



McKINLEY
ENVIRONMENTAL
SOLUTIONS

Combined Environmental Impact Statement &
Tree Conservation Report
Aquaview Stage 1 & 2 Development



March 2018
Prepared for Minto Communities

McKINLEY ENVIRONMENTAL SOLUTIONS
613-620-2255 | mckinleyenvironmental@gmail.com
www.mckinleyenvironmental.com

EXECUTIVE SUMMARY	1
1.0 INTRODUCTION	3
1.1 Reading the Tree Conservation Report (TCR).....	3
1.2 Scoping the Environmental Impact Statement	3
1.3 Site Overview (TCR).....	4
1.4 Description of Undertaking (TCR).....	6
1.5 Agency Consultation	8
1.6 Regulatory Requirements	8
2.0 METHODOLOGY	9
2.0.1 Tree Inventory Methodology and Definitions (TCR)	9
2.0.2 EIS Methodology.....	9
3.0 EXISTING CONDITIONS	10
3.1 Geological Conditions	10
3.2 Site History (TCR).....	10
3.3 Vegetation Communities (TCR).....	13
3.4 Tree Inventory (TCR).....	18
3.5 Wetlands and Watercourses.....	23
3.6 Adjacent Lands and Significant Features	24
3.7 Wildlife and Significant Wildlife Habitat	25
3.8 Species at Risk	25
3.9 Linkages	27
4.0 DESCRIPTION OF ENVIRONMENTAL IMPACTS AND MITIGATION	28
4.1 Terrestrial Habitat and Tree Removal (TCR)	28
4.1.1 Tree Retention and Tree Protection Measures (TCR).....	28
4.1.2 Replanting (TCR).....	29
4.2 Servicing and Stormwater Management.....	30
4.3 Sediment and Erosion Controls	30
4.4 Adjacent Lands and Significant Features	31
4.5 Wildlife and Species at Risk	32



5.0	CUMULATIVE EFFECTS	33
6.0	ADDITIONAL STUDIES	33
7.0	CLOSURE	34
8.0	REFERENCES	35

LIST OF FIGURES

Draft Plan of Subdivision

Figure 1: Site Overview

Figure 2: Vegetation Communities

Figure 3: Tree Locations

Appendix A – Master Plant List

Appendix B – Bird and Wildlife Species Lists

Appendix C – OMNRF Information Request Response

EXECUTIVE SUMMARY

McKinley Environmental Solutions (MES) was retained by Minto Communities (Minto) to prepare a Combined Environmental Impact Statement (EIS) and Tree Conservation Report (TCR) to support the proposed development of the Aquaview Stage 1 & 2 parcels. The Site includes two (2) adjacent parcels which are owned by Minto Communities (Concession 10, Part of Lots 1 & 2 (Cumberland)). The Aquaview Stage 2 parcel (PIN #145254817) is approximately 7.86 ha (19.41 acres) in size. The Aquaview Stage 1 parcel (PIN #145253352) is approximately 2.56 ha (6.33 acres) in size. Both parcels are zoned Development Reserve. The parcels are located in Orleans within the urban area of the City of Ottawa. Both parcels were cleared and partially graded in the early 2000s during the development of the adjacent subdivisions, and are currently in a pre-development condition. At the current time, both parcels are dominated by highly disturbed recent regrowth Cultural Meadow. Tree cover is very sparse and is limited to several small stands of planted trees and recent regrowth. Tree removal requirements are anticipated to be negligible, due to the limited number of trees found within the development area.

The area surrounding both parcels is predominantly previously developed and includes residential and commercial properties, roads, the constructed Avalon North Stormwater Management Pond, and City parkland/recreational trails. The only natural features found in the vicinity of the Site are the landscaping features within the City parkland and around the stormwater management pond, and a vacant field located west of the Aquaview Stage 2 parcel (on the opposite side of 10th Line Road). Planted trees located along the roads, within the City parkland, and around the Avalon North Stormwater Management Pond will be protected during Site development by tree preservation measures.

The development proposal includes the construction of new subdivisions within the Aquaview Stage 1 & 2 parcels. The Aquaview Stage 2 parcel will include approximately 58 avenue townhomes, 35 rear lane townhomes, and 181 executive townhome units, for a total of approximately 274 units. The proposed Cumberland Bus Rapid Transit (BRT) corridor is located north of Aquaview Stage 2. In order to allow for the future construction of the Cumberland BRT, an approximately 0.35 ha triangular block of land (Block 105) located along the northern edge of the Aquaview Stage 2 parcel will be transferred to the City of Ottawa. Aquaview Stage 2 will also include approximately 0.04 ha of open space blocks (Block 102 to 104) adjacent to the proposed Cumberland BRT Corridor. The Aquaview Stage 1 parcel will include approximately 48 single detached homes. Both parcels will receive municipal sewer and water. Stormwater runoff from both parcels will be directed towards the existing Avalon North Stormwater Management Pond, which is located between the two (2) parcels.

There are no wetlands, watercourses, Significant Woodlots, Areas of Natural and Scientific Interest, Urban Natural Areas, areas of Significant Wildlife Habitat or other designated natural heritage features found within the Site or in the immediately surrounding area. There are currently no known Species at Risk concerns for the Site. However, recent sightings of nesting Eastern Meadowlark and Bobolink have been documented in the region surrounding the Site. The majority of the Site provides potentially suitable habitat for these species. Therefore, a targeted survey for threatened Bobolink and Eastern Meadowlark is required to be completed in the spring and summer of 2018. The survey results will be provided in an addendum to this report. The addendum will identify regulatory requirements under the Endangered Species Act (if any), based on the survey results.

Pending that the regulatory, mitigation, and avoidance measures outlined in this report are implemented appropriately, the development is not anticipated to have a significant negative effect on the natural features and functions.



