-1 (Natural Heritage) of the Town of Grand Valley Official Plan identifies a portion of the subject property as containing a "Wooded Area less than four (4) hectares" in size. The Town's Official Plan states that the features depicted in Schedule B-1 must be considered through the development process.

Using the Woodland boundary as shown in **Figure 1**, the total area in hectares is approximately 1.5 hectares. Using the criteria indicated under the Town of Grand Valley Official Plan, this Woodland would not be considered Significant.

The Dufferin County Official Plan defers determination of significance of Woodlands to the Natural Heritage Reference Manual and the local municipal Official Plans. Under the Natural Heritage Reference Manual Criteria (which also supports the PPS), the Woodland does not achieve any of the indicated criteria (Woodland Size, Ecological Functions, Uncommon Characteristics, or Economic and Social Functional Values).

The Woodland identified partly within the Subject Property does not meet the test for Significance under any of the relevant policy. Development is permitted in Woodlands within the Town of Grand Valley and Dufferin County. There is no requirement for an assessment of impacts to this feature.

Acknowledgement of First Submission Woodland Assessment

Natural Resources Solutions Inc. (NRSI) was initially retained by Mr. Hrycyna to complete an assessment of the woodland at the subject property. The Woodland Assessment was completed in November 2017 and January 2018. The outcome of NRSI's assessment identified the wooded area as not meeting the criteria outlined under the rescinded Dufferin County Tree By-law (2006-15) to be identified as a "Woodland". NRSI also stated that the woodland failed to meet the criteria of significance under the Town of Grand Valley Official Plan. While NSE is in agreement that the woodland does not meet the criteria for significance, we disagree with NRSI's interpretation of "Woodland" and based on the summary we have provided in the preceding sections, would characterize the wooded area on the subject property and the adjacent White Pine plantation, as comprising a "Woodland".

Within the same report, NRSI identified "Tree Protection and Other Constraints" for the subject property. The arborist assigned to the file recommended certain trees for retention based on their status as well-established, native, and in good condition. NSE Arborist Samantha Hughes (ISA Certified ON-2260A) reviewed NRSI's recommendations to retain specific trees in polygons C and D and provided the following comments:

1. A complete assessment of trees was not completed (e.g., no vigour or health class), likely due to the timing of surveys (winter). As there is no assessment of trees, I can not say if the trees are significant enough on their own to try and retain.
2. The NRSI report approaches the retention of trees based on privacy for the lots- which is up to the site plan and not the arborist. The tree species mentioned in the report are not listed as locally significant.

3. Some of the trees proposed for retention appear to potentially be located off the subject property. As such, the proponent is not the owner of these trees and the arborist can not make decisions about their fate related to the proposed development unless consultation with the respective property owner is initiated. Trees located on the boundary of shared properties should be discussed between both parties.
    a. If trees fall outside property bounds the recommendation to retain only makes sense if a Tree Protection Zone can be erected that will at most encroach under a canopy no more than ¼ of the canopy of any given tree.

NSE's recommendations with respect to removal of vegetation on the subject property are provided below under the heading "Summary and Recommendations".

SPECIES AT RISK SCREENING

A Species at Risk screening was completed using available electronic resources, professional experience, and characterization of the available habitat on the Subject Property. In order to support the Species at Risk Screening, NSE submitted an Information Request Form to the Guelph District Ministry of Natural Resources and Forestry in order to obtain information on known element occurrences of Species at Risk and/or documented Species at Risk habitat in the vicinity of the Subject Property.

The Ministry of Natural Resources and Forestry noted that they have no records of Species at Risk in the vicinity of the Subject Property. The MNRF recommends that if tree removal is to take place that surveys be undertaken for three (3) Species at Risk Bats (Little Brown Myotis, Northern Myotis, and Tri-colored Bat).

The MNRF reminds the proponent that absence of SAR records does not necessarily indicate absence of SAR or their habitat from an area. The Guelph District MNRF has provided a list of SAR known to occur in the Town of Grand Valley and East Luther. Using the ELC that was completed as part of the assessment of the subject property, the available ecosites were cross-referenced with the habitat descriptions in the document provided and professional experience was used in order to determine suitability of the subject property for the given species. Communication and documents provided are available in **Appendix C** to this letter report. Below, in **Table 1**, NSE provides our assessment of the listed Species at Risk, the risk of occurrence of individuals or habitat within the Subject Property, and brief rationale explaining the assignment of the chance of the habitat potential ranking.

Habitat Potential Ranking is characterized as follows:

Low: Indicates that no suitable habitat is available for the given species within the Study Area and no individuals were identified during field investigations.
Moderate: Indicates that there is more potential for the given species to occur within the Study Area - that suitable habitat appeared to be present during field investigations although no occurrences of the given species were documented.

High: Indicates a known species record within the Study Area (including observations made during field investigations, literature review, and agency communications), as well as the presence of high quality habitat for the given species within the Study Area.

