



October 17, 2022
Our File: 222360

Via Email – fireside@bmts.com

Estate of Muriel McCrabb
c/o Allan Speer
P.O. Box 1817
Port Elgin, ON N0H 2C0

Re: Letter of Opinion
GCOP Bedrock Resource Area Viability
Proposed Residential Development
Concession 14/15, Lot 24 and Part Lot 23
Township of Georgian Bluffs
County of Grey

Dear Allan,

As requested, this correspondence is provided as a letter of professional opinion regarding the location of your property on an area of Paleozoic bedrock covered by soil with a thickness of 1 to 8 metres, as noted in Appendix E of the Grey County Official Plan (June 7, 2019), which identifies potential bedrock and shale resources within Grey County. Section 5.6.6(2) of the Grey County Official Plan indicates that “...*development and activities which would preclude or hinder the establishment of new operations or access to the resources shall only be permitted if the resource use would not be feasible...*”

Based on a review of geological mapping, the near-surface bedrock underlying the Site consists of dolostone of the Amabel Formation across the majority of the property, with the southeastern most portion underlain by dolostone of the Guelph Formation.

The subject Site consists of three lots that were recently separate properties. However, it is our understanding that these lots were recently merged by the Township of Georgian Bluffs as a result of administrative estate matters. Individual(s) managing the estate are attempting to re-sever the overall Site (i.e. recently merged parcel) into the lots that were legally separate in 2017. The legal descriptions of the proposed lots are as follows, as reported in the Grey County GIS online mapping service:

- Lot 1: Concession 15, Part Lot 24, Survey PCL 3 ROW, RP16R297 Part 1, RP16R328 Part 1, Municipality of Georgian Bluffs (0.36 ha)
- Lot 2: Keppel Concession 14, Part Lot 23, Municipality of Georgian Bluffs (6.8 ha)
- Lot 3: Concession 14, Lot 24, Municipality of Georgian Bluffs (40.9 ha)

We understand that although the proponent is proposing to sever lots 1 and 2 from the parent lot, with Lot 3 to be retained, no specific development is proposed at this time. However, ultimately the lots are expected to be sold and developed as a single residential lots.

The overall subject site is currently vacant and contains no structures. The property consists of primarily forested lands with various ATV and snowmobile trails stretch across some portions of the Site. No municipal sanitary sewer or water services are provided to the property.

Based on the testholes that were excavated as part of a Karst Topography Assessment completed on the property on October 10, 2022, the depth to bedrock in the vicinity of the areas of the property that are proposed for future development is between approximately 0.3 and 1.5 metres below ground surface (mbgs). Details of the Karst Topography Assessment can be found in the report titled, *"Karst Topography Assessment – Concession 14/15, Lot 24 and Part Lot 23, Township of Georgian Bluffs"* dated October 16, 2022 and completed by GM BluePlan Engineering Ltd. (GMBP).

Although there is the potential in some instances for the extraction of dolostone of the Amabel or Guelph formation for use as either dimension stone or for crushing to produce aggregate resources, the area of the subject property proposed for severance and/or development is not considered to be feasible for the extraction of these resources, as discussed below.

Proximity to Existing Residential Development, Francis Lake and Community Opposition

The subject property is situated in locations adjacent to the ROW of Concession Road 14, Francis Drive, and Big Rock Road, respectively. The surrounding properties in the vicinity of the development areas of the proposed severance lots consist of single residential dwellings. In particular, the property is bound to the south, north, and extensively to the west, by rural and recreational residential lots. The majority of lots are along the shore of Francis Lake. The property itself, is approximately 100 m to 750 m away from Francis Lake.

A proposed quarry development in this location would be expected to be met with strong community opposition, regardless of the findings of background studies and a design that could meet mitigative requirements. The work required to address the opposition would decrease the viability of the use of the property for extraction considerably.

Should bedrock extraction be considered on this Site in the future, the setbacks from the existing residential dwellings would need to be considered, which would be expected to limit the extraction of the rock to greater than 120 metres from the nearest residence. The setbacks along the west, north and south would further limit viability of the pit through loss of extractable area.