1.0 INTRODUCTION

1.1 Reading the Tree Conservation Report (TCR)

This report is presented as a Combined Environmental Impact Statement (EIS) and Tree Conservation Report (TCR). Readers who are principally interested in the TCR may choose to read only those portions of the report where the section headings are marked **(TCR)**. This includes Sections 1.1, 1.3, 1.4, 2.0.1, 3.2, 3.3, 3.4, and 4.1. Readers who are interested in the EIS should read the entire report, as information included in the TCR sections is not reiterated.

1.2 Scoping the Environmental Impact Statement

This EIS was undertaken following the City of Ottawa's Environmental Impact Statement Guidelines. Following the City guidelines, the Environmental Impact Statement (EIS) includes the following:

- Documentation of existing natural features on and around the Site;
- Identification of potential environmental impacts of the project;
- Recommendations for ways to avoid and reduce any negative impacts; and
- Proposal of ways to enhance natural features and functions.

This EIS was prepared with guidance from the *Natural Heritage Reference Manual* (OMNRF 2005). The major objective of this EIS is to demonstrate that the proposed project will not negatively affect the significant features and functions of the study area, and that impacts will be minimized through mitigation measures.

1.3 Site Overview (TCR)

The Site includes two (2) adjacent parcels which are owned by Minto Communities (Figure 1) (Concession 10, Part of Lots 1 & 2 (Cumberland)). The Aquaview Stage 2 parcel (PIN #145254817) is approximately 7.86 ha (19.41 acres) in size. The Aquaview Stage 1 parcel (PIN #145253352) is approximately 2.56 ha (6.33 acres) in size. Both parcels are zoned Development Reserve. The parcels are located in Orleans within the urban area of the City of Ottawa. Both parcels were cleared and partially graded in the early 2000s during the development of the adjacent subdivisions, and are currently in a pre-development condition. At the current time, both parcels are dominated by highly disturbed recent regrowth Cultural Meadow. Tree cover is very sparse and is limited to several small stands of planted trees and recent regrowth.

The Aquaview Stage 2 parcel is bordered to the north by the proposed Cumberland Bus Rapid Transit (BRT) corridor, beyond which are developed commercial properties. The area northeast of the Aquaview Stage 2 parcel includes a developed residential subdivision. Aquaview Drive is located southeast of the Aquaview Stage 2 parcel, whereas Lakepointe Drive and 10th Line Road are located to the south and west (respectively). A vacant field is located further west of the Aquaview Stage 2 parcel (beyond 10th Line Road). The Avalon North Stormwater Management Pond, recreational trails, and adjacent City parkland lies between the Aquaview Stage 1 & 2 parcels. Landscaping features are present around the stormwater management pond, including stands of planted Deciduous Trees, which border the northern edge of the Aquaview Stage 1 parcel. The area east of the Aquaview Stage 1 parcel includes a City park, whereas Aquaview Drive is located to the south and west. The areas surrounding both parcels are therefore predominantly previously developed and include residential and commercial properties, roads, the Avalon North Stormwater Management Pond and City parkland/recreational trails. The only natural features found in the vicinity of the Site are the landscaping features within the City parkland and around the stormwater management pond, and the vacant field located west of the Aquaview Stage 2 parcel (on the opposite side of 10th Line Road).

FIGURE 1: SITE OVERVIEW

Aquaview Stage 1 & 2 Development

Combined Environmental Impact Statement & Tree Conservation Report



 - Site Limits

Please Note: This is not a legal land survey. All dimensions and locations are shown as approximate.

1.4 Description of Undertaking (TCR)

The Draft Plan of Subdivision is included below. The development proposal includes the construction of new subdivisions within the Aquaview Stage 1 & 2 parcels. The Aquaview Stage 2 parcel will include approximately 58 avenue townhomes, 35 rear lane townhomes, and 181 executive townhome units, for a total of approximately 274 units. The proposed Cumberland Bus Rapid Transit (BRT) corridor is located north of Aquaview Stage 2. In order to allow for the future construction of the Cumberland BRT, an approximately 0.35 ha triangular block of land (Block 105) located along the northern edge of the Aquaview Stage 2 parcel will be transferred to the City of Ottawa. Aquaview Stage 2 will also include approximately 0.04 ha of open space blocks (Blocks 102 to 104) adjacent to the proposed Cumberland BRT Corridor. The Aquaview Stage 1 parcel will include approximately 48 single detached homes. Both parcels will receive municipal sewer and water. Stormwater runoff from both parcels will be directed towards the existing Avalon North Stormwater Management Pond, which is located between the two (2) parcels.



23. March 2018, 9:44 AM

SUBJECT TO THE CONDITIONS, IF ANY, SET FORTH IN OUR LETTER DATED 20 THIS DRAFT PLAN IS APPROVED BY THE CITY OF OTTAWA UNDER SECTION 51 OF THE PLANNING ACT. THIS DAY OF 2018.

