Municipality of Clarington | Soper Springs Secondary Plan

Landscape Analysis Report

Clarington

Draft

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1 Introduction

The Soper Springs Secondary Plan Study area, or the "Study Area" (**Figure 1**), is a 186 hectare area in the Municipality of Clarington, located at the north end of Bowmanville. It is generally bound by Liberty Street North to the west, Concession Road 3 to the south, and Lambs Road to the east. The Study Area's northern boundary runs 1 kilometre north and parallel to Concession Road 3.

Map C of the Clarington Official Plan (COP) identifies this area as requiring preparation of a Secondary Plan. The purpose of this report is to provide a landscape analysis as part of the background review and analysis of phase one of the study that will guide the preparation of a Secondary Plan.

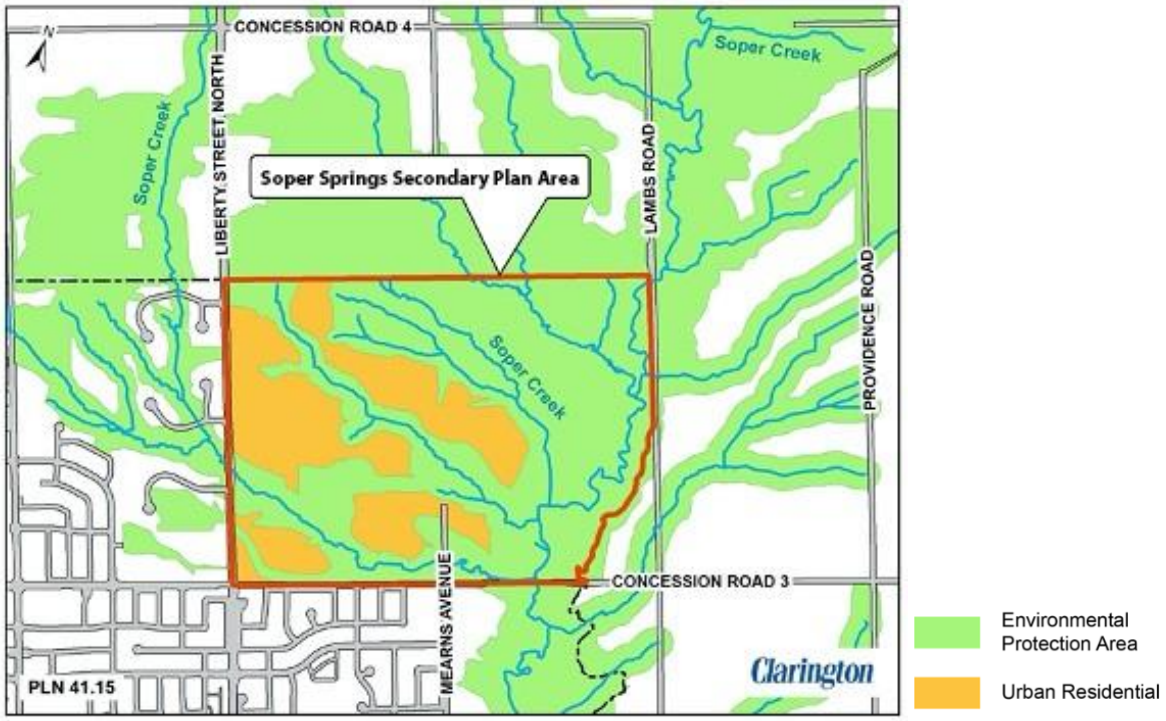

Figure 1: Soper Springs Secondary Plan Area Context
Source: Municipality of Clarington

The landscape analysis evaluates, describes and interprets the existing topography, built form and natural features and provides a site summary to inform the planning and design of the Soper Springs Secondary Plan. A review of the existing context, topography, natural features, and built form is provided to help to identify the

opportunities and constraints for the development of the Soper Springs Secondary Plan. The findings of the landscape analysis will be used to help inform Phase 2 of the Secondary Planning process.

1.1 Existing Context

A mixture of agricultural uses, natural areas, and private residential properties exist within and around the Study Area. A large portion of lands within the Soper Springs Secondary Plan boundary are designated as Environmental Protection Area (EPA) as noted on Map "A3" of the Clarington Official Plan shown in **Figure 2**. **Figure 3** clearly shows the mix of existing uses in the aerial view.