Table 1. Assessment of suitability of habitat on the Subject Property using the Town of Grand Valley and East Luther list of Species at Risk provided by the MNRF.

	Potential for Habitat within Subject Property (Field Verified)	**Rationale**
BIRDS		
Bald Eagle	Low	No super canopy trees. No nest observed.
Barn Swallow	Low	No Barn Swallow nests observed at time of Site Visit.
Black Tern	Low	No marshes or wetlands on subject property.
Bobolink	Low	Open grassland present east of subject property, lawn is managed on subject property.
Canada Warbler	Low	Low quality dry forested habitat less than 0.75 hectares.
Cerulean Warbler	Low	Forest is young, not open understory.
Chimney Swift	Low	No suitable chimney on subject property.
Common Nighthawk	Low	No suitable habitat for roosting or nesting.
Eastern Meadowlark	Low	Open grassland present east of subject property, lawn is managed on subject property.
Eastern Whip-poor-will	Low	Abundant ground cover and low-quality woodland.
Eastern Wood-pewee	Low	Woodland is small with understory.
Henslow's Sparrow	Low	No old fields present on subject property.
Least Bittern	Low	No pools or marshes or swamps on subject property.

	Potential for Habitat within Subject Property (Field Verified)	Rationale
Loggerhead Shrike	Low	No pasture or large grasslands tracts on subject property.
Wood Thrush	Low	Woodland is not mature, small with limited mosaic.
Yellow-breasted Chat	Low	No dense thickets or overgrown clearings on subject property.
INSECTS		
Monarch Butterfly	Low	Milkweed spp. not documented on subject property. Wildflowers are present, low foraging opportunities.
Rusty-patched Bumble Bee	Low	Subject property is manicured, little opportunity for foraging. Species has not been documented recently outside of Pinery Provincial Park.
MAMMALS		
Eastern Small-footed Myotis	Moderate	Preferred habitat not present. Structures present, occasional roosting only.
Gray Fox	Low	Habitat is not suitable. Range not known to this area.
Little Brown Myotis	Moderate	Buildings present on subject property. Trees greater than 25 cm DBH present on subject property.
Northern Myotis	Moderate	Buildings present on subject property. Trees greater than 25 cm DBH present on subject property.
Tri-colored Bat	Moderate	Buildings present on subject property. Trees

	Potential for Habitat within Subject Property (Field Verified)	Rationale
		greater than 25 cm DBH present on subject property.
PLANTS		
American Ginseng	Low	Low quality disturbed Woodland. Habitat not present on subject property.
Butternut	Low	Not observed during Site Visit.
REPTILES		
Blanding's Turtle	Low	Suitable habitat not present on subject property (no aquatic habitat on subject property).
Butler's Gartersnake	Low	Population known to Luther Marsh only.
Eastern Ribbonsnake	Low	No riparian habitat on Subject Property.
Snapping Turtle	Low	No aquatic habitat on subject property.

Overall, low quality habitat was documented within the Subject Property. It is expected that wildlife typical of marginal habitats and urban/suburban influence could be reasonably expected to be found on the Subject Property. There was no indication that Species at Risk habitat was available for any of the listed species, with the exception of the four (4) Species at Risk Bats. Even so, the habitat that is available on the subject property is considered marginal, given the small size of the Woodland and the characteristics of the structures that are present on the Subject Property. Proximity to the Grand River may increase the likelihood of detecting these species within the Subject Property. It is more likely that bats are primarily occupying the forested habitats that abut the Grand River on both the east and west banks, spanning up from the watercourse.

The MNRF recommends undertaking surveys for the species should trees be proposed for removal. Trees are proposed for removal under the existing plan.

On April 18th, 2018, NSE completed a leaf-off survey of the trees on the subject property in order to identify candidate roost trees for Species at Risk bats using the Guelph District Ministry of Natural Resources and Forestry protocol issued in 2017 for wooded ecosites. Notably, the property contains small amounts of wooded ecosites as defined by the MNRF and instead contains a number of lone-standing trees, hedgerows, and plantation

inclusions. Overall, trees proposed for removal under the current site plan did not contain any significant features for Species at Risk Bats – no cavities were documented, instead broken branches and small amounts of thin peeling bark were the only features identified that may be linked with roosting by bats. The trees in the hedgerow running along Crozier Drive do contain features that may be suitable for maternity roosting by Species at Risk bats. These trees are not proposed for removal under the current site plan. Based on NSE's experience, removal of the trees under the proposed site plan is unlikely to contravene the Endangered Species Act. NSE will continue conversations with the MNRF in order to confirm and finalize this determination.

SUMMARY AND RECOMMENDATIONS

The subject property is characterized by ecosites exhibiting a high degree of anthropogenic influence. Overall, the property is considered to provide marginal habitat for wildlife characteristic of urban and suburban environments.

Development is permitted in Woodlands within the Town of Grand Valley and within Dufferin County.