JEFF MCEWEN, P. ENG
MANAGER, DEVELOPMENT REVIEW-EAST
PLANNING, INFRASTRUCTURE AND ECONOMIC
DEVELOPMENT DEPARTMENT, CITY OF OTTAWA



DRAFT PLAN OF SUBDIVISION of

BLOCK 12 REGISTERED PLAN 4M-1253 AND BLOCK 205 REGISTERED PLAN 4M-1172 PART OF LOT 2 CONCESSION 10 (GEOGRAPHIC TOWNSHIP OF CUMBERLAND) CITY OF OTTAWA

Scale 1:1000
DISTANCES AND COORDINATES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

SCHEDULE OF LAND USE (Stage 1)			
LOT	USE	UNITS	AREA (Ha/ac)
1 to 48	Singles	48	2.14/5.30
Street	Street	*	0.42/1.03
Total		48	2.56/6.33

SCHEDULE OF LAND USE (Stage 2)			
BLOCK	USE	UNITS	AREA (Ha/ac)
58 to 87, 94 to 101	Executive Townhomes	181	3.82/9.45
88 to 93	Average Townhomes (B2B)	58	0.69/1.70
49 to 57	Rear Lane Townhomes	35	0.57/1.41
102 to 104	Open Space		0.04/0.09
105	Transway		0.35/0.85
Streets	Streets		2.39/5.91
Total		274	7.84/19.41

INFORMATION REQUIRED UNDER SECTION 51 (7) OF THE PLANNING ACT R.S.O. 1990

- a. SEE PLAN
- b. SEE PLAN
- c. SEE PLAN
- d. SEE PROPOSED LAND USE SCHEDULE (ABOVE)
- e. SEE PLAN
- f. SEE PLAN
- g. SEE PLAN
- h. CITY WATER AVAILABLE
- i. SEE SOIL REPORT
- j. SEE TOPOGRAPHICAL INFORMATION
- k. ALL CITY SERVICES AVAILABLE
- l. SUBJECT TO EASEMENT PER INST. NO. 0C422759.

OWNER'S CERTIFICATE
I HEREBY AUTHORIZE STANTEC GEOMATICS LTD. TO SUBMIT THIS DRAFT PLAN OF SUBDIVISION ON MY BEHALF

MINTO COMMUNITIES INC.

DATE	DATE
SUSAN MURPHY VICE PRESIDENT	BRENT STRACHAN SENIOR VICE PRESIDENT
I HAVE THE AUTHORITY TO BIND THE CORPORATION	I HAVE THE AUTHORITY TO BIND THE CORPORATION

OWNER'S CERTIFICATE
I HEREBY AUTHORIZE STANTEC GEOMATICS LTD. TO SUBMIT THIS DRAFT PLAN OF SUBDIVISION ON MY BEHALF

CITY OF OTTAWA

DATE

JEFF MCEWEN, P. ENG
MANAGER, DEVELOPMENT REVIEW-EAST
PLANNING, INFRASTRUCTURE AND ECONOMIC
DEVELOPMENT DEPARTMENT, CITY OF OTTAWA

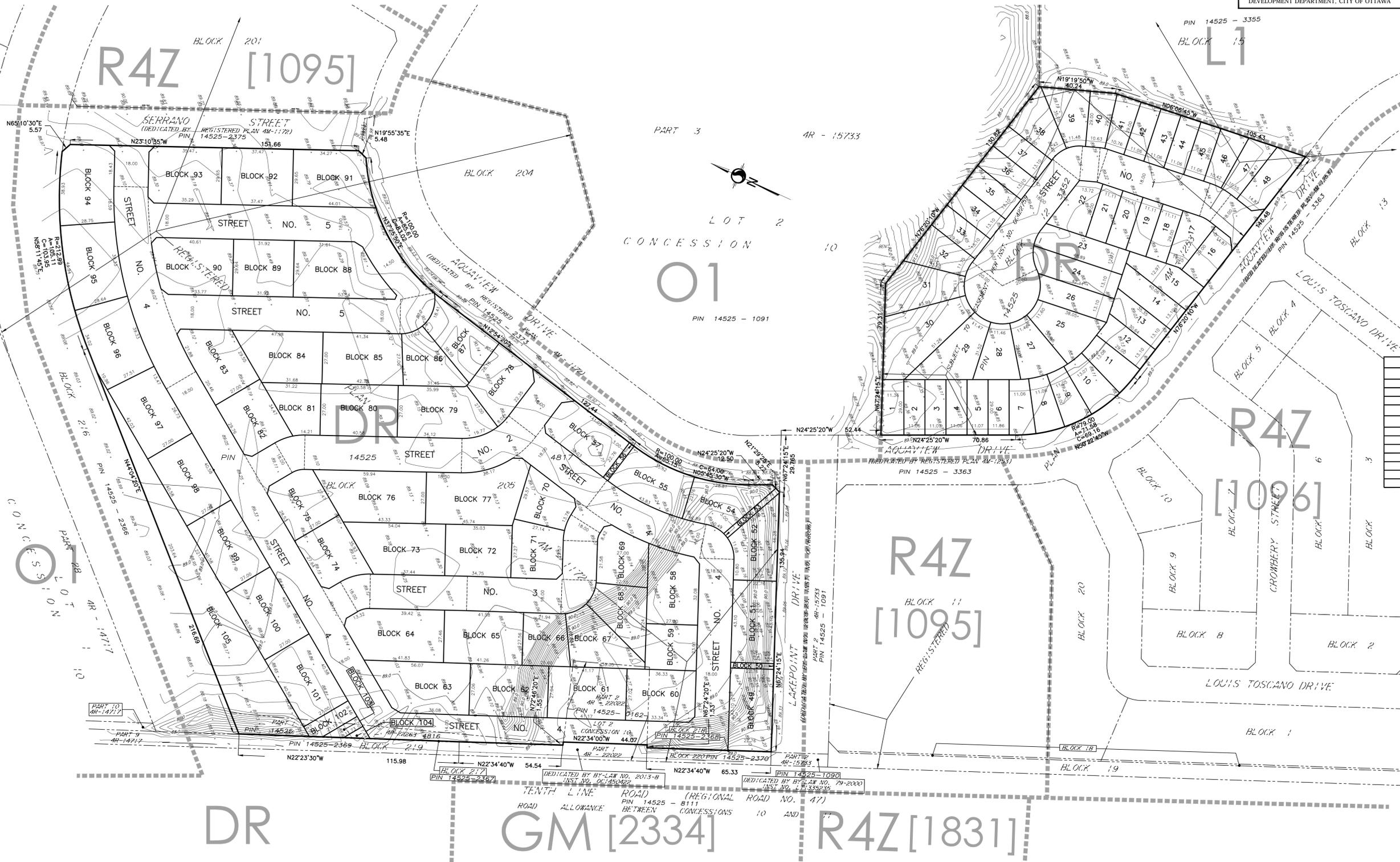
SURVEYOR'S CERTIFICATE
I HEREBY CERTIFY THAT THE BOUNDARIES OF THE SUBJECT LANDS AND THEIR RELATIONSHIP TO ADJOINING LANDS HAVE BEEN ACCURATELY AND CORRECTLY SHOWN.