Soper Creek and agricultural properties lie to the east of the Study Area. Estate-style single-detached residential properties are located to the west of the Study Area, and residential subdivisions are located to the south. Lands designated Protected Countryside within the Greenbelt Plan begins directly north of the Secondary Plan boundary.

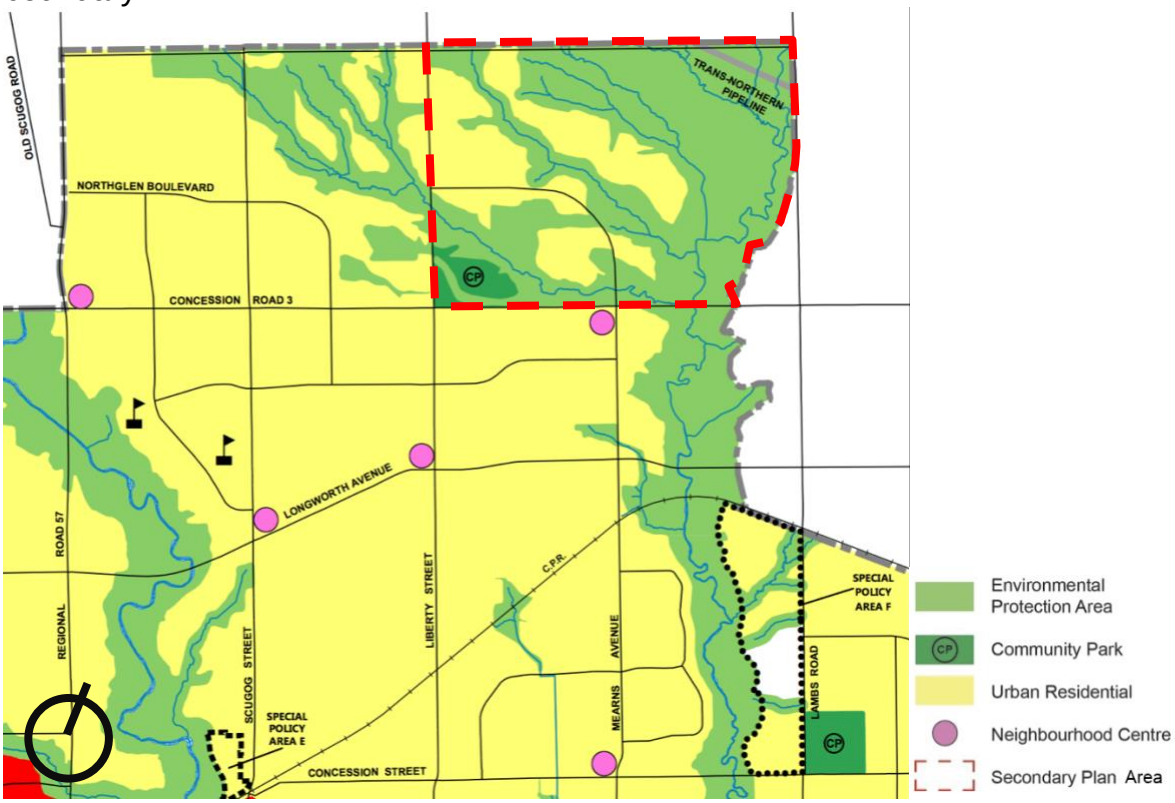

Figure 2: Study Area lands and surrounding area
Source Town of Clarington Official Plan

Figure 3: Aerial photo of the Study Area
Source Google Earth (Base)

1.2 Topography

The site's topography is varied, with the highest elevation at the northwest corner of the Study Area and the lowest elevation towards the southeast. The main branch of the Soper Creek flows through the eastern half of the study area with several tributaries throughout the study area flowing easterly towards the main branch, all within the natural heritage area (**Figure 4)**. The Study Area contains several high points and several ridges and valleys, contributing to a rolling landscape as seen in **Figures 5 and 6**.