NSE's arborist is not proposing any specific trees for retention on the subject property. Trees that will not be removed under the proposed site plan, but that abut the development, have the potential to be impacted by the grading activities on site and may be subject to injury and injury resulting in death. To protect retained trees from the potential impacts of construction activity several mitigation measures should be considered:

- It is recommended that tree protection measures coinciding with the dripline of trees proposed for retention be installed prior to the commencement of any construction or grading activities on the site.
- Tree protection measures should remain in place throughout the duration of construction.
- If tree roots are damaged during soil excavation, it is recommended that damaged roots are pruned using a sharp tool (handsaw or by-pass blade hand pruner) to make a clean cut. Pruning damaged roots can facilitate healing and minimize the risk of infection. This should be completed under the direction of a qualified Arborist.

When considering the removal of trees and/or vegetation on the subject property, best practice in order to avoid impacting species that may be using the Woodland is to restrict vegetation removals outside of the active period of most wildlife in Ontario (May 1st to October 31st). Adhering to this timing window will reduce the chance of contravention of the Migratory Birds Convention Act and the Fish and Wildlife Conservation Act. If tree removals are proposed within this window, then a qualified biologist should be engaged in order to assess the breeding activity of resident birds in order to avoid destruction of active nests and harm or harassment to individuals.

Appendix A. Terms of Reference

From: Lorraine Adderley
To: Tracey Atkinson; Holly Dodds
Subject: RE: Scoped Environmental Impact Assessment 20 Scott Street Grand Valley
Date: December 19, 2017 2:57:58 PM
Attachments: image001.jpg

Hi Holly,

Your summary of our discussion is accurate. The scope you have outlined in your previous email seems appropriate.

- I agree with a scoped EIA habitat assessment for the woodland.
- A scoped Species at Risk screening for wildlife habitat and habitat of Endangered and Threatened Species.

The woodland is mapped in Schedule B of the Grand Valley OP and in Schedule E to the Dufferin County OP.

There should be a scoped EIA focused on the woodland feature. Since we don't know what it is or why it is shown as a woodland on the Grand Valley OP or Dufferin OP. It should include:

- a site visit/review to document what it is,
- address whether this constitutes a forest/woodland (and why it may have been designated as significant in the first place), and
- then determine in the planning context of the Town and County OP if this woodland meets the definition of significant.
    - Sections 4.2.1.5 and 4.2.1.5.1 of the Grand Valley OP provide definitions
    - Sections 5.3 and 5.3.4 as well as definitions 136. b) and 162 of the Dufferin OP provide definitions and policy. Specifically 5.3 has guidance on determining significance and defers to the Natural Heritage Reference Manual (MNR) and the Town OP.

In addition, the EIA should include a Species at Risk Screening based on an MNRF information request and background sources such as the NHIC. The site visit for the woodland can be used to assist in the SAR screening for appropriate habitat.

If there are any town or county by-laws regarding tree removal, they should also be applied to this site.

Regards,

Lorraine Adderley

Lorraine Adderley, BSc (Env), MSc
Terrestrial Ecologist -

R.J. Burnside & Associates Limited www.rjburnside.com
Office: 800-265-9662 Direct: 705-797-4354

Project Coordinator

From: Tracey Atkinson [mailto:tatkinson@townofgrandvalley.ca]
Sent: Tuesday, December 19, 2017 11:27 AM
To: 'Holly Dodds'; Lorraine Adderley
Subject: RE: Scoped Environmental Impact Assessment 20 Scott Street Grand Valley

Hello Ladies,

I will defer to Lorraine.

Kind regards,

Tracey Atkinson, MCIP RPP
Planner
Town of Grand Valley
519-928-5652
tatkinson@townofgrandvalley.ca

From: Holly Dodds [mailto:hdodds@nsenvironmental.com]
Sent: December-18-17 9:27 AM
To: Tracey Atkinson; Lorraine Adderley
Subject: re: Scoped Environmental Impact Assessment 20 Scott Street Grand Valley

Good morning Tracey and Lorraine,

North-South Environmental Inc. has been retained by Daniel Hrycyna to complete the scoped environmental impact assessment for 20 Scott Street in Grand Valley, Ontario.

On December 6th, 2017, Lorraine and I had the opportunity to chat about the 20 Scott Street property in Grand Valley and the expectations with respect to a scoped assessment of the indicated feature on site. Lorraine, you mentioned that you would be summarizing our discussion and providing the notes to Tracey. I would like to formalize the scope of work through an email confirmation. On December 6th it was my understanding that the scope of work would include the following for the property:

1. Complete a Site Visit to characterize the Wooded Area
2. Complete a Species at Risk Screening for the Subject Property and submit an Information Request to the Ministry of Natural Resources and Forestry to obtain information on known or suspected Species at Risk in the area or those that are known to the Subject Property.
3. Summarize findings of assessment (Letter Report Format)

a. Summarize field activities and outcome of assessment of the Wooded Area
b. Determine significance if the Wooded Area is identified as a feature as described under the Dufferin County Official Plan and the Town of Grand Valley Official Plan.
c. Review relevant policy
d. Summarize outcome of Species at Risk Screening and append Ministry of Natural Resources and Forestry communications.