Significant Woodlands

Perhaps the most significant issue with respect to use for bedrock extraction is the fact that the entire subject Site is currently designated as "Significant Woodlands" as per Appendix B of the Grey County Official Plan, which indicates that *"[n]o development or site alteration may occur within Significant Woodlands or their adjacent lands unless it has been demonstrated through an environmental impact study."*

The use of the Site for a quarry is considered to be significantly invasive with potential risk to the ecological health on the Site. As such, quarrying on this property would likely be difficult to obtain a licence for under the Aggregate Resources Act due to the requirement for an Environmental Impact Study that would be required to show little to no impact on ecological health. Since large swaths of woodland would need to be clear cut in order to accommodate quarrying operations, it is not likely possible to achieve.

The land designation as Significant Woodland is considered to be a significant hurdle that would likely stand in the way of the approval of a quarry operation on this Site.

Summary

The subject property is not considered to be viable/feasible for extraction of bedrock resources based on the following:

- Designation of the entire Site as “Significant Woodland” as per Appendix E of the Grey County Official Plan, and
- The extensive neighboring rural residential and recreational property use in the vicinity of Francis Lake with expected community opposition to a quarry development in the interest of preserving the natural environment in the area and continuing the use of the nearby lands for residential and/or recreational purposes.

With respect to future potential quarry operations beyond the subject property, it is noted that all proposed development areas at the subject property are located adjacent to, and around other residential uses. Consequently, the development of the proposed residential lots would not further limit setbacks for future quarry properties to the east, northeast, or southeast.

Yours truly,

GM BLUEPLAN ENGINEERING LIMITED

Per:

A handwritten signature in blue ink, appearing to read 'C. J. Sweet'.

C. J. Sweet, P.Geo.
CJS/md


cc: GMBP: Matt Nelson – matt.nelson@gmblueplan.ca;
File No. 222360

Encl: Figure 1 - Site Layout
Figure 2 - Proposed Severance and Testhole Location Plan
Appendix B of GCOP and Excerpts
Appendix E of GCOP and Excerpts