The highest point is located on the north western side of the property, along Liberty Street North, 50 metres above the lowest point in the Study Area, as highlighted in **Figure 4**. As a result of its rolling characteristic, there are few flat areas, with mostflat lands being associated with existing residential properties along Liberty Street North. **Figure 5** shows the varied topographic characteristic of this high point, located north of Concession Road 3 and west of Mearns Road, with a 15 metre change in elevation from the highest point to the lowest point within a short distance.

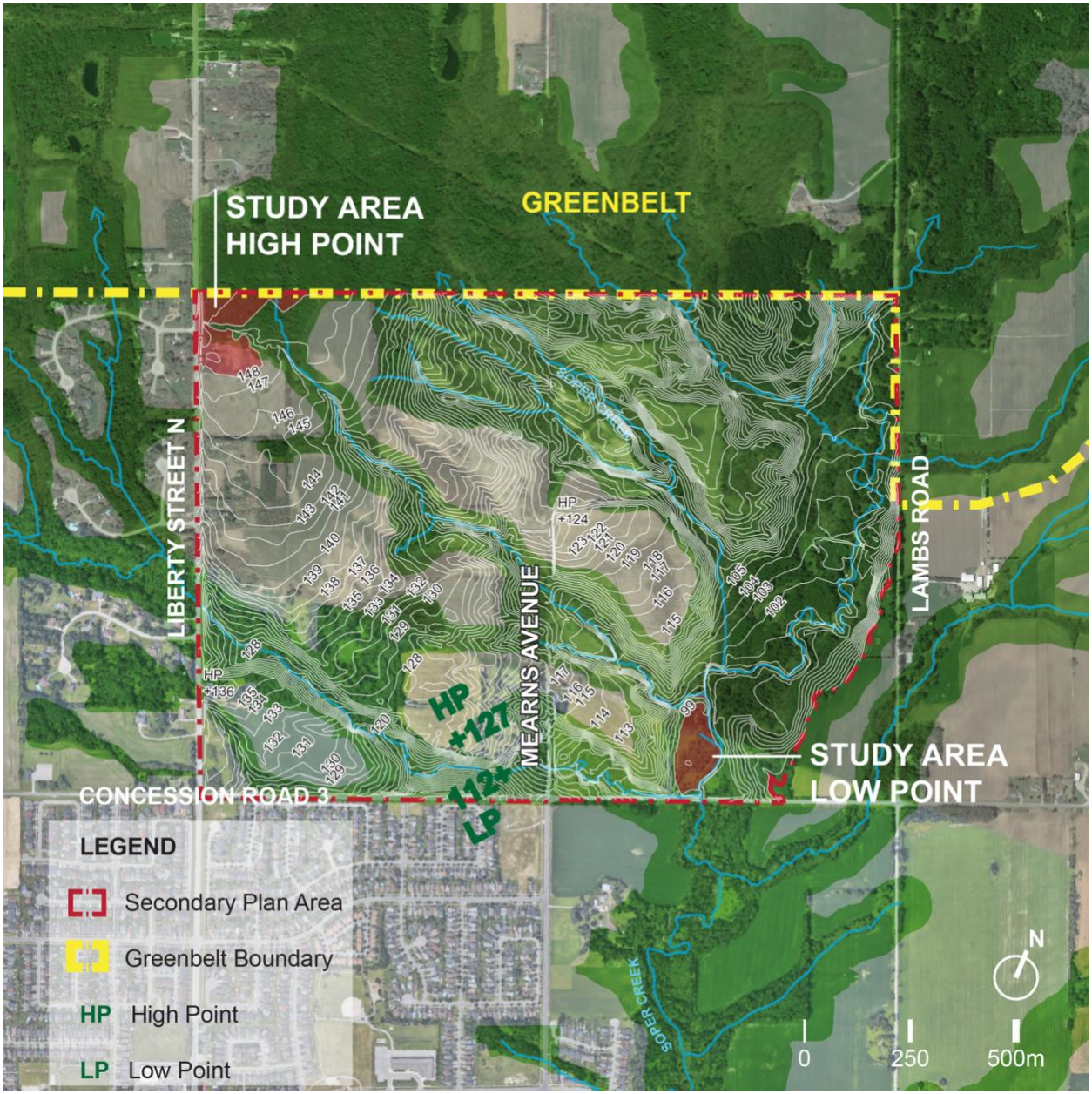

Figure 4: Topographical map of the Soper Springs Secondary Plan Area with 1-meter intervals.
Source Google Earth (Base)

The Soper Creek tributary runs through the eastern half of the Study Area, creating low

lying topography. The Soper Creek tributary provides a gentle valley feature within the subject lands as shown in **Figures 4, 5 and 6**.