If you could please confirm the scope such that we can confidently proceed with our program it would be greatly appreciated.

Thank you for your time and attention,

Holly Dodds, M.Sc.
Wildlife Biologist
cid:image003.jpg@01D14A27.DA4E2770

Appendix B. Flora Table

Appendix B. Species documented during site visit to 20 Scott Street in Grand Valley, Ontario.

	Scientific Name	Common Name	G Rank	S Rank	ESA	SARA	Hedgerow	FOD5-7	CUP3-3
	Pinaceae								
	Picea glauca (Moench) Voss	White Spruce	G5	S5			x		
	Pinus strobus L.	White Pine	G5	S5			x		
*	*Pinus sylvestris L.*	Scots Pine	GNR	SNA			x		x
	Ulmaceae								
*	*Ulmus pumila L.*	Siberian Elm	GNR	SNA					x
	Fagaceae								
	Quercus macrocarpa Michx.	Bur Oak	G5	S5			x		
	Betulaceae								
	Betula alleghaniensis Britton	Yellow Birch	G4G5Q	S1?				x	
	Polygonaceae								
*	*Rumex obtusifolius L.*	Bitter Dock	GNR	SNA				x	
	Salicaceae								
?	*Salix sp.*	Willow	GNR	S?				x	
	Brassicaceae								
*	*Hesperis matronalis L.*	Dame's Rocket	G4G5	SNA				x	
	Grossulariaceae								
?	*Ribes sp.*	Gooseberry	GNR	S?			x		
	Rosaceae								
	Fragaria virginiana Miller	Wild Strawberry	G5	S5					x
	Geum aleppicum Jacq.	Yellow Avens	G5	S5			x	x	
	Prunus serotina Ehrh.	Black Cherry	G5	S5				x	
	Prunus virginiana L.	Choke Cherry	G5	S5				x	x
	Rubus allegheniensis Porter	Allegheny Blackberry	G5	S5				x	
	Cornaceae								
	Cornus alternifolia L. f.	Alternate-leaf Dogwood	G5	S5					x
	Aceraceae								
*	*Acer platanoides L.*	Norway Maple	GNR	SNA			x		
	Acer saccharum Marshall	Sugar Maple	G5	S5			x	x	
	Apiaceae								
*	*Daucus carota L.*	Wild Carrot	GNR	SNA			x		
	Apocynaceae								
*	*Vinca minor L.*	Periwinkle	GNR	SNA			x		
	Asclepiadaceae								
	Asclepias syriaca L.	Common Milkweed	G5	S5			x		
	Solanaceae								
*	*Solanum dulcamara L.*	Climbing Nightshade	GNR	SNA			x		x
	Plantaginaceae								
*	*Plantago lanceolata L.*	English Plantain	G5	SNA			x		

	Scientific Name	Common Name	G Rank	S Rank	ESA	SARA	Hedgerow	FOD5-7	CUP3-3
	Oleaceae								
*	*Syringa vulgaris L.*	Common Lilac	GNR	SNA			x		
	Campanulaceae								
*	*Campanula rapunculoides L.*	Creeping Bellflower	GNR	SNA			x		
	Caprifoliaceae								
*	*Lonicera tatarica L.*	Tartarian Honeysuckle	GNR	SNA			x		x
*	*Viburnum opulus L. ssp. opulus*	Cranberry Viburnum	GNR	SNA			x		
	Asteraceae								
*	*Arctium minus (Hill) Bernh.*	Common Burdock	GNR	SNA			x	x	x
*	*Cirsium vulgare (Savi) Ten.*	Bull Thistle	GNR	SNA			x		
*	*Lapsana communis L.*	Common Nipplewort	GNR	SNA				x	
	Solidago canadensis L. var. canadensis	Canada Goldenrod	G5T5	S5			x		
	Solidago flexicaulis L.	Zigzag Goldenrod	G5	S5				x	
	Symphyotrichum novae-angliae L. Nesom	New England Aster	G5	S5			x	x	
?	*Symphyotrichum sp.*	Aster	GNR	S?			x		
	Poaceae								
*	*Bromus inermis Leyss.*	Smooth Brome	G5TNR	SNA			x	x	
*	*Dactylis glomerata L.*	Orchard Grass	GNR	SNA			x	x	x

* Non-native Species

GRank = Global Rank
NatureServe. 2008. Appropriate Use of NatureServe Conservation Status Assessments in Species Listing Processes.
GX – Presumed extinct
GH – Possibly extinct
G1 – Critically imperiled
G2 – Imperiled
G3 – Vulnerable
G4 – Apparently secure
G5 – Secure

