



**Scoped
Natural Heritage Evaluation
(Woodland Assessment)
Palgrave Estates West – Phase 2
Lots 30 - 33**

Prepared for:
Angelstone Tournaments Inc.

Prepared by:
Azimuth Environmental
Consulting, Inc.

March 2022

AEC 22-094



Environmental Assessments & Approvals

March 3, 2022

AEC 22-094

Angelstone Tournaments Inc.
c/o EMG Property Inc.
400 North Rivermede Rd., Unit 102
Concord, ON
L4K 3R5

Attention: Bob Carey

Re: **Scoped Natural Heritage Evaluation – Woodland Assessment,
Palgrave Estates West – Phase 2, Lots 30, 31, 32, 33**

Dear Mr. Carey:

As requested we have completed an assessment of woodlands located within and adjacent to Lots 30 through 33 contained within the Palgrave Estates West Phase 2 lands. The following report outlines our study approach, findings and conclusions.

If you have questions or require additional information please do not hesitate to contact the undersigned.



Yours truly,

AZIMUTH ENVIRONMENTAL CONSULTING, INC.

A handwritten signature in black ink that reads "Jim Broadfoot". The signature is written in a cursive style and is set against a light green rectangular background.

Jim Broadfoot, H. B.Sc.
Terrestrial Ecologist

Attach:

cc: Michelle Cutts, Rudy & Associates



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1.0 INTRODUCTION

Azimuth Environmental Consulting Inc. was retained by Angelstone Tournaments Inc. to complete a Scoped Natural Heritage Evaluation related to residential lots 30 through 33 located within the Palgrave Estates West – Phase 2 lands, Town of Caledon (Appendix A).

It is our understanding that the Phase 2 lands were rezoned in 2017 to permit the existing Equestrian Centre to accommodate parking and buffering for the use from the existing residential community (i.e., the Phase 1 lands). As the Phase 2 lands are no longer required for the Equestrian Centre operations the owner is now looking to register Phase 2 of the draft approved lands. The Toronto Region Conservation Authority (TRCA) advised (Appendix A) that the Phase 2 subdivision lands contain a wooded area that was placed in a protective zoning category in lieu of an assessment to determine its form/function or significance and as such, in order to confirm if the previously approved lot configuration is still appropriate - a scoped Natural Heritage Evaluation (NHE)/woodland evaluation is required. The TRCA indicated that the scoped NHE/woodland evaluation is to be completed in accordance with relevant Oak Ridges Moraine Conservation Plan (ORMCP) technical papers. Discussion with the TRCA and others on January 19, 2022 revealed an interest in evaluating woodlands on the east side of the Phase 2 lands in addition to the woodland noted above.

The subject lands are identified as Palgrave Estate Residential Community (a component of Countryside Area of the ORMCP) and designated as Policy Area 3 within the Palgrave Estate Residential Community.

2.0 STUDY APPROACH

2.1 Field Data

A site-visit was completed on February 8, 2022 (Temperature -4C, wind B3 NW, cloud cover 30%, ground snow covered depth approx. 20cm, precipitation nil, observed J Broadfoot) to evaluate the composition, structure and extent of woodlands located on and adjacent to Lots 30- through 33. Woodland extent was established based on field assessment and air photo interpretation. Areas of shrub cover located along woodland edge habitat were excluded from woodlands (i.e., areas containing Staghorn Sumac, Amur Maple, and other species not attaining “tree height” [4.5m] at maturity excluded).

In keeping with the criteria of the ORMCP Technical Paper Series 7 – *Identification and Protection of Significant Woodlands* - where two larger treed areas (40 metres or more wide) are physically connected by a narrow linear treed area (less than 40 metres wide)



with any open breaks being 20 metres or less wide, all treed areas would be considered to be one woodland as long as the narrow linear treed area is no more than 3 times longer than its average width (as per figure below). If the assessment indicates one woodland composed of two linked woodland patches, the overall woodland area would be the total of the two patches blocks plus the connecting linear treed area.