Figure 5: High point (elevation in metres) located in the south of the Study Area, near the corner ofConcession Road 3 and Mearns Avenue.
Source: Google Earth

Figure 6: The Study Area's topography is highly varied, due to the presence of the Soper Creek tributary to the east of the site. This image, looking southeast from Liberty Street N to the intersection of Concession Road 3 also shows the density of wooded areas within the subject lands.
Source: Google Earth

1.3 Built Form

Within the Study Area, the existing built form consists largely of estate-style single-detached residential properties and agricultural buildings and structures such as barns and sheds, and one communication tower along Mearns Avenue as shown on **Figure 7**.

Figure 7: Existing Buildings
Source: Google Earth (Base)

Natural Features

1.4.1 Wooded Features

As noted above, a large portion of lands within the Secondary Plan are designated as Environmental Protection Area (EPA). **Figure 8** identifies other wooded features including hedgerows, wooded areas adjacent to or associated with residential properties, trees bordering the Soper Creek tributaries, and trees on the roadside that border the Study Area that are located outside the EPA.

Figure 8: Other Wooded features exist on the property outside the designated EPA, near residential properties, along the roadside and as stand-alone groupings.

Source: Google Earth and the Municipality of Clarington (Base)

1.4.2 Creek Corridor

A main tributary to Soper Creek runs north-south, to the east of the Study Area and is largely contained within the designated EPA as shown in **Figure 8**. Several small tributaries cross the Study Area diagonally, draining into Soper Creek as seen in **Figure 8**. The subject lands also contain several smaller streams and pond areas as identified in **Figure 9.** The defined shape and edge condition of the ponds suggest they are likely constructed, and associated with nearby residential or agriculture properties.

The tributary areas are low lying with creek banks that are largely vegetated with grasses, shrubs and mature trees, as seen in **Figure 10**.

Figure 9: Ponds within Study Area
Source: Google Earth (Base

Figure 10: Soper Creek tributary in the eastern portion of the Study Area, located north of Concession Road 3 and east of Mearns Avenue.
Source: Google Earth

1.5 Opportunities and Constraints

This landscape analysis is based on observation and photos of the Study Area. The ongoing Soper Creek Subwatershed Study will provide more detailed identification of significantnatural heritage features requiring protection and maintenance.

At this point in the process, based on the existing context, topography, built form and natural features, the following are landscape opportunities and constraints within the Soper Creek Secondary Plan Area.

1.5.1 Opportunities

The landscape analysis shows the Study Area is largely protected under the EPA designation of the Official Plan and is comprised of heavily wooded areas that cover more than half of the site. This presents opportunities to capitalize on the unique natural heritage of the area by:

1. Preserving views from high points;
2. Integrating and protecting natural features;
3. Providing public access to nature; and
4. Establishing cluster developments.

1.5.1.1 Preserving views from high points

The existing topographical features includes one notable high point and highly varied topography with several peaks and valleys as shown in **Figures 4, 5 and 6**.

An opportunity exists to maintain areas of higher elevation to provide some variety to the site and allow for a potential view to Soper Creek. There is a potential for open space and road patterns to be designed to take advantage of the views from high points.

1.5.1.2 Integration of natural features

The Soper Creek, its tributaries and associated features within the valley shown in **Figures 4, 5, 6 and 8,** is currently protected within the EPA designation of the Official Plan, and its boundary will be further defined through the Soper Creek Subwatershed Study that is currently underway. This feature presents opportunities to create unique settlement areas surrounded by stream corridors and wooded edges with connection to trail systems along the Soper Creek corridor (**Figure 12**).