SRank = Sub-national Rank
Ontario Ministry of Natural Resources. 2013. Southern Ontario Vascular Plant Species List. Peterborough, Ontario.
SH – Possibly extirpated (Historical)
S1 – Extremely rare in Ontario
S2 – Very rare in Ontario
S3 – Rare to uncommon in Ontario
S4 – Considered to be common in Ontario
S5 – Indicates that a species is widespread in Ontario
S? – Not ranked yet
SNR - Unranked
SNA – Not applicable
SE – Exotic
SU – Unranked
SX – Presumed extirpated from Ontario
C – Cultivated
? – Uncertain classification due to insufficient information

ESA = Endangered Species Act
Ontario Government. 2018. Species at risk in Ontario List. Peterborough, Ontario.
EXT – Extirpated
END – Endangered
THR – Threatened
SC – Special Concern

SARA = Species at Risk Act
Government of Canada. 2018. Species at Risk Public Registry. Gatineau, Québec.
EXP – Extirpated
END – Endangered
THR – Threatened
SC – Special Concern

Appendix C. Agency Correspondence

Ministry of Natural Resources And Forestry

Ministère des Richesses naturelles et des Forets

Guelph District
1 Stone Road West
Guelph, Ontario
N1G 4Y2

Telephone: (519) 826-4955
Facsimile: (519) 826-4929

January 8, 2017

Holly Dodds
North-South Environmental Inc.
35 Crawford Crescent, P.O. Box 518, Suite U5
Campbellville, ON L0P 1B)
hsdodds@nsenvironmental.com

RE: 20 Scott St. Development
20 Scott St. Grand Valley, ON

Dear Holly,

The Ministry of Natural Resources and Forestry (MNRF), Guelph District Office, has reviewed the natural heritage information available for the above-noted property and surrounding area (the "study area"), and offers the following comments:

WETLANDS

The Ministry notes that there are no provincially significant wetlands (PSWs) within the study area.

AREAS OF NATURAL AND SCIENTIFIC INTEREST

The Ministry notes that there are no Areas of Natural and Scientific Interest (ANSIs) within the study area.

SPECIES AT RISK

The Ministry notes that there are no records of species at risk in this area. The Ministry recommends that if tree removal is to take place surveys be undertaken for species at risk bats:

Little Brown Myotis (END)
Northern Myotis (END)
Tri-colored Bat (END)

Threatened and Endangered Species receive both individual species and habitat protection under the *Endangered Species Act, 2007* (ESA). SAR habitat prescribed under regulation is listed in Ont. Reg. 242/08 (https://www.ontario.ca/laws/regulation/080242).

Please be advised that because the province has not been surveyed comprehensively for the presence of listed species, the absence of a record does not necessarily indicate the absence of

SAR from an area. To determine the presence of SAR for a given study area, the District's recommended approach is as follows:

I. Habitat Inventory

The Ministry recommends undertaking a comprehensive botanical inventory of the entire area that may be subject to direct and indirect impacts from the proposed activity. The vegetation communities should be classified as per the "Ecological Land Classification (ELC) for Southern Ontario" system, to either the "Ecosite" or "Vegetation Type" level. For aquatic habitats in the study area, we recommend that you collect data on the physical characteristics of the waterbodies and inventory the riparian zone vegetation, so that these habitats can be classified as per the Aquatic Ecosites described in the ELC manual.

II. Potential SAR within the Study Area

A list of SAR that have the potential to occur in the area can be produced by cross-referencing the ecosites described during the habitat inventory with the habitat descriptions of SAR known to occur within the planning area. The list of SAR known to occur in the **Town of Grand Valley and East Luther** is attached for your reference. The species-specific COSEWIC status reports (https://www.canada.ca/en/environment-climate-change/services/committee-status-endangered-wildlife.html) are a good source of information on habitat needs and will be helpful in determining the suitability of the study areas ecosites for a given species.

Please note that the Species at Risk in Ontario (SARO) List is a living document that is periodically amended as a result of species assessment and re-assessments conducted by the Committee on the Status of Species at Risk in Ontario (COSSARO). The SARO List can be accessed on the following webpage: https://www.ontario.ca/environment-and-energy/species-risk-ontario-list.

COSSARO also maintains a list of species to be assessed in the future. It is recommended that you take COSSARO's list of anticipated assessments into consideration, especially when the proposed start date of an activity is more than 6 months away, or the project will be undertaken over a period greater than 6 months. This list can be viewed at: https://www.ontario.ca/page/how-comment-protecting-species-risk.

III. SAR Surveys

The Ministry recommends that each potential SAR identified under Step II is surveyed for, regardless of whether or not the species has been previously recorded in the area. The survey report should describe how each SAR was surveyed for, and provide a rationale for why certain species were not afforded a survey (e.g., habitat within the study area is not suitable for a specific SAR). Please note that some targeted surveys may require provincial authorizations (e.g., ESA permit or Wildlife Scientific Collector's Permit).

ADDITIONAL INFORMATION

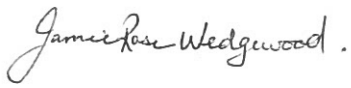
Natural heritage features (e.g. wetlands, ANSIs) can be viewed for a given study area through the MNRF's "Make a Map" web application: https://www.ontario.ca/page/make-natural-heritage-area-map. Digital data layers can be obtained through the Land Information Ontario (LIO) geowarehouse https://www.ontario.ca/page/land-information-ontario.

