

19.4 Environmental Study During the Development Process

A range of technical studies may be required to assess existing conditions, identify constraints and opportunities, and inform site design, mitigation, and potential monitoring requirements. Coordination with approval agencies will assist in identifying and scoping study requirements. Potential studies that are based on type of assessment are briefly outlined below. Determination of which technical aspects require consideration will be based on the features and conditions present on the site.

Natural Heritage Assessment documents terrestrial and, where applicable, aquatic features and functions. In-field survey requirements will be informed by site conditions and preliminary screening assessments. Preliminary assessments are used to identify potential targeted survey requirements, such as for some Species at Risk not readily captured through standard survey methods. Surveys will include some combination of the following: vegetation communities (i.e. Ecological Land Classification), botanical inventory (typically multi-season), birds, amphibians, mammals, reptiles, fish community and/or fish habitat, targeted surveys for Species at Risk. Habitat assessment(s) paired with survey results are used to assess feature and function sensitivities and significance (e.g., Significant Wildlife Habitat, Ontario Wetland Evaluations).

- » When Might This Study Be Used? To support land-based planning such as site selection for an initiative like the Seniors Village, or preparation of a Nature Area Management Plan.

Environmental Impact Study inventory consistent with a Natural Heritage Assessment, but extends to include an assessment of potential impacts associated with a proposed site alteration or development, recommend mitigation efforts, compensation, etc. An environmental impact study draws on information from a range of studies to establish a multi-disciplinary perspective on impacts.

- » When Might This Study Be Used? Completed when a site alteration or development moves forward to design stages, and is often required by approval agencies.

Hydrogeologic Study assesses existing conditions related to groundwater, water balance, and may include specialized tasks such as wetland water balance(s). May be completed to assess existing conditions or extend to consider impacts, mitigation, compensation, etc.

- » When Might This Study Be Used? Completed to inform land-based planning or when a site alteration or development moves forward to design stages.

Geomorphology or Landform Assessment – headwater drainage features (may be addressed through an environmental impact study or hydrogeological study), erosion, landform assessment (valleyland, glacial landforms). This assessment may be completed to assess existing conditions or extend to consider impacts, mitigation, compensation, etc.

- » When Might This Study Be Used? Completed to inform land-based planning or when a site alteration or development moves forward to design stages.