Integration of trees not within the EPA into the development should be considered where feasible. Maintenance of these features should be based on their overall health, age, and quality as assessed during the preparation of Planning Act applications. Tree preservation would be subject to findings from a site-specific Natural Heritage Study and/or Tree Inventoryand Assessment while also recognizing the limited amount of developable lands.

1.5.1.3 Public Access to Nature

Substantial opportunities are afforded by the landscape to integrate EPAs with formalized parks and open spaces to provide greater access to nature. As **Figure 12** shows, the Clarington Official Plan designates a Community Park near the intersectionof Concession Road 3 and Liberty Street North. The Community Park is proposed where currently an agriculture field is located (**Figure 11**). The placement of the Community Park in this location provides a central location near a major intersection, in proximity to residential properties to the south, and adjacency to EPAs and urban trails. Four other Community Parks are identified in Map "K" of the Clarington Official Plan (**Figure 12**), with two Community Parks not yet developed (within the Soper Springs and Soper Hills Secondary Plan areas). The Soper Springs Secondary Plan will provide policy direction for ensuring public connections to open space and parks are created through the development process.

The location of the proposed Community Park designation provides one option for the placement of this community-wide facility, however alternative options for sizing and placement of parks should be considered through the study process. A Community Park located adjacent to the EPA presents one option for integrating active parks uses adjacent to Town-wide natural systems and trails, in a manner that preserves the natural features. If, through this Study, a Community Park is determined to be inappropriate for the Soper Springs Secondary Plan an alternative option may consider the inclusion of smaller Neighbourhood Parks and Parkettes to supplement park needs.

Figure 11: Location of Community Park area as shown in Clarington's Official Plan and conceptual alignment of Urban Trail
Source: Google Earth and Clarington Official Plan (Base)