DATE

BRIAN J. WEBSTER
ONTARIO LAND SURVEYOR

Stantec Geomatics Ltd.
CANADA LANDS SURVEYORS
ONTARIO LAND SURVEYORS
1331 CLYDE AVENUE, SUITE 400
OTTAWA, ONTARIO, K2C 3G4
TEL. 613.722.4420 FAX. 613.722.2799
stantec.com

DRAWN: CEC CHECKED: * PW: KJ FIELD: * PROJECT No.: 16161371-131



NOTE:
THE PLAN DATA IS COMPILED FROM OFFICE RECORDS OF STANTEC GEOMATICS LTD. AND HAS NOT BEEN VERIFIED BY FIELD MEASUREMENTS. ALL DISTANCES ARE APPROXIMATE, TO BE VERIFIED BY FINAL REGISTERED PLAN(S).

1.5 Agency Consultation

The City of Ottawa was contacted by the proponent, and the Rideau Valley Conservation Authority (RVCA) will be circulated as part of the development application review. An Information and Records Request Response was received from the Ontario Ministry of Natural Resources and Forestry (OMNRF) Kemptville District (Appendix C).

1.6 Regulatory Requirements

As discussed in greater detail in the following sections, no wetland features or watercourses occur within the vicinity of the Site. Therefore, there are no development activities proposed which would necessitate obtaining a permit from the RVCA under Ontario Regulation 153/06. Similarly, there are no areas of fish habitat anticipated to be impacted by the development, and therefore a review and/or authorization under the *Fisheries Act* should not be required.

There are currently no known Species at Risk (SAR) concerns for the Site. As noted below in Section 6.0, a targeted survey for threatened Bobolink and Eastern Meadowlark is required to be completed in the spring and summer of 2018. The survey results will be provided in an addendum to this report. The addendum will identify regulatory requirements under the Endangered Species Act (ESA) (if any), based on the survey results.

Lastly, the City of Ottawa may require the proponent to obtain a Tree Removal Permit prior to tree clearing. However, tree removal is anticipated to be limited to the removal of a few young regrowth stems.

2.0 METHODOLOGY

2.0.1 Tree Inventory Methodology and Definitions (TCR)

A Site visit to inventory plants and measure tree sizes was completed on October 26th, 2017. Weather conditions during the Site visit included sunny skies and 6 °C. Weather conditions were typical of late autumn, however, most trees retained sufficient leaf coverage to allow accurate identification. The majority of the Site lacks mature tree cover (e.g. trees >10 cm dbh), and so measurement plots were not undertaken to inventory trees. Instead, individual trees were measured where they occur within the Site. Tree size measurements were taken using a D-tape, which is a calibrated diameter at breast height tape. Measurements for each of the qualifying trees (>10 cm dbh) were taken 1.2 m from the ground surface and recorded.

The following terms are used throughout this report:

- Diameter at Breast Height (dbh) means the measurement of the trunk of a tree at a height of 120 cm above grade for trees 15 cm diameter or greater, and at a height of 30 cm above grade for trees less than 15 cm diameter.
- The Critical Root Zone (CRZ) is 10 centimeters from the trunk of the tree for every centimeter of trunk dbh. The CRZ is calculated as dbh x 10 cm.

2.0.2 EIS Methodology

The presence of natural heritage features was assessed by completing the following:

- Site visit to describe vegetation communities and inventory plants;
- Site visit to assess the potential for habitat of Species at Risk, wetlands, fish habitat, amphibian breeding habitat, Significant Wildlife Habitat features, and other significant habitat features to be present;
- Classification of plant communities according to the Ecological Land Classification (ELC) method;
- Review of Official Plan designations;
- Examination of aerial imagery to evaluate landscape features;
- Natural Heritage Information Center (NHIC) database review;
- Obtainment of an Information and Records Request Response from the OMNRF (Appendix C); and
- Review of the background geo-technical report.

As noted below in Section 6.0, a targeted survey for threatened Bobolink and Eastern Meadowlark is required to be completed in the spring and summer of 2018. The survey methods and results will be provided in an addendum to this report.

3.0 EXISTING CONDITIONS

3.1 Geological Conditions

Both parcels were partially graded during the development of the adjacent subdivisions in the early 2000s (discussed below). As such, both parcels are flat and occur at an elevation of approximately 88 m ASL. Both parcels are well drained.

3.2 Site History (TCR)

Air photos from 1976, 1991, 1999 and 2002 are included below (Photos from City of Ottawa 2017). A recent air photo is included in Figure 1. The oldest available historic air photo (from 1976), shows that the Site and the surrounding area was intensively farmed in 1976. A farmhouse was present along 10th Line Road in 1976. By 1991, limited regrowth of trees and shrubs is visible within the Site, although the area continues to be predominantly farmed (perhaps used as a hayfield). Mature trees are present around the farmhouse in 1991, some of which have been retained at the Site and currently occur within Tree Stand #2 (discussed below). By 1999, portions of the Site showed additional tree and shrub regeneration, particularly the northern portion of the Aquaview Stage 1 parcel. Development of the subdivisions and commercial properties surrounding the Site began around 2002, during which the Site was cleared and graded. The Avalon North Stormwater Management Pond was also under construction in 2002, and adjacent landscaping features would have been planted after 2002 (following completion of the stormwater management pond). In 2002, the only trees that remained within the Site were those surrounding the farmhouse. Some of the mature trees surrounding the farmhouse continue to be found within Tree Stand #2. The farmhouse is no longer found within the Site, and was demolished after 2002.