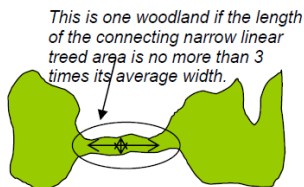


Figure from ORMCP Technical Paper Series 7 – Identification and Protection of Significant Woodlands

A search was completed for Butternut (endangered) and Black Ash (endangered) located within and adjacent to woodlands.

2.2 Woodland Evaluation

The criteria of the ORMCP Technical Paper Series 7 – Identification and Protection of Significant Woodlands was applied to identify woodlands and to assess significance.

3.0 RESULTS

As per mapping in Appendices B and C, the subject lands contain an isolated Western Woodland and complex of Eastern Woodlands made up of woodland patches and treed hedgerow.

3.1 Woodland Characteristics

3.1.1 Western Woodland

The Western Woodland covers approx. 0.7ha and has an average width of 43m.

The Western Woodland is a coniferous plantation dominated by White Spruce (outer edge), Red Pine and Eastern White Pine (internal). Most trees were polewood sized (10cm to 24cm dbh) with a few in the 25cm to 50cm dbh size range. The understory was sparsely populated with Trembling Aspen and Sugar Maple seedlings/saplings.

The Western Woodland is an isolated feature not associated with a key natural heritage feature or hydrologically sensitive feature (no watercourses or wetlands, see provincial mapping Appendix D). The woodland is located more than 50m from the nearest



woodland (coniferous plantation on Equestrian Centre lands) and more than 80m from an area of natural forest cover (forest > 4ha in size/apparent key natural heritage feature) located to the west.

3.1.2 Eastern Woodlands

As per mapping in Appendix C the Eastern Woodlands are composed of a complex of 4 woodland patches and include a linear treed area (hedgerow).

Patch 1

Patch 1 covers approx. 0.23ha and has an average width of approx. 34m.

Patch 1 is dominated by Scots Pine. Scots Pine is non-native and is considered invasive by the Ontario Invasive Plant Council (Marinich, Allison and Powell, Kate. 2017. Scots pine (*Pinus sylvestris* L.). Best Management Practices in Ontario. Ontario Invasive Plant Council, Peterborough, ON. https://www.ontarioinvasiveplants.ca/wp-content/uploads/2020/10/ScotsPine_BMP.pdf). Best management practices for this species recommend removal. Most trees were polewood sized (10cm to 24cm dbh) with a few in the 25cm to 50cm dbh size range aligned with the right of way of Mount Hope Road. The understory is dominated by invasive shrubs – Tartarian Honeysuckle, Autumn Olive, Common Buckthorn. Given dominance by Scots Pine and non-native and invasive shrubs, ground cover of Patch 1 by native tree species is < 10%. Therefore, Patch 1 is not a candidate for consideration as Significant Woodland given the exemptions afforded in Section 5 of ORMCP Technical Paper 7 indicating that Significant Woodlands do not have “native tree species cover less than 10% of the ground”.

Patch 2

Patch 2 covers approx. 0.02ha and has an average width of approx. 8m.

Patch 2 is dominated by Trembling Aspen with Manitoba Maple and Scots Pine. The understory is dominated by Staghorn Sumac.

Patch 2 is an isolated feature not associated with a key natural heritage feature or hydrologically sensitive feature (no watercourses or wetlands, see provincial mapping Appendix D).

Patches 3, 4

Patches 3 and 4 are confined mainly to adjacent lands and are connected *via* a linear treed area/hedgerow. As per mapping in Appendix C, the western limit of Patch 3 is defined at the point where the hedgerow exceeds 40m width. The average width of the linear treed area/hedgerow is approx. 20m (min. 10m, max. 40m). The length of the linear treed



area/hedgerow between Patches 3 and 4 is 177m. Since the length of the linear treed area is greater than 3X the average width of the hedgerow (i.e., $177\text{m} > [3 \times 20\text{m} = 60\text{m}]$), Patches 3 and 4 are individual woodlands and the treed hedgerow is not considered a woodland.

Patch 3

Patch 3 covers approx. 0.25ha and has an average width of approx. 26m.