Additionally, the MNRF recommends contacting the municipality and the conservation authority to determine if they have any additional information or records of interest for the study area.

Please be advised that it is your responsibility to comply with all other relevant provincial or federal legislation, municipal by-laws, other MNRF approvals or required approvals from other agencies. If your investigations reveal the presence of Threatened or Endangered species, please contact the MNRF at esa.guelph@ontario.ca for further direction.

I trust that the above information is of assistance.

Sincerely,



Jamie Wedgewood
A/ Management Biologist

East Luther Grand Valley

Date Generated: January-08-18

Bird	SARO	Protection	Habitat Information	Timing Windows	Survey Protocol
Bald Eagle *Haliaeetus leucocephalus*	SC	N/A	Prefers deciduous and mixed-deciduous forest; and habitat close to water bodies such as lakes and rivers. They roost in super canopy trees such as Pine.	Breed and Nest - April or May Some Migrate South when waterbodies freeze over	Follow Breeding Bird Survey Protocol
Bank Swallow *Riparia riparia*	THR	Species Protection and General Habitat Protection	It nests in a wide variety of naturally and anthropogenically created vertical banks, which often erode and change over time including aggregate pits and the shores of large lakes and rivers.	Migrate South before Winter	Follow Breeding Bird Survey Protocol. Colony and Roost information should be recorded and submitted using Bird Studies Canada's Ontario Bank Swallow Project data forms (2010).
Barn Swallow *Hirundo rustica*	THR	Species Protection and General Habitat Protection	Prefers farmland; lake/river shorelines; wooded clearings; urban populated areas; rocky cliffs; and wetlands. They nest inside or outside buildings; under bridges and in road culverts; on rock faces and in caves etc.	Migrate South before Winter	Follow Breeding Bird Survey Protocol
Black Tern *Chlidonias niger*	SC	N/A	Generally prefer freshwater marshes and wetlands; nest either on floating material in a marsh or on the ground very close to water	Migrate South for the Winter	Follow Breeding Bird Survey Protocol
Bobolink *Dolichonyx oryzivorus*	THR	Species Protection and General Habitat Protection	Generally prefers open grasslands and hay fields. In migration and in winter uses freshwater marshes and grasslands	Migrate South for the Winter	Contact MNR Guelph District Management Biologist to obtain a copy of the protocol
Canada Warbler *Cardellina canadensis*	SC	N/A	Generally prefers wet coniferous, decidiuous and mixed forest types, with a dense shrub layer. Nests on the ground, on logs or hummocks, and uses dense shrub layer to conceal the nest.	Arrive in Early May Migrate South for the Winter	Follow Breeding Bird Survey Protocol

Cerulean Warbler *Setophaga cerulea*	THR	Species Protection and General Habitat Protection	Generally found in mature deciduous forests with an open understorey; also nests in older, second-growth deciduous forests.	Migrate South for the Winter	Follow Breeding Bird Survey Protocol
Chimney Swift *Chaetura pelagica*	THR	Species Protection and General Habitat Protection	Historically found in deciduous and coniferous, usually wet forest types, all with a well developed, dense shrub layer; now most are found in urban areas in large uncapped chimneys	Nesting - Late April to Mid-May Migrate South in September or Early October	Chimney Swift Monitoring Protocol. Bird Studies Canada, March 2009
Common Nighthawk *Chordeiles minor*	SC	N/A	Generally prefer open, vegetation-free habitats, including dunes, beaches, recently harvested forests, burnt-over areas, logged areas, rocky outcrops, rocky barrens, grasslands, pastures, peat bogs, marshes, lakeshores, and river banks. This species also inhabits mixed and coniferous forests. Can also be found in urban areas (nest on flat roof-tops).	Migrate South for the Winter	Contact MNR Guelph District Management Biologist to obtain a copy of the protocol
Eastern Meadowlark *Sturnella magna*	THR	Species Protection and General Habitat Protection	Generally prefers grassy pastures, meadows and hay fields. Nests are always on the ground and usually hidden in or under grass clumps.	Migrate South for the Winter	Contact MNR Guelph District Management Biologist to obtain a copy of the protocol
Eastern Whip-poor-will *Caprimlugus vociferus*	THR	Species Protection and General Habitat Protection	Generally prefer semi-open deciduous forests or patchy forests with clearings; areas with little ground cover are also preferred; In winter they occupy primarily mixed woods near open areas.	Nesting: May - July	Contact MNRF Guelph District Management Biologist to obtain a copy of the protocol
Eastern Wood-Pewee *Contopus virens*	SC	N/A	Associated with deciduous and mixed forests. Within mature and intermediate age stands it prefers areas with little understory vegetation as well as forest clearings and edges.	Migrate South for the Winter	Follow Breeding Bird Survey Protocol