Photograph 1: Historic Air Photo from 1976 (property boundary shown in red). The Site and surrounding areas are farmed. A farmhouse is present in the Aquaview Stage 2 parcel (Photos from City of Ottawa 2017).



Photograph 2: Historic Air Photo from 1991 (property boundary shown in red). The Site and surrounding areas are farmed. Limited tree/shrub growth is visible in the Site and around the farmhouse (Photos from City of Ottawa 2017).





Photograph 3: Historic Air Photo from 1999 (property boundary shown in red). The Site and surrounding areas are farmed. Continuing tree/shrub growth is visible in the Site and around the farmhouse (Photos from City of Ottawa 2017).



Photograph 4: Historic Air Photo from 2002 (property boundary shown in red). The Site and surrounding areas have been cleared and graded for development. The stormwater pond is under construction (Photos from City of Ottawa 2017).



3.3 Vegetation Communities (TCR)

Plant species noted within the Site are listed in Appendix A. As noted above, both parcels were cleared and partially graded in the early 2000s. Currently, the majority of both parcels consists of Cultural Meadow. The Cultural Meadows are dominated by grasses including Brome Grass, Orchard Grass, Barnyard Grass, Timothy, and Reed Canary Grass. Herbaceous groundcover is dominated by invasive weed species that are typical of recently disturbed areas. The most common herbaceous plants found within the Cultural Meadows include Canada Goldenrod, Common Burdock, Common Ragweed, Lamb's Quarter's Pigweed, Chickory, Common Yarrow, Canada Thistle, Bull Thistle, Queen Anne's Lace, Daisy Fleabane, Ox-eye Daisy, Bird's Foot Trefoil, White Sweet Clover, Common Plantain, Curled Dock, Dandelion, Red Clover, White Clover, and Common Mullein. Common Milkweed, Sow Thistle, Rough Sunflower, Common Mallow, and New England Aster are also represented. Shrub cover is very sparse and includes Wild Red Raspberry. Within the Cultural Meadows, there are isolated young stems (<10 cm dbh) of Trembling Aspen and American Elm. Mature tree stands occurring within the Site are discussed below in Section 3.4.

FIGURE 2: VEGETATION COMMUNITIES

Aquaview Stage 1 & 2 Development

Combined Environmental Impact Statement & Tree Conservation Report



Please Note: This is not a legal land survey. All dimensions and locations are shown as approximate.

 - Site Limits



Photograph 5: Looking north along the northeast boundary of the Aquaview Stage 2 parcel (October 26th, 2017).



Photograph 6: Looking northwest across the Aquaview Stage 2 parcel (October 26th, 2017).





Photograph 7: Looking from 10th Line Road southeast across the Aquaview Stage 2 parcel (October 26th, 2017).



Photograph 8: Looking south along the western side of the Aquaview Stage 1 parcel. Aquaview Drive is shown on the right (October 26th, 2017).





Photograph 9: Looking south across the central part of the Aquaview Stage 1 parcel. Aquaview Drive is shown in the background (October 26th, 2017).



3.4 Tree Inventory (TCR)

As noted above, the majority of the Site is devoid of mature tree cover. There are four (4) stands of mature trees found within the Site. The locations of the mature tree stands are shown in Figure 3. The trees stands include the following:

- **Tree Stand #1:** Tree Stand #1 includes a small depression in the northeast corner of the Aquaview Stage 2 parcel. Ground conditions are moist within the depression and the area appears not to have been regularly maintained. Tree Stand #1 includes a small stand of young American Elm and Trembling Aspen (10 to 20 cm dbh) surrounded by Bebb's Willow and Slender Willow shrubs.
- **Tree Stand #2:** Tree Stand #2 includes six (6) trees that were likely planted as landscaping features around the former farmhouse along 10th Line Road (within the Aquaview Stage 2 parcel). The six (6) trees were retained when the farmhouse was demolished (after 2002). Tree Stand #2 includes three (3) large Weeping Willows (102 cm, 76 cm, and 86 cm dbh). The Weeping Willows are a non-native ornamental, and hence are not considered significant trees, despite their large size. A 42 cm dbh White Spruce, a 62 cm dbh Trembling Aspen, and a 10 cm dbh Scotch Pine are also present. It is likely that all of these trees were planted around the former farmhouse as landscaping features.
- **Tree Stand #3:** Tree Stand #3 includes several planted Norway Spruce and Tamarack, varying in size between 10 to 20 cm dbh. These trees were planted as aesthetic features next to the intersection of 10th Line Road and Lakepointe Drive.
- **Tree Stand #4:** Tree Stand #4 includes six (6) moderately sized Trembling Aspen that have recently grown within the Aquaview Stage 1 parcel. The Trembling Aspen have a dbh of 28 cm, 22 cm, 20 cm, 22 cm, 26 cm and 31 cm.

In addition to those trees found within the Site, the following trees are found in immediately adjacent areas:

- **Aquaview Drive Street Trees:** Young (<10 cm dbh) planted saplings of Hackberry, Silver Maple, and Sugar Maple are present along Aquaview Drive.
- **Stormwater Management Pond Deciduous Stands:** Stands of Deciduous Trees were planted after 2002 around the Avalon North Stormwater Management Pond. The Planted Deciduous Stands occur along the northern edge of the Aquaview Stage 1 parcel. The Planted Deciduous Stands are dominated by Trembling Aspen, Sugar Maple, Silver Maple, and White Ash, with a few White Spruce and Serviceberry shrubs. The trees are all between 15 cm and 35 cm dbh and are approximately 10 to 15 years of age (planted after 2002).