Patch 3 is dominated by Scots Pine but areas identified as part of Patch 3 on adjacent land contain deciduous trees (Trembling Aspen, Sugar Maple, Manitoba Maple noted) and other conifers (spruce and Eastern White Pine noted). Most trees were polewood sized (10cm to 24cm dbh) with a few in the 25cm to 50cm dbh size range. Much of the canopy of Patch 3 includes landscape trees on adjacent lands.

Patch 3 is an isolated feature not associated with a key natural heritage feature or hydrologically sensitive feature (no watercourses or wetlands, see provincial mapping Appendix D).

Patch 4

Patch 4 covers approx. 3.6ha and has an average width of approx. 67m. Patch 4 contains an area of deciduous forest with successional pine habitat extending west adjacent to an old rail corridor. As the limits of Patch 4 are confined to adjacent lands, no detailed assessment of composition, structure was completed. Based on provincial mapping (Appendix D), Patch 4 is not associated with a key natural heritage feature or hydrologically sensitive feature (no watercourses or wetlands).

Eastern Woodland Composite

According to the criteria of the ORMCP, woodland patches separated by a gap in excess of 20m are considered individual woodlands. As per Section 3.1.2 above, Patch 1 is excluded from consideration as part of Significant Woodland owing to dominance by a non-native and invasive tree species (Scots Pine). Patches 2 and 3 are separated by a utility corridor that creates a gap less than 20m wide and hence we have produced a composite Eastern Woodland composed of Patches 2 and 3 as shown on mapping in Appendix C.

The composite Eastern Woodland covers approx. 0.32ha and has a minimum average width of approx. 19m. The composite woodland is not associated with a key natural heritage feature or hydrologically sensitive feature (no watercourses or wetlands).



3.2 Significant Woodland Assessment

According to Section 5 of the ORMCP Technical Paper Series 7, Significant Woodlands are those:

- Having canopy closure and/or density of trees matching stated criteria; and
- Have a minimum average width of 40m or more measured to crown edges; and
- Which are:
 - 4 hectares or larger in size located in the Countryside or Settlement Areas of the ORMCP; or
 - 0.5 hectare or larger in size located in the Natural Core or Natural Linkage Areas of the ORMCP; or
 - 0.5 hectare or larger located within or intersecting with a key natural heritage feature or hydrologically sensitive feature or their vegetation protection zone.

As the subject lands are identified as a component of Countryside Area of the ORMCP, woodlands over 4ha in size and average width > 40m are candidates for identification as Significant Woodland according to size criteria of the ORMCP. However, it is our understanding that in the Countryside Area of the ORMCP woodlands as small as 0.5ha could be considered significant if they are located within or intersect with a key natural heritage feature or hydrologically sensitive feature (wetland, watercourse, etc.) or their vegetation protection zone (30m setback to feature) and have minimum average width of 40m or more measured to crown edges. We apply these tests below.

3.2.1 Western Woodland

- Woodland identified by application of ORMCP criteria – Yes; and
- Minimum average width of 40m or more measured to crown edges – Yes (average width 43m); and
- 4ha or larger in size located in the Countryside or Settlement Areas of the ORMCP – No (0.7ha); or
- 0.5ha or larger located within or intersecting with a key natural heritage feature or hydrologically sensitive feature or their vegetation protection zone – No (see Section 3.1.1);
- **Candidate Significant Woodland – No.**

3.2.2 Eastern Woodland

- Woodland identified by application of ORMCP criteria – Yes (composite of 2 patches); and



- Minimum average width of 40m or more measured to crown edges – No (average width 18m); and
- 4ha or larger in size located in the Countryside or Settlement Areas of the ORMCP – No (0.32ha); or
- 0.5ha or larger located within or intersecting with a key natural heritage feature or hydrologically sensitive feature or their vegetation protection zone – No (see Section 3.1.2);
- **Candidate Significant Woodland – No.**

4.0 CONCLUSION

Results indicate that the woodlands of the subject lands are not candidates for identification as Significant Woodland.