222360
Karst Topography Assessment
Concession Road 14
Township of Georgian Bluffs



LEGEND

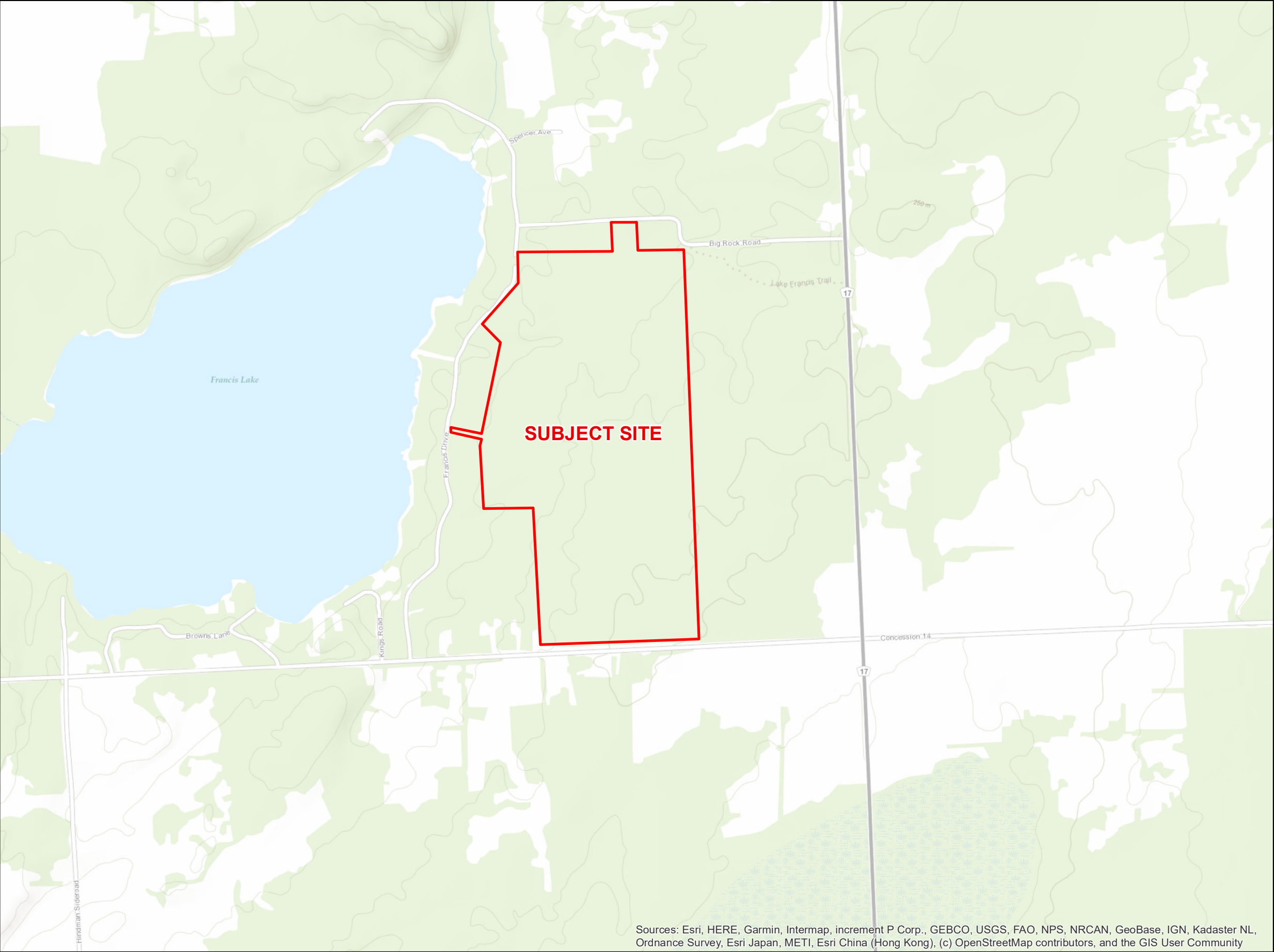
 Approximate Boundary of Subject Property