Henslow's Sparrow *Ammodramus henslowii*	END	Species Protection and General Habitat Protection	Generally found in old fields, pastures and wet meadows. They prefer areas with dense, tall grasses, and thatch, or decaying plant material	Migrate South for the Winter	Follow Breeding Bird Survey Protocol
Least Bittern *Ixobrychus exilis*	THR	Species Protection and General Habitat Protection	Generally located near pools of open water in relatively large marshes and swamps that are dominated by cattail and other robust emergent plants	Migrate South for the Winter	Follow Marsh Monitoring Protocol; 10 day window of male calling (variable timing). Does not respond well to playback. Very difficult to detect.
Loggerhead Shrike *Lanius ludovicianus*	END	Species Protection and General Habitat Protection	Generally prefer a combination of pasture or other grassland with scattered low trees and shrubs. They build their nests in small trees or shrubs.	Migrate South for the Winter	Follow Breeding Bird Survey Protocol
Wood Thrush *Hylocichla mustelina*	SC	N/A	Nests mainly in second-growth and mature deciduous and mixed forests, with saplings and well-developed understory layers. Prefers large forest mosaics, but may also nest in small forest fragments.	Migrate South for the Winter Arrive in Ontario in mid to late spring	Follow Breeding Bird Survey Protocol
Yellow-breasted Chat *Icteria virens*	END	Species Protection and General Habitat Protection	Generally prefer dense thickets around wood edges, riparian areas, and in overgrown clearings	Migrate South for the Winter Arrive in Ontario Early May	Follow Breeding Bird Survey Protocol

Insect	SARO	Protection	Habitat Information	Timing Windows	Survey Protocol
Monarch Butterfly *Danaus plexippus*	SC	N/A	Exist primarily wherever milkweed and wildflowers exist; abandoned farmland, along roadsides, and other open spaces	Usually migrate south in late September and October	Watch for adults along roadsides and in open fields. Caterpillars feed on milkweeds: Common milkweed grows in open disturbed habitats (fields, roadsides, etc) and swamp milkweed grows in wet habitats (along streams, lakes, marshes) Adults can be spotted from a distance; caterpillars must be looked for carefully on the host plant.

Rusty-patched Bumble Bee *Bombus affinis*	END	Species Protection and General Habitat Protection	Generally inhabits a range of diverse habitats including mixed farmland, sand dunes, marshes, urban and wooded areas. It usually nests underground in abandoned rodent burrows	Active from early Spring to late Fall	Contact MNRF Guelph District Management Biologist to obtain a copy of the protocol
Mammal	**SARO**	**Protection**	**Habitat Information**	**Timing Windows**	**Survey Protocol**
Eastern Small-footed Myotis *Myotis leibii*	END	Species Protection and General Habitat Protection	Overwintering habitat: Caves and mines that remain above 0 degrees Celsius Maternal Roosts: primarily under loose rocks on exposed rock outcrops, crevices and cliffs, and occasionally in buildings, under bridges and highway overpasses and under tree bark.	Hibernates in caves and mines during winter	Contact MNRF Guelph District Management Biologist to obtain a copy of the protocol
Gray Fox *Urocyon cinereoargenteus*	THR	Species Protection and General Habitat Protection	Generally prefers deciduous forests, marshes, swampy areas, and urban areas	Active Year Round	Opportunistically or by examining tracks in winter and summer
Little Brown Myotis *Myotis lucifugus*	END	Species Protection and General Habitat Protection	Overwintering habitat: Caves and mines that remain above 0 degrees Celsius Maternal Roosts: Often associated with buildings (attics, barns etc.). Occasionally found in trees (25-44 cm dbh).	Hibernates during winter	Contact MNRF Guelph District Management Biologist to obtain a copy of the protocol
Northern Myotis *Myotis septentrionalis*	END	Species Protection and General Habitat Protection	Overwintering habitat: Caves and mines that remain above 0 degrees Celsius Maternal Roosts: Often asssociated with cavities of large diameter trees (25-44 cm dbh). Occasionally found in structures (attics, barns etc.)	Hibernates during winter	Contact MNRF Guelph District Management Biologist to obtain a copy of the protocol