FIGURE 3: TREE LOCATIONS

Aquaview Stage 1 & 2 Development

Combined Environmental Impact Statement & Tree Conservation Report



— Site Limits ① - Tree Locations

Please Note: This is not a legal land survey. All dimensions and locations are shown as approximate.



Photograph 10: Looking northwest at Tree Stand #1 (Aquaview Stage 2 parcel). Young Trembling Aspen and American Elm are shown with Bebb's Willow and Slender Willow shrubs (October 26th, 2017).



Photograph 11: Looking north at Tree Stand #2 (Aquaview Stage 2 parcel). Mature planted Weeping Willow are shown (October 26th, 2017).





Photograph 12: Looking north at Tree Stand #3 (Aquaview Stage 2 parcel). Planted Norway Spruce are shown (October 26th, 2017).



Photograph 13: Looking south at Tree Stand #4 (Aquaview Stage 1 parcel). Six (6) Trembling Aspen are shown growing in the Cultural Meadow (October 26th, 2017).





Photograph 14: Looking northeast at the planted Deciduous Trees, located between the public trail around the stormwater management pond and the northern edge of the Aquaview Stage 1 parcel (October 26th, 2017).



Photograph 15: Looking southwest from the public trail at the planted Deciduous Trees. The Aquaview Stage 1 parcel is visible beyond the trees (October 26th, 2017).



3.5 Wetlands and Watercourses

There are no natural wetlands or watercourses within the Site, or in the immediately surrounding area. The Avalon North Stormwater Management Pond occurs between the Aquaview Stage 1 & 2 parcels, however, this feature is artificial and was constructed in 2002. As noted above, the stormwater management pond is surrounded by planted landscaping features and a recreational trail. A swale is present along the proposed Cumberland Bus Rapid Transit (BRT) corridor (north of the Aquaview Stage 2 parcel). A portion of the swale includes growth of Common Cattail and Reed Canary Grass. However, the swale is an isolated depression that doesn't connect to any adjacent wetlands/watercourses, and it is also too small (<0.5 ha) to qualify as a wetland. Therefore, the swale is not considered a significant feature.



Photograph 16: Looking east at the stormwater management pond and parkland (October 26th, 2017).

3.6 Adjacent Lands and Significant Features

As noted above, the area surrounding both parcels is predominantly previously developed and includes residential and commercial properties, roads, the Avalon North Stormwater Management Pond, and City parkland/recreational trails. There are no wetlands or watercourses present within the Site or in the immediately surrounding area. There are also no areas within the Site which are shown to be part of the City of Ottawa Natural Heritage System (City of Ottawa 2014). No Significant Woodlots, Areas of Natural and Scientific Interest (ANSIs), or other designated natural heritage features are found within the Site or in the immediately surrounding area.

The only natural features found in the vicinity of the Site are the landscaping features within the City parkland and around the stormwater management pond. As discussed below in Section 4.1, planted trees located along the roads, within the City parkland, and around the stormwater management pond will be protected during Site development by tree preservation measures.

A vacant field is located west of the Aquaview Stage 2 parcel (on the opposite side of 10th Line Road). The field is separated from the Site by 10th Line Road, which is a major road with significant traffic volume. The vacant field is therefore sufficiently separated from the Site that the development is unlikely to significantly impact the field.

3.7 Wildlife and Significant Wildlife Habitat

Wildlife and bird species noted during the Site visit are listed in Appendix B. A total of fourteen (14) bird species were noted within the Site. This included several common species of migratory birds typically found in suburban areas. Other wildlife observed within the Site included Eastern Grey Squirrel, Red Squirrel, and Eastern Chipmunk. Each of these are comparatively common species. As discussed below in Section 6.0, a bird survey targeting Bobolink and Eastern Meadowlark will be completed in the spring and summer of 2018. Additional bird and wildlife sightings are likely to be documented during additional surveying.

No Significant Wildlife Habitat (SWH) features are known to occur within the Site or the immediately surrounding area. No wetlands, amphibian breeding habitat, stick nests, migratory bird stopover points, heron rookeries, reptile hibernacula, caves, bedrock fissures, or any other features which may qualify as SWH were noted within the Site (OMNRF 2014a). The Avalon North Stormwater Management Pond may provide habitat for migratory waterfowl and amphibians. As discussed below in Section 4.2, there are no significant negative impacts to the stormwater management pond proposed.

3.8 Species at Risk

The Natural History Information Center (NHIC) records for the nine (9) grids that include and surround the Site were reviewed. This included an area 3 km x 3 km in size and all published Species at Risk (SAR) records were noted. An Information and Records Request Response was received from the OMNRF Kemptville District (Appendix C). The following SAR were identified as potentially occurring within the vicinity:

- Bobolink – Threatened
- Eastern Meadowlark – Threatened
- Henslow's Sparrow – Endangered
- Butternut – Endangered
- Snapping Turtle – Special Concern
- Barn Swallow - Threatened
- Chimney Swift - Threatened

The following represents a summary of the potential presence of suitable habitat for these species within the Site:

- **Bobolink and Eastern Meadowlark:** Bobolink and Eastern Meadowlark both breed in open habitats dominated by grasses including old hayfields, natural grasslands, and pastures (SARO 2017). NHIC records show occurrences of Eastern Meadowlark in the region surrounding the Site. Both species prefer to nest in open areas dominated by grasses, as opposed to fields dominated by forbs or open areas with shrub cover (OMNRF 2014b; OMNRF 2014c). The Cultural Meadow in both parcels is grass dominated with little shrub cover, and hence has the potential to provide suitable habitat for the species. Eastern Meadowlark and Bobolink are known to be area sensitive species, and generally they require continuous tracts of suitable habitat that are a minimum of 5 ha in size (OMNRF 2014b; OMNRF 2014c). Surveying for these species is not typically undertaken in areas of suitable habitat <2 ha in size. The Aquaview Stage 2 parcel is approximately 7.86 ha in size, whereas the Aquaview Stage 1 parcel is approximately 2.56 ha in size. The Aquaview Stage 1 parcel is likely too small and too close to existing development to be likely to attract nesting Bobolink and Eastern Meadowlark. The Aquaview Stage 2 parcel may be large enough to provide nesting habitat for Bobolink and Eastern Meadowlark, however, it is also heavily disturbed by existing developed areas and high traffic roads. While it is considered relatively unlikely that either species would be found within the Site, a targeted survey is required due to the presence of potentially suitable habitat and records for the species in the surrounding region. The follow-up survey requirements are discussed in Section 6.0.
- **Henslow's Sparrow:** Henslow's Sparrow are found in abandoned agricultural lands and meadows with extensive areas of tall grasses (SARO 2017). Henslow's Sparrows are exceedingly rare, and very few sightings of this species have been reported in the Ottawa Region over the last decade. When the species is sighted, it typically occurs in large tracts of abandoned agricultural land far from human disturbance (SARO 2017). It is therefore considered highly unlikely that Henslow's Sparrow would be found within the Site. The survey methodology that will be employed for Bobolink and Eastern Meadowlark would detect the presence of Henslow's Sparrow, if any are found in the area.
- **Butternut Trees:** Butternut Trees are found in many treed areas throughout the Ottawa region (SARO 2017). Trees within the Site were identified to species, and no Butternuts were found within the Site or the immediately surrounding areas. Therefore, Butternut Trees are not likely to be a concern for the proposed development.
- **Snapping Turtle:** Snapping Turtles are common throughout the region and are found within many kinds of wetlands and watercourses (SARO 2017). As discussed previously, there are no natural watercourses or wetlands in the vicinity of the Site. While it is possible that Snapping Turtles have colonized the stormwater management pond since its construction, Snapping

Turtles are likely to remain predominantly confined to the pond and its banks, and are unlikely to travel overland into the development areas. Snapping Turtle are therefore not considered likely to be a significant concern for the proposed development.

- **Barn Swallow and Chimney Swift:** Barn Swallows nest in many anthropogenic structures including old barns, abandoned buildings, in culverts, and under bridges (SARO 2017). Chimney Swift nest in open chimneys with rough interior surfaces made from brick and/or stone (SARO 2017). The farmhouse that historically occurred within the Site was demolished after 2002. There are currently no structures within the Site which could provide habitat for Barn Swallow and/or Chimney Swift. Barn Swallow and Chimney Swift are therefore not considered likely to be a significant concern for the proposed development.

In summary, there are currently no known SAR concerns for the Site. However, recent sightings of nesting Eastern Meadowlark have been documented in the region surrounding the Site. The majority of the Site provides potentially suitable habitat for both Eastern Meadowlark and Bobolink. Therefore, a targeted breeding bird survey is required to be completed in the spring and summer of 2018. The follow-up survey methodology is discussed in Section 6.0.

3.9 Linkages

As discussed previously, the area surrounding both parcels is predominantly previously developed and includes residential and commercial properties, roads, the Avalon North Stormwater Management Pond, and City parkland/recreational trails. The only natural features found in the vicinity of the Site are the landscaping features within the City parkland and around the stormwater management pond, and a vacant field located west of the Aquaview Stage 2 parcel (on the opposite side of 10th Line Road). The Site does not occur between any adjacent areas of natural habitat, and therefore does not provide a wildlife movement corridor or linkage function.

4.0 DESCRIPTION OF ENVIRONMENTAL IMPACTS AND MITIGATION

4.1 Terrestrial Habitat and Tree Removal (TCR)

4.1.1 Tree Retention and Tree Protection Measures (TCR)

As noted above, the majority of the proposed development area lacks mature tree cover, and therefore there is relatively little tree removal required. Tree Stands #1, #2, and #4 are within the development area, and will be removed during Site preparation. As noted above in Section 3.4, Tree Stands #1 and #4 include small numbers of young recent regrowth trees with little conservation value. The only large trees found within the Site are those that were planted around the historic farmhouse (Tree Stand #2). As noted above, the three (3) large Weeping Willows are not considered distinctive, due to the fact that they are a non-native ornamental species.

Tree Stand #3 occurs within the right-of-way of Lakepointe Drive and will be preserved. Similarly, the street trees planted along Aquaview Drive and the Planted Deciduous Stands and other landscaping features that are present around the stormwater management pond and the City parkland/recreational trails will also be preserved. The following tree mitigation measures should be implemented to help protect and preserve retained trees:

- Mark the edge of the tree clearing area to ensure only designated trees are removed. Protect the critical root zone (CRZ) of retained trees, where the CRZ is established as being 10 cm from the trunk of a tree for every centimeter of trunk dbh. The CRZ is calculated as $\text{dbh} \times 10 \text{ cm}$;
- When trees to be removed overlap with the CRZ of trees to be retained, cut roots at the edge of the CRZ and grind down stumps after tree removal. Do not pull out stumps. Ensure there is not root pulling or disturbance of the ground within the CRZ;
- If roots must be cut, roots 20 mm or larger should be cut at right angles with clean, sharp horticultural tools without tearing, crushing, or pulling;
- Do not place any material or equipment within the CRZ of any tree;
- Do not attach any signs, notices, or posters to any tree;
- Do not damage the root system, trunk, or branches of any tree; and
- Ensure that exhaust fumes from all equipment are directed away from any tree canopy.