Scale
1:10,000

October 2022

SITE LOCATION MAP
Estate of Muriel McCrabb

Figure No. 1







Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

222360
Karst Topography Assessment
Concession Road 14
Township of Georgian Bluffs



LEGEND

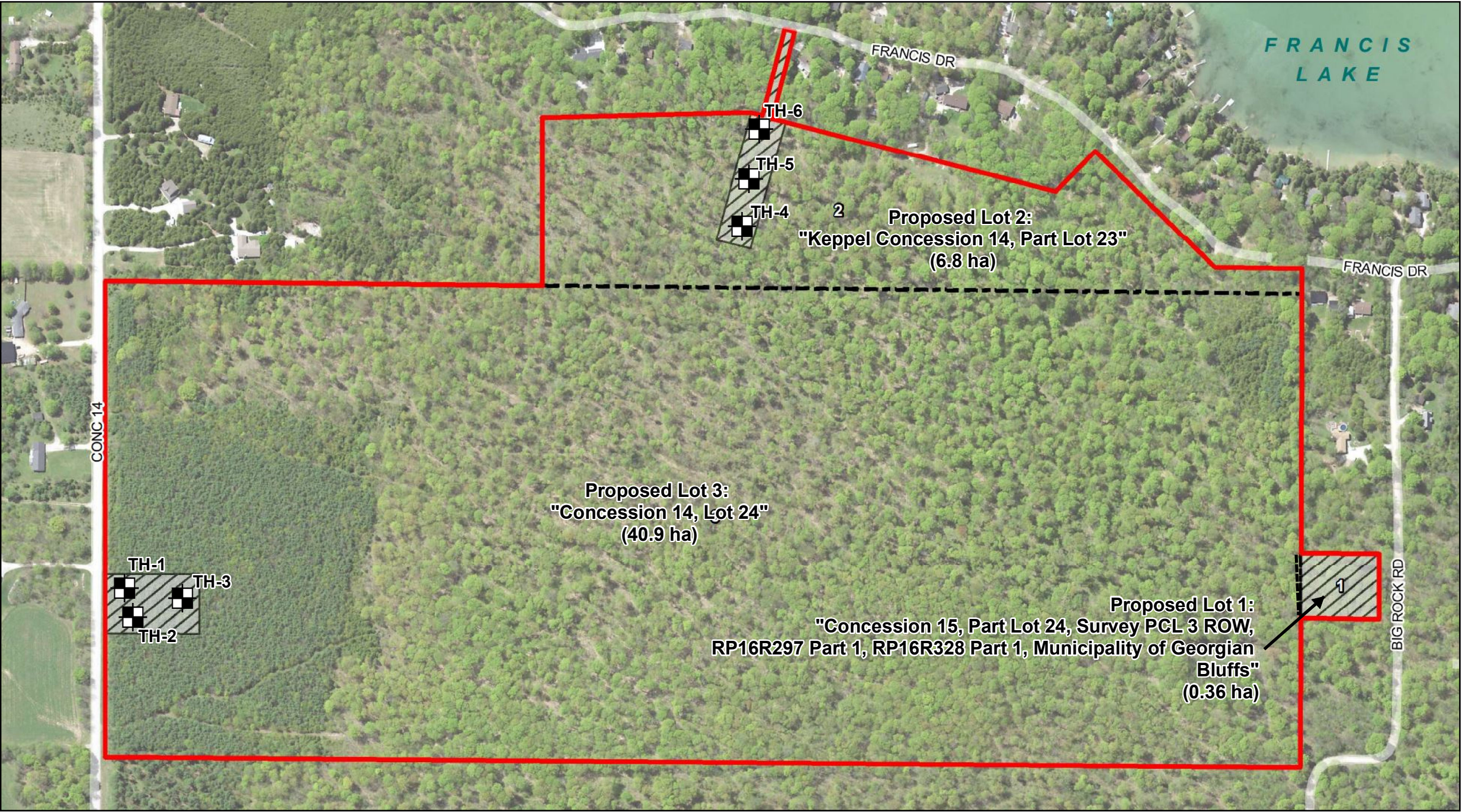
-  Approximate Boundary of Subject Property
-  Proposed Future Building Envelope
-  Proposed Severance Boundaries
-  Approximate Testhole Locations (Completed October 10, 2022)