APPENDICES

Appendix A: Draft Plan & TRCA Correspondence

Appendix B: Western Woodland

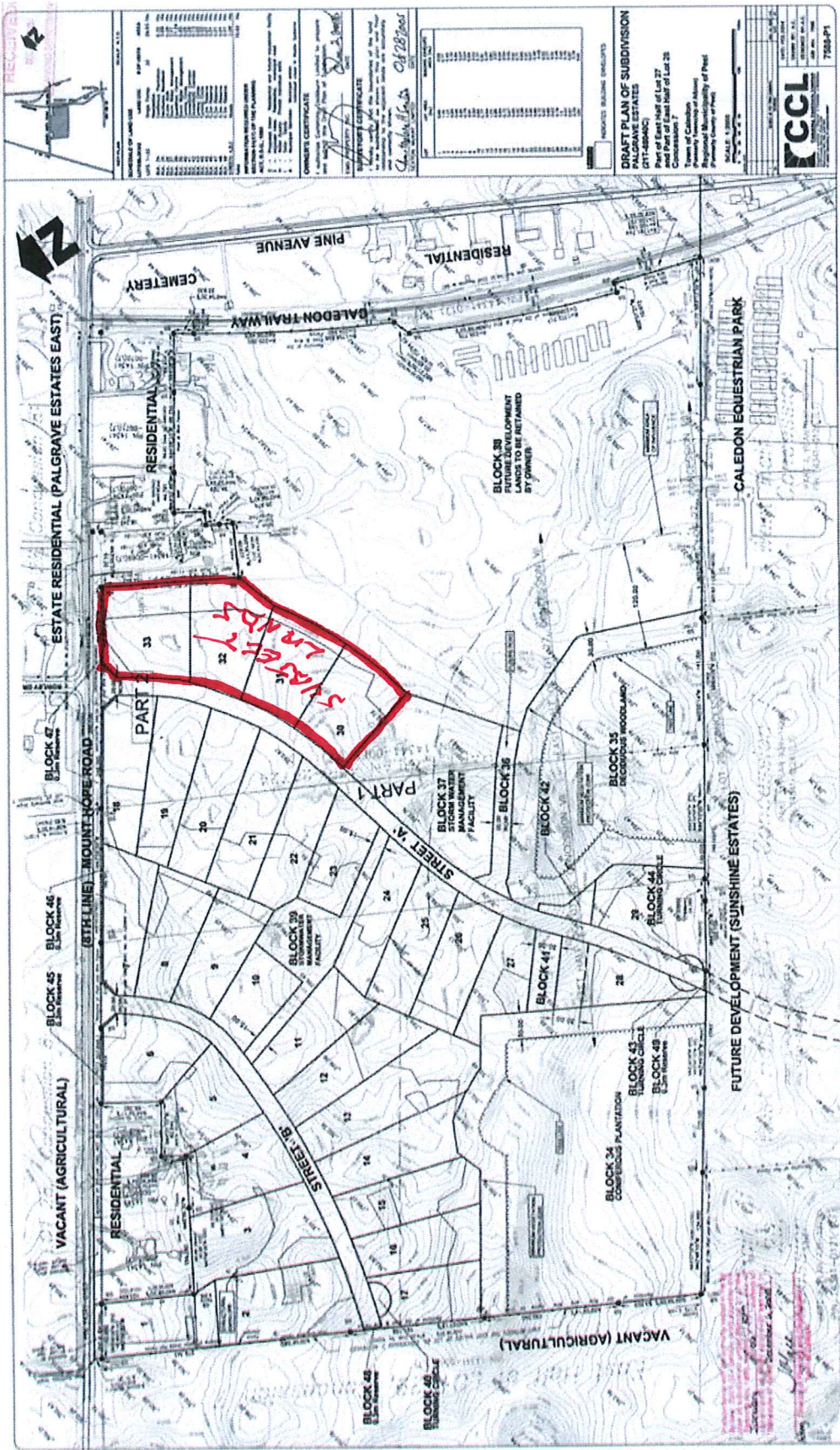
Appendix C: Eastern Woodland

Appendix D: Provincial Natural Heritage Features Mapping



APPENDIX A

Draft Plan & TRCA Correspondence



RECORDED

DRAFT PLAN OF SUBDIVISION
PALGRAVE ESTATES
 Part of East Half of Lot 37
 and Part of East Half of Lot 28
 Commission 7
 Province of Ontario
 Registered Municipality of Peel
 Priority Order of Plan

CCCL

7550-PT

OWNER'S CERTIFICATE
 I, the undersigned, being the owner of the land described in the above plan, do hereby certify that the same is the true and correct plan of the land as shown on the ground and as shown on the plan, and that the same is the true and correct plan of the land as shown on the ground and as shown on the plan, and that the same is the true and correct plan of the land as shown on the ground and as shown on the plan.