Tri-colored Bat *Perimyotis subflavus*	END	Species Protection and General Habitat Protection	Overwintering habitat: Caves and mines that remain above 0 degrees Celsius Maternal Roosts: Can be in trees or dead clusters of leaves or arboreal lichens on trees. May also use barns or similar structures.	Hibernates during winter	Contact MNRF Guelph District Management Biologist to obtain a copy of the protocol
Plant	**SARO**	**Protection**	**Habitat Information**	**Timing Windows**	**Survey Protocol**
American Ginseng *Panax quinquefolius*	END	Species Protection and General Habitat Protection	Grows in rich, moist, undisturbed and relatively mature deciduous woods in areas of neutral soil (such as over limestone or marble bedrock).	Flowering begins in June and continues until August The fruit develop from July to August and ripen in August and September	Walk slowly and systematically in grid fashion, pausing to scan for plants every 5 meters Use a plant field guide to distinguish from similar species
Butternut *Juglans cinerea*	END	Species Protection and General Habitat Protection	Generally grows in rich, moist, and well-drained soils often found along streams. It may also be found on well-drained gravel sites, especially those made up of limestone. It is also found, though seldomly, on dry, rocky and sterile soils. In Ontario, the Butternut generally grows alone or in small groups in deciduous forests as well as in hedgerows	Flowers from April to June. Fruits reach maturity during the month of September or October	Walk slowly and systematically in grid fashion through suitable habitat pausing every 30 meters for a detailed scan of trees within sight. Areas with dense foliage or many saplings will require a more intensive survey to detect sapling butternut. Use Butternut Health Assessment Protocol if planning on removing trees.
Reptile	**SARO**	**Protection**	**Habitat Information**	**Timing Windows**	**Survey Protocol**
Blanding's Turtle *Emydoidea blandingii*	THR	Species Protection and General Habitat Protection	Generally occur in freshwater lakes, permanent or temporary pools, slow-flowing streams, marshes and swamps. They prefer shallow water that is rich in nutrients, organic soil and dense vegetation. Adults are generally found in open or partially vegetated sites, and juveniles prefer areas that contain thick aquatic vegetation including sphagnum, water lilies and algae. They dig their nest in a variety of loose substrates, including sand, organic soil, gravel and cobblestone. Overwintering occurs in permanent pools that average about one metre in depth, or in slow-flowing streams.	Eggs are laid in June, with hatchlings emerging in late September and early October.	Contact MNR Guelph District Management Biologist to obtain a copy of the protocol

Butler's Gartersnake *Thamnophis butleri*	END	Species Protection and General Habitat Protection	Generally prefers open habitats, such as dense grasslands and old fields, where there are small marshes and seasonal wet areas	Active: early April - mid-September Mating: early spring (April) Hatching: June and July	Contact MNR Guelph District Management Biologist to obtain a copy of the protocol
Eastern Ribbonsnake *Thamnophis sauritus*	SC	N/A	Generally occur along the edges of shallow ponds, streams, marshes, swamps, or bogs bordered by dense vegetation that provides cover. Abundant exposure to sunlight is also required, and adjacent upland areas may be used for nesting.	Hibernate: October - April Mating: Early Spring Hatching: Early Fall (September)	Contact MNRF Guelph District Management Biologist to obtain a copy of the protocol
Snapping Turtle *Chelydra serpentina*	SC	N/A	Generally inhabit shallow waters where they can hide under the soft mud and leaf litter. Nesting sites usually occur on gravely or sandy areas along streams. Snapping Turtles often take advantage of man-made structures for nest sites, including roads (especially gravel shoulders), dams and aggregate pits.	Nesting: Late May and June Hibernate: October - April	Scan offshore rocks and logs for basking turtles (10am-2pm) Snorkel in desired aquatic habitat Nesting Season: Search known or preferred nesting habitat areas for females

From: ESA Guelph (MNRF)
To: Holly Dodds
Subject: RE: Information Request - 20 Scott Street Grand Valley Ontario
Date: January 8, 2018 1:15:33 PM
Attachments: image001.jpg
East Luther Grand Valley.pdf
20_Scott_St_Response.pdf
Guelph_NH_InfoRequest_FillableForm.pdf

Good afternoon Holly,

Please see the attached letter in response to your request for information regarding the property at 20 Scott Street, Grand Valley. If you have any questions please let me know.

Please also note that Guelph District has updated the Information Request Form, I have attached the new fillable form for your reference.

Kind regards,

Jamie Wedgewood

Jamie Rose Wedgewood
A/Management Biologist
Ontario Ministry of Natural Resources and Forestry
Guelph District
1 Stone Rd. W.
N1G 4Y2
(P): 519-826-4936
Jamie.R.Wedgewood@ontario.ca

Please note I will temporarily have a new phone number, 519-826-4169 and will not have access to voicemail.

From: Holly Dodds [mailto:hdodds@nsenvironmental.com]
Sent: December-15-17 1:43 PM
To: ESA Guelph (MNRF)
Subject: re: Information Request - 20 Scott Street Grand Valley Ontario

Good afternoon,

Please find attached a fillable Information Request form. We are seeking information on known element occurrences of SAR and/or documented SAR habitat in the vicinity of 20 Scott Street, Grand Valley, Ontario - described further in the attached form. This request is made in support of a proposed development in this location. Information on SAR and/or their habitats known to the MNRF will contribute to our understanding of potential sensitivities associated with the study area

and will be incorporated in to our Species at Risk screening exercise.

The form contains three attachments that show the location of the Study Area in the context of the Town of Grand Valley. One figure shows the preferred site plan concept and two show the proposed development area in the context of the surrounding landscape.

Thank you for your attention - please let me know if you require any additional details to process the information request.

Regards,

Holly Dodds, M.Sc.
Wildlife Biologist
cid:image003.jpg@01D14A27.DA4E2770