Not To Scale

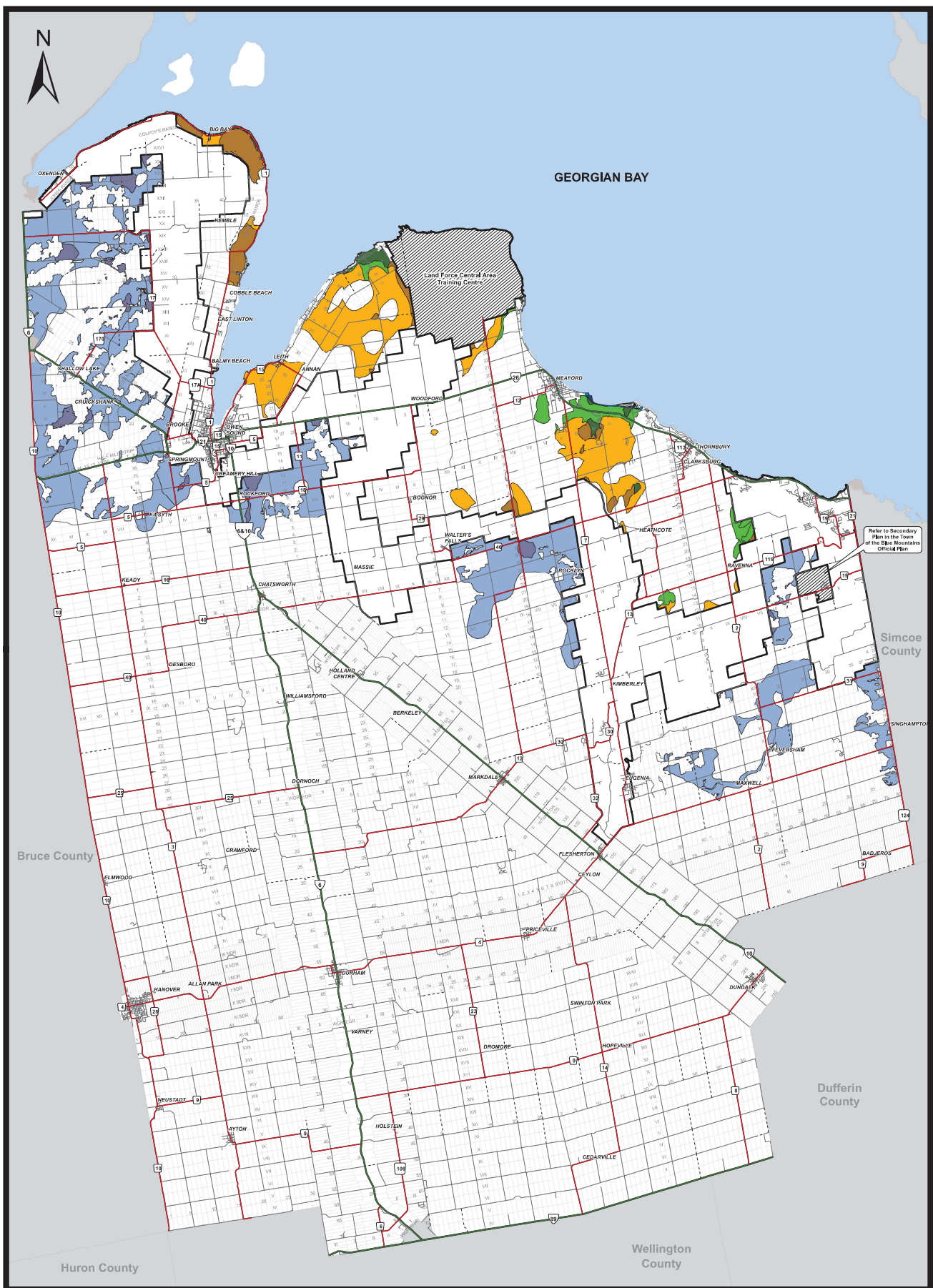
October 2022

**Proposed Severance Lots
and Testhole Location Plan**
Estate of Muriel McCrabb

Figure No. 2



Note: Image retrieved from Figure 4 of the EIS Report completed by Palmer and dated September 29, 2022.



**THE COUNTY OF GREY
OFFICIAL PLAN
APPENDIX E
Bedrock and Shale Resources**

LEGEND

- Provincial Highway
- County Road
- Local Road
- Seasonal Road

- Selected Bedrock Resource Areas**
- Drift Thickness**
- Paleozoic bedrock outcrop; areas of exposed bedrock partially covered by a thin veneer of drift. Drift Thickness is generally less than 1 m.
 - Paleozoic bedrock covered by drift. Drift Thickness is generally 1 to 6 m. Bedrock outcrops may occur.

Jagger Hines Limited and Rowell, D.J., 2009. Aggregate resources inventory of Grey County, southern Ontario. Ontario Geological Survey, Aggregate Resources Inventory Paper 180, 71p.

Shale Resource Areas

- Queenston Formation less than 1 m
- Queenston Formation 1 m to 8 m
- Georgian Bay Formation less than 1 m
- Georgian Bay Formation 1 m to 8 m
- Blue Mountain Formation less than 1 m
- Blue Mountain Formation 1 m to 8 m

Rowell, D.J., 2012. Shale resources inventory of southern Ontario. An update. Ontario Geological Survey, Open File Report 6278, 46p.