APPROVED CERTIFICATE
 I, the undersigned, being the owner of the land described in the above plan, do hereby certify that the same is the true and correct plan of the land as shown on the ground and as shown on the plan, and that the same is the true and correct plan of the land as shown on the ground and as shown on the plan, and that the same is the true and correct plan of the land as shown on the ground and as shown on the plan.

Christine Smith
 04/28/2008

REGISTERED BUILDING ENCLAVES

Block No.	Description
29	Plantation
30	Storm Water Management Facility
31	Residential
32	Residential
33	Residential
34	Plantation
35	Deciduous Woodland
36	Residential
37	Storm Water Management Facility
38	Residential
39	Storm Water Management Facility
40	Residential
41	Residential
42	Residential
43	Deciduous Woodland
44	Plantation
45	Plantation
46	Plantation
47	Residential
48	Plantation
49	Plantation
50	Residential
51	Residential
52	Residential
53	Residential
54	Residential
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90	Residential
91	Residential
92	Residential
93	Residential
94	Residential
95	Residential
96	Residential
97	Residential
98	Residential
99	Residential
100	Residential

Jim Broadfoot

From: Michelle Cutts <mcutts.rudy.associates@sympatico.ca>
Sent: December-15-21 2:07 PM
To: Jim Broadfoot
Subject: FW: TRCA Comments - PRE 2021-0220 - 0 Mount Hope Road (Caledon Equestrian Centre)

Comments from TRCA as discussed.

Michelle Cutts, MCIP, RPP
Principal Planner

RUDY & Associates

Operating under 2102761 Ontario Limited
22 Forest Heights Cres., Orillia, ON L3V 8J6
T: (705) 331 2943
E: mcutts.rudy.associates@sympatico.ca

From: Nick Cascone <Nick.Cascone@trca.ca>
Date: Wednesday, November 17, 2021 at 5:30 PM
To: Rob Hughes <Rob.Hughes@caledon.ca>
Cc: "mcutts.rudy.associates@sympatico.ca" <mcutts.rudy.associates@sympatico.ca>
Subject: TRCA Comments - PRE 2021-0220 - 0 Mount Hope Road (Caledon Equestrian Centre)

Hello Rob,
Provided below are TRCA's comments on the above noted DART application:

Site Context:

- The subject lands are regulated by TRCA as they are traversed by a valley corridor and contain a large wetland complex associated with the Humber River Watershed. A TRCA permit pursuant to Ontario Regulation 166/06 is required from this Authority prior to any works taking place within a TRCA regulated area. Based on our review, none of the works being contemplated at this time appear to be within a TRCA regulated area of the property.
- We note that while part of the subject lands are regulated by TRCA, the eastern portion of the site is within the jurisdiction of the Nottawasaga Valley Conservation Authority (NVCA). In the past, permission from the NVCA has been required in order to allow for TRCA to review planning applications on the subject lands on their behalf. As such, permission from the NVCA will be required if TRCA is to review any future planning application which extends into their jurisdiction.
- In addition to the above, it is noted that the subject lands are located on the Oak Ridges Moraine (ORM), within the Palgrave Estates Residential Community land use designation of the Oak Ridges Moraine Conservation Plan (ORMCP). As identified above, the subject property contains a valley corridor and wetland feature. Further, the site also contains woodland features. In accordance with the policies of the ORMCP, valley corridors, wetlands and woodlands are protected natural features.
- TRCA staff note that the property was most recently subject to a Zoning Bylaw Amendment application in 2016/2017. Through this past application, several features located on the subject lands were placed in protective zoning categories (EPA-ORM).