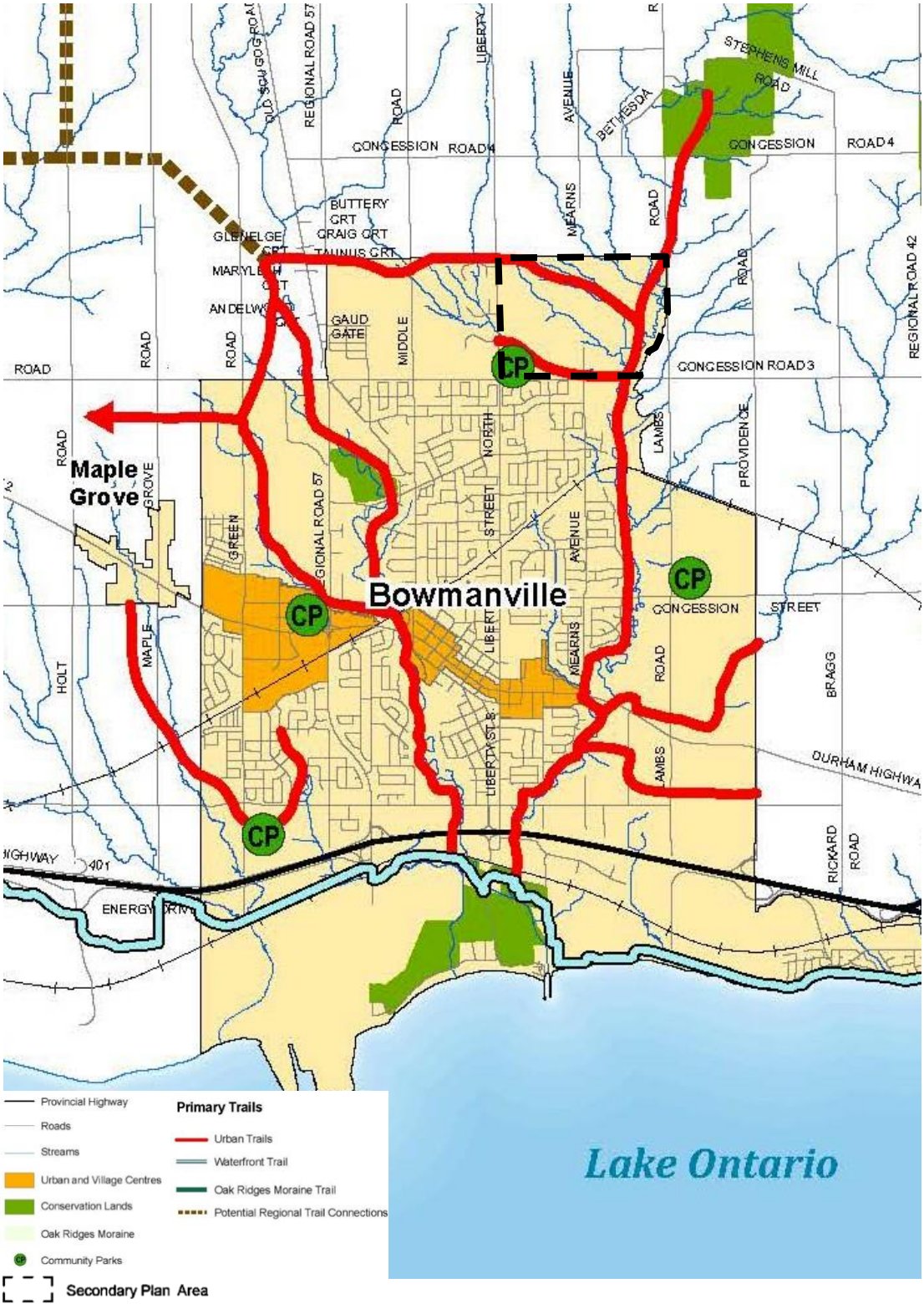

Figure 12: Map "K" of the Clarington Official Plan, showing trail system for Bowmanville

Source: Clarington Official Plan (Base)

1.5.1.4 Cluster Developments

The nature of the Study Area's environmental features presents a unique opportunity for the implementation of clusters of residential developments in the small pockets of designated urban residential areas along edges of the EPA, creating residential enclaves surrounded by dense wooded features. Development could take the form of townhouses, stacked townhouses, walk up apartments or similar to maximize developable area and provide opportunities for one-of-a-kind placemaking within Bowmanville.

1.5.2 Constraints

1.5.2.1 Developable Area

The Study Area's extensive EPA designated areas present obvious constraints to development. Developable area is constrained to less than half of the Secondary Plan Area. Any development that occurs must also consider the sensitive nature of the surrounding environmental area. Section 14.4.5 of the Clarington Official Plan permits developmentwithin the EPA designation to:

a) Low-intensity recreation;

b) Uses related to forest, fish and wildlife management;

c) Erosion control and stormwater management; and

d) Agriculture, agricultural related and on-farm diversified uses in accordance with Section 3.4.8.

Based on this analysis, the density and arrangement of land uses will be explored throughout the study process as land use options develop in Phase 2.

1.5.2.2 Road Access

Road access to developable areas also presents challenges. Mearns Avenue, which extends from Concession Road 3, and Liberty Street North provide the only existing access point to the Secondary Plan area. Mearns Avenue has potential for extension through the developable area of the Secondary Plan. **Figure 2** shows one option of curving through designated Urban Residential lands to connect to Liberty Street North. Other options for access to the site will be considered in the next stage of the study as part of the land use concepts. However, the number and location of roads will need to be carefully evaluated to ensure minimal impact to sensitive natural heritage features.

1.5.3 Conclusion

The Soper Spring Secondary Plan area provides a unique potential for development within a natural setting. Its rolling topography provides opportunities for enhanced views to the nearby Soper Creek. Parks and open spaces have the potential to connectto the larger municipal trail system that eventually connects to Bowmanville's future waterfront

trails. Development of these lands must, however, be sensitive to designated EPAs. Proposed land uses within this Secondary Plan area could include higher density development, such as townhouses or apartments, in order to maximize developable land. Options for residential clustering that provides a range of housing densities will be considered in Phase 2 of the study.

2 Next Steps

The Landscape Analysis Report, Sustainability and Green Principles Report, and Summary Background Report will be presented to the Steering Committee for review and input prior to the completion of the final Reports. Findings from the reports will be presented to the public in an online Open House. The Open House will seek to gain additional insights by members of the public and relevant stakeholders in order to develop a vision for this new community. The input received will help confirm the Illustrated Urban Design and Sustainability Principles and the development of Alternative Land Use and Infrastructure Plans for Phase 2 of this Study.