SCALE 1:135,000



AUTHOR: Grey County Planning and Development
FILE NAME: GRC_Off_ApdxE_Map00036.mxd
APPLICATION: ArcMap
DATE: June 7, 2019
PROJECTION: UTM zone 17N / NAD83
SOURCE: Terrestrial, Ministry of Natural Resources and Forestry
INTERACTIVE MAP: gpc.ca/development
DOWNLOAD PDF: gpc.ca/development

This map is for illustrative purposes only. Do not rely on this map as being a precise indicator of routes, location of features or surveying boundaries. This map may contain cartographical errors or omissions.

- 15) Existing licensed mineral aggregate extraction operations are permitted and shall be recognized in local zoning by-laws. Licensed mineral aggregate extraction operations are identified on Schedule B of this Plan as Mineral Resource Extraction.

5.6.6 Bedrock Resource Areas and Shale Resource Areas

- 1) The *County*, with the help of the *Province*, member municipalities, and stakeholders undertook a *significant* process through the Aggregate Resources Inventory Master Plan (2004), to identify *Aggregate resource areas*, which are mapped on Schedule B. This Master Plan not only looked at where primary and secondary aggregate resources are located, but also where those resource areas are constrained by environmental, or other land use features (e.g. *settlement areas*). The Plan then recommended certain resource areas for protection, such that they would be available for future extraction. A similar *County*-wide mapping exercise has not yet been undertaken for Bedrock and Shale Resource Areas.
- 2) The *Province* has provided mapping for Bedrock and Shale Resource Areas, within 8 metres of the surface, which have been mapped on Appendix E. This mapping is shown for two purposes;
 - a. To identify where these resources exist, and where resource use or extraction could reasonably be predicted in the future, and
 - b. To guide strategic land use decisions where future *development* may pose land use incompatibilities with these resources.

Within Bedrock and Shale Resource Areas shown on Appendix E and on *adjacent lands*, *development* and activities which would preclude or hinder the establishment of new operations or access to the resources shall only be permitted if the resource use would not be feasible; or the proposed land use or *development* serves a greater long-term public interest; and issues of public health, public safety and environmental impact are addressed.

- 3) The *County* has not analysed constraints to these resource areas in detail. However, the mapping on Appendix E has excluded Bedrock or Shale Resource Areas within the Niagara Escarpment Plan Area, within designated *settlement areas* as mapped on Schedule A to the *County* Plan, and within *Core Areas* mapped on Schedule C.
- 4) The *County* may initiate an official plan amendment, which could include undertaking a study of Bedrock and/or Shale Resource Areas, to;
 - a. Consult with the public, agencies, and other community stakeholders,

- b. Determine constraints to these resources,
- c. Refine the mapping of the primary resources needed for protection, and
- d. Recommend policies of protection and utilization of the resources to be implemented as part of the *County* Official Plan.