Submission Requirements:

Provided below are TRCA's comments on each required planning application:

Zoning Bylaw Amendment for Subdivision Lands:

- According to the previously approved Zoning Bylaw Amendment for the site (Town File: RZ 16-16), the Phase II subdivision lands contain an EPA1-ORM zoned wooded area. It is our understanding that at the time this past application was approved, a conservative approach was taken whereby the wooded area was placed in a protective zoning category in lieu of an assessment to determine its form/function or significance. As such, in order to confirm if the previously approved lot configuration is still appropriate, a scoped Natural Heritage Evaluation (NHE)/woodland evaluation will be required in support of any future Zoning Bylaw Amendment application. The scoped NHE/woodland evaluation shall be completed in accordance with relevant ORMCP technical papers. If it is determined the wooded area (or any other feature observed on the subject lands) is considered to be Key Natural Heritage Feature (KNHF) and/or Key Hydrologic Feature (KHF) per the ORMCP, the boundary of any residential lot will need to be adjusted accordingly to avoid fragmentation of the feature and its associated Minimum Vegetation Protection Zone (MVPZ).
- While the TRCA does not regulate tableland woodland features, we support the retention of existing vegetation on the subject lands. If it is determined the wooded area is not considered to be significant, but still classifies as a woodland, it should be protected in accordance with the Official Plan policies of the Region of Peel and Town of Caledon.
- The applicant and/or Town shall confirm if the proposed lots are subject to any density bonusing requirements in accordance with the Official Plan. It is our understanding that the proponent previously withdrew from the density bonusing program for the original plan of subdivision (21T-8840C).
- In addition to the above, the following materials will be required:
 - Planning Justification Report;
 - Draft Zoning Bylaw Amendment;
 - Preliminary Engineering Drawings/Plans – Including Site Plan, Grading Plan, Site Servicing Plan, Erosion and Sediment Control Plan, cross-sections and associated details. The plans should clearly identify the location of any natural features and buffers (if applicable);
 - Stormwater Management Report/Functional Servicing Report – Outlining how the proposed stormwater management design conforms with TRCA requirements for water quantity, quality, erosion and water balance as well as the SWM requirements of the ORMCP. TRCA’s SWM guideline can be accessed through the following link:
<https://drive.google.com/file/d/0BxjqkzmOuaaRa3ZxS25wUWF6Q1k/view?resourcekey=0-oltcetL4W7--mrgkpggDng>.

Site Plan application for Equestrian Centre:

- The following requirements are based on the high-level plan provided by the applicant through this DART application. Prior to filing a Site Plan application, it is strongly recommended that the applicant provides TRCA staff with a more detailed plan/understanding of the proposed works so that the list of requirements can be further scoped, as necessary.
 - A Site Plan identifying the location of all KNHFs/KHFs and their associated MVPZs. If the any new works are located in close proximity to a KNHF/KHF, a site staking exercise with TRCA and Town staff may be necessary to confirm feature limits. Any newly proposed development and site alteration should be located outside of these areas.
 - If new formal parking areas are proposed, a Grading Plan and Servicing Plan will be necessary;
 - If new formal parking areas are proposed, a Stormwater Management Report/Functional Servicing Report is required to outline how the proposed stormwater management design conforms with TRCA requirements for water quantity, quality, erosion and water balance as well as the SWM requirements of the ORMCP. TRCA’s SWM guideline can be accessed through the following link:
<https://drive.google.com/file/d/0BxjqkzmOuaaRa3ZxS25wUWF6Q1k/view?resourcekey=0-oltcetL4W7--mrgkpggDng>
 - For any new development and/or site alteration located in close proximity to a KNHF and/or KHF and their associated MVPZ, and Erosion and Sediment Control Plan is required.

I trust the above comments are of assistance. Please let me know if you have any questions.

Regards,

Nick Cascone, M.Sc.PI

Planner

Development Planning and Permits | Development and Engineering Services

T: [\(416\) 661-6600](tel:(416)661-6600) x5936

E: nick.cascone@trca.ca

A: [101 Exchange Avenue, Vaughan, ON, L4K 5R6](https://www.trca.ca) | [trca.ca](https://www.trca.ca)



Please note that TRCA's Offices are presently closed to visitors. The plan input and review function continues during the Coronavirus pandemic. In order to reduce the potential of transmission, TRCA requests that development planning and permit applications and materials be submitted digitally in PDF format. Paper submissions are discouraged and may result in extended timeframes for review.