4.1.2 Replanting (TCR)

As noted above, there is currently very little tree cover within the Site. During Site development, trees and shrubs will be planted for landscaping purposes. The planting locations and specific planting requirements will be confirmed by a detailed Landscaping Plan. Plantings should emphasize the use of native trees and shrubs, which may include those identified in Appendix A. Planting of Ash trees should be avoided due to the high likelihood that any planted Ash trees will become infested with Emerald Ash Borer.



4.2 Servicing and Stormwater Management

Stormwater runoff from both parcels will be directed towards the existing Avalon North Stormwater Management Pond, which is located between the two (2) parcels. Both parcels will receive municipal sewer and water.

4.3 Sediment and Erosion Controls

During construction, existing conveyance systems can be exposed to significant sediment loadings. Although construction is only a temporary situation, a sediment and erosion control plan will be required to ensure the existing conveyance systems are not negatively impacted by sediment and erosion.

The sediment and erosion control plan will include the following:

- Groundwater in trenches (if present) will be pumped into a filter mechanism, such as a trap made up of geotextile filters and straw, prior to release to the environment;
- Bulkhead barriers will be installed at the nearest downstream manhole in each sewer which connects to an existing downstream sewer (e.g. existing sewers along Aquaview Drive, Lakepointe Drive, and 10th Line Road, if required). These bulkheads will trap any sediment carrying flows, thus preventing any construction-related contamination of existing sewers;
- Seepage barriers will be constructed in any temporary drainage ditches;
- Construction vehicles will leave the site at designated locations. Exits will consist of a bed of granular material, in order to minimize the tracking of mud off-site;
- Any stockpiled material will be properly managed to prevent those materials from entering the sewer systems; and
- Until landscaped areas are sodded or until streets are asphalted and curbed, all catch basins and manholes will be constructed with a geotextile filter sock located between the structure frame and cover.

4.4 Adjacent Lands and Significant Features

As discussed previously, the area surrounding both parcels is predominantly previously developed and includes residential and commercial properties, roads, the Avalon North Stormwater Management Pond, and City parkland/recreational trails. The only natural features found in the vicinity of the Site are the landscaping features within the City parkland and around the stormwater management pond, and a vacant field located west of the Aquaview Stage 2 parcel (on the opposite side of 10th Line Road). As discussed above in Section 4.1.1, planted trees located along the roads, within the City parkland, and around the stormwater management pond will be protected during Site development by tree preservation measures.

4.5 Wildlife and Species at Risk

Mitigation for wildlife during tree clearing and construction is summarized here. These recommendations include provisions from the City of Ottawa (2015) *Protocol for Wildlife Protection During Construction*:

- **Pre-Stressing:** Prior to tree removal, the area should be pre-stressed by traversing the Site with a loud noise such as an excavator horn. This will encourage wildlife to leave the area;
- **Tree Clearing Direction:** There are no woodlots or forest within the Site, and therefore a direction of tree clearing is not required;
- **Temporary Exclusion Fencing:** There are no wetlands or watercourses in close proximity to the Site, and therefore temporary exclusion fencing is not required;
- **Sweeps:** Prior to vegetation clearing, preconstruction sweeps of vegetated areas will be undertaken to ensure wildlife are not present. Construction staff will be required to review the mitigation measures included in this EIS. A designated staff member will be required to conduct daily sweeps each morning prior to commencement of work to ensure wildlife have not entered the work area;
- **SAR Encounters:** If SAR are encountered in the work area, construction in the vicinity must be stopped immediately and measures must be taken to ensure the SAR is not harmed. The project biologist and the OMNRF must be contacted to discuss how to proceed prior to recommencement of work;
- **General Provisions:** General provisions for Site management include the following:
 - Do not harm, feed, or unnecessarily harass wildlife;
 - Drive slowly and avoid hitting wildlife;
 - Keep Site tidy and free of garbage and food wastes. Secure all garbage in appropriate sealed containers;
 - Ensure proper Site drainage so that standing water does not accumulate on Site. This will reduce the likelihood that turtles and other wildlife may enter the Site;
 - Any stockpiles should be properly secured with silt fencing to prevent wildlife from accessing areas of loose fill; and
- **Timing Windows:** In order to avoid impacting the nests of migratory birds, vegetation clearing must be undertaken outside of the core migratory bird breeding season, which is April 15th to August 15th each year.

5.0 CUMULATIVE EFFECTS

Cumulative effects were considered in the design of the mitigation measures outlined in Section 4.0. As noted above, there are no designated habitats, wetlands, or forest cover within the Site. Therefore, the development of the Site will not contribute to the cumulative loss of wetlands or forest habitat.

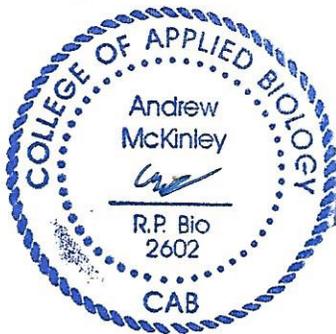
6.0 ADDITIONAL STUDIES

As noted above in Section 3.8, potentially suitable habitat exists within the Site for threatened Bobolink and Eastern Meadowlark. In order to address the potential for these species to be found within the Site, a breeding bird survey will be undertaken following the OMNRF *Wildlife Monitoring Programs and Inventory Techniques - Technical Manual* (Konze & McLaren 1998) Breeding Bird Survey (BBS) method. The survey includes completion of three (3) site surveys in May and June. The timing and methodology of the survey will follow the requirements outlined in the OMNRF *Survey Methodology under the Endangered Species Act: Dolichonyx oryzivorus