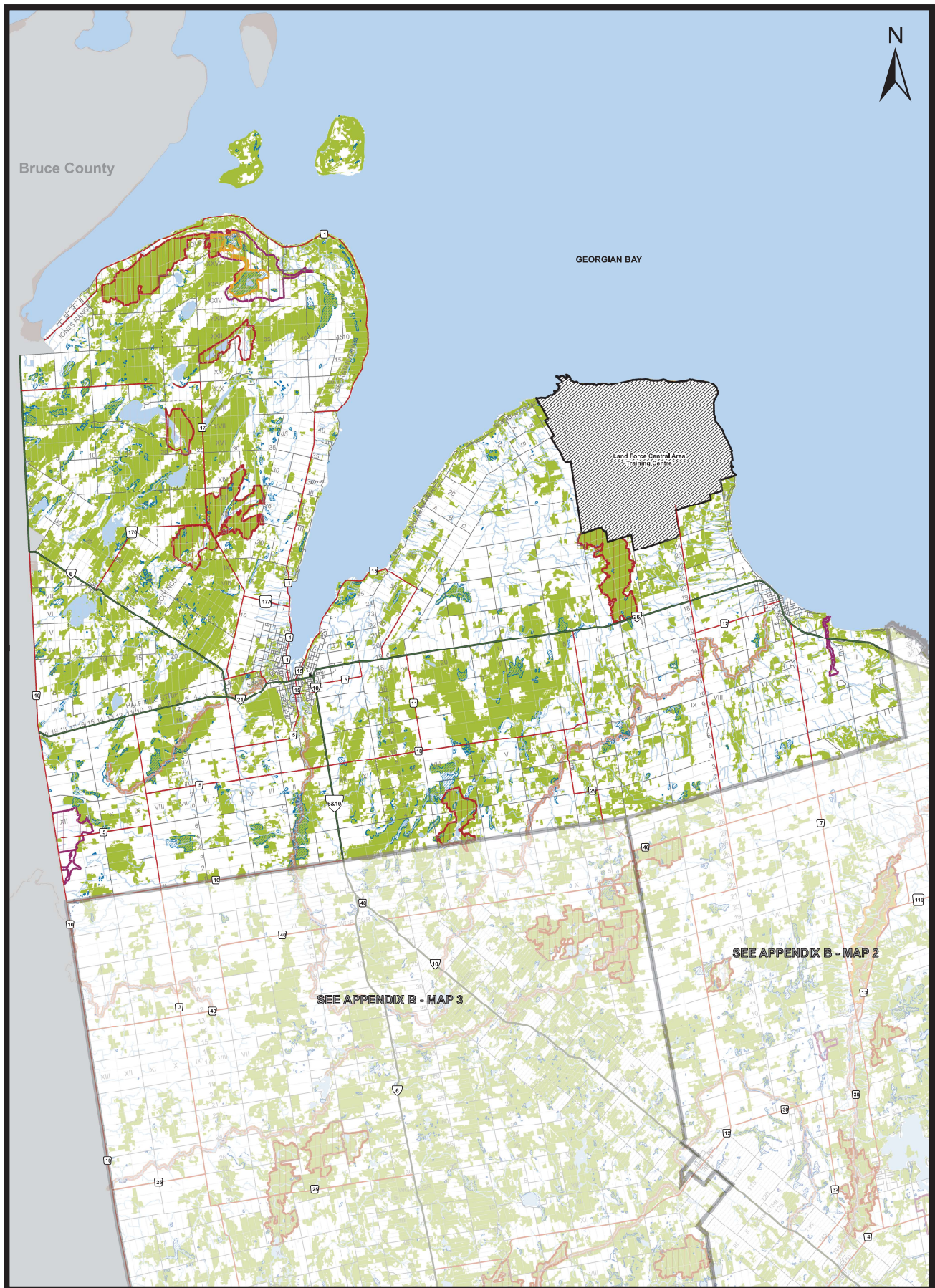
5.7 Space Extensive Industrial and Commercial

5.7.1 Background

The Space Extensive Industrial and Commercial *land use type*, as shown on Schedule A of this Plan, applies to those areas previously designated and approved for such *development*. Future expansion of this *land use type* will require an Official Plan amendment, and shall satisfy the criteria of this Plan.

5.7.2 Permitted Uses

- 1) Permitted uses include the following, in addition to uses that would generally satisfy the criteria established in 5.7.2(2):
 - a) Fuel distribution
 - b) Agricultural bulk sales establishment
 - c) Warehousing
 - d) Transport terminal
 - e) Dry manufacturing plant, including assembly, repair and storage
 - f) Equipment sales and rental
 - g) Farm machinery sales and service
 - h) Agricultural produce or *livestock* terminal
 - i) Feed mill or grain elevator
 - j) Sawmill
 - k) Horticultural nurseries
 - l) Automobile sales and services
 - m) Recreational vehicle sales and services
- 2) In addition to the uses permitted in 5.7.2(1), new uses would be permitted subject to satisfying all of the following criteria:
 - a) The use requires accessible sites to serve their market area;
 - b) The use serves demands from highway traffic;
 - c) The use requires a large parking or outdoor storage area or require a large volume single purpose building;
 - d) The location of the proposed use in a general industrial block or general retail block in an urban centre is not feasible due to its storage area or building volume requirements;



7.3.1 Provincially Significant Wetlands and Significant Coastal Wetlands

The identification and delineation of Provincially *Significant Wetlands* and *Significant Coastal Wetlands* is the responsibility of the Province. These features may be more accurately shown on mapping available from the Province.