All digital submissions and documents can be submitted to the following e-mail addresses:

Enquiries/ applications within Peel Region municipalities – peelplan@trca.ca

Enquiries/ applications within York Region municipalities – yorkplan@trca.ca

We thank you for your cooperation as we respond to the current situation.



APPENDIX B

Western Woodland

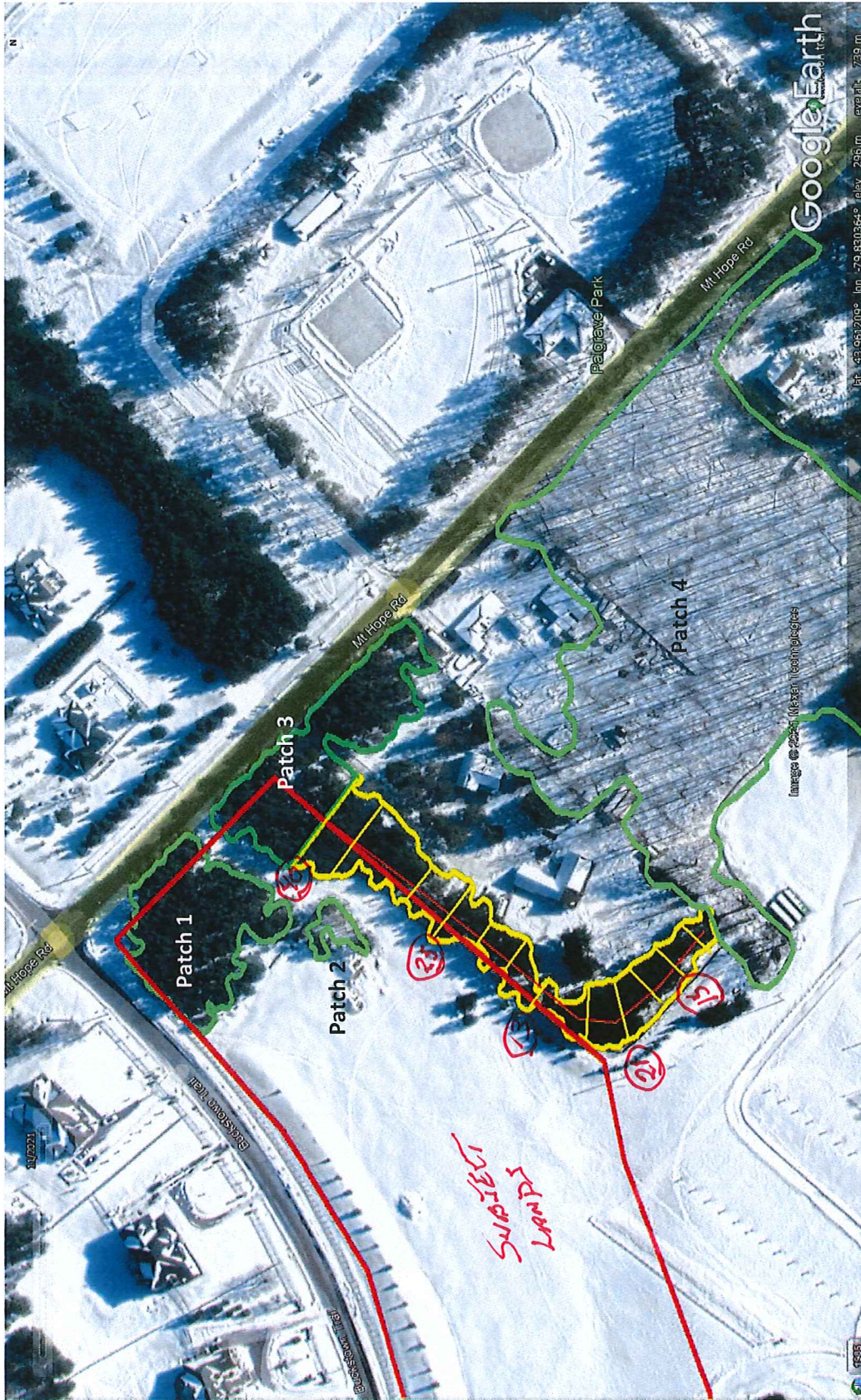


Western Woodland (Google Earth Air Photo - November 2021)