- 1) No *development* or *site alteration* is permitted within the Provincially *Significant Wetlands* and *Significant Coastal Wetlands land use type* (shown on Schedule A), except where such activity is associated with forestry and uses connected with the conservation of water, soil, wildlife, and other natural resources but does not include buildings and will not negatively impact the integrity of the *Wetland*.
- 2) No *development* or *site alteration* may occur within the *adjacent lands* of the Provincially *Significant Wetlands* and *Significant Coastal Wetlands land use type* unless it has been demonstrated through an *environmental impact study*, as per Section 7.11 of this Plan, that there will be no *negative impacts* on the natural features or their *ecological functions*.

Development or *site alteration* within the *adjacent lands* of the Provincially *Significant Wetlands* and *Significant Coastal Wetlands land use type* will require a permit from the appropriate *conservation authority*.

- 3) Changes to the Provincially *Significant Wetlands* and *Significant Coastal Wetlands land use type* or the *adjacent lands* requires the approval of the Ministry of Natural Resources and Forestry or its delegated authority.

7.3.2 Other Wetlands

- 1) No *development* or *site alterations* are permitted within Other *Wetlands* or their *adjacent lands*, shown on Appendix B, or as identified by *conservation authorities*, unless it has been demonstrated that there will be no *negative impacts* on the natural features or on their *ecological functions*.

7.4 Significant Woodlands

Significant Woodlands mapping as shown on Appendix B was developed by the *County* of Grey with assistance from the Ministry of Natural Resources and Forestry (MNRF). The identification was primarily a desktop based Geographic Information Systems (GIS) exercise and the *County* acknowledges that inaccuracies or omissions in the mapping may be present. As a result, site visits by *qualified individuals* may be required at the application stage to scope any potential studies.

The *Significant Woodlands* layer was refined in 2017 by using data collected as part of the *Natural Heritage Systems Study – Green in Grey*, data from the MNRF and through airphoto analysis. Once the refinement occurred, it was then assessed through the original criteria used when creating the original *woodlands* layer and adjusted

accordingly. This has improved the accuracy of the data; however errors and omissions could still exist.

In order to be considered *significant*, a woodland shall be either greater than or equal to forty (40) hectares in size outside of *settlement areas*, or greater than or equal to four (4) hectares in size within *settlement area* boundaries. If a woodland fails to meet the size criteria outside a *settlement area*, a woodland can also be *significant* if it meets any two of the following three criteria:

- Proximity to other *woodlands* i.e. if a woodland was within 30 metres of another *significant* woodland, or
 - Overlap with the boundaries of a Provincially *Significant Wetland* and *Significant Coastal Wetlands*, *Core Area*, *Significant Valleylands*, or a *Significant Areas of Natural and Scientific Interest* , or
 - Interior habitat of greater than or equal to eight (8) hectares, with a 100 metre interior buffer on all sides.
- 1) No *development* or *site alteration* may occur within *Significant Woodlands* or their *adjacent lands* unless it has been demonstrated through an *environmental impact study*, as per Section 7.11 of this Plan, that there will be no *negative impacts* on the natural features or their *ecological functions*. *Adjacent lands* are defined in Section 7 and 9.18 of this Plan.

Projects undertaken by a municipality or *conservation authority* may be exempt from the *environmental impact study* requirements, provided said project is a public work or conservation project.
 - 2) Where it can be proven that a woodland identified as *significant* has ceased to exist, or ceased to exhibit characteristics of significance, an *environmental impact study* may not be required. Site photographs or a site visit by a *qualified individual* may be necessary to determine that a woodland no longer exists.
 - 3) Tree cutting and forestry will be permitted in accordance with the County Forest Management By-law (or successor thereto), and guided by the policies of Section 5.5 of this Plan.
 - 4) Fragmentation of *significant woodlands* is generally discouraged.
 - 5) *Significant Woodlands* are not meant to include orchards, nurseries, or holiday tree plantations. Where it can be demonstrated that the mapping inadvertently