APPENDIX C

Eastern Woodland



Eastern Woodland Patches & Hedgerow (Google Earth Air Photo - November 2021)

Green Polygons – woodland Patches; Yellow Polygon – linear treed area/hedgerow (line segments: yellow = width; red = length)

④ LINE SEGMENT WIDTH

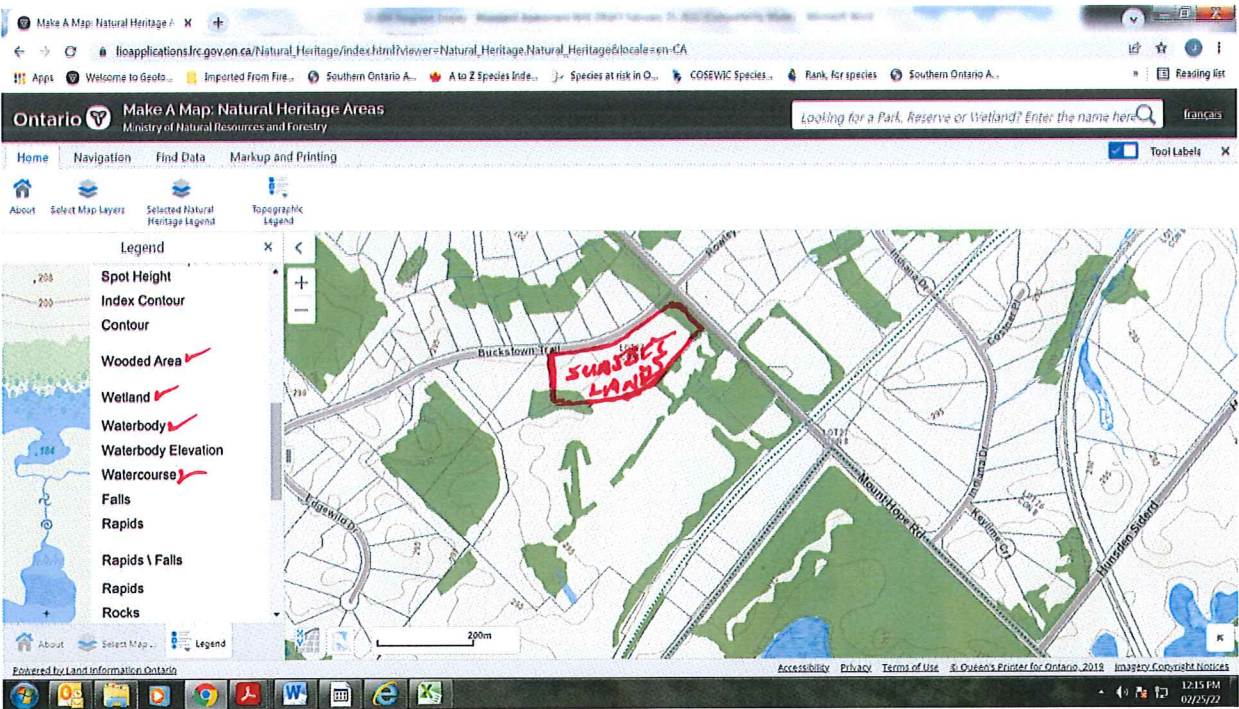


Eastern Woodland (Google Earth Air Photo - November 2021)



APPENDIX D

Provincial Natural Heritage Features Mapping



Source MNRF Make a Natural Heritage Map

(https://www.ioapplications.lrc.gov.on.ca/Natural_Heritage/index.html?viewer=Natural_Heritage.Natural_Heritage&locale=en-CA) accessed February 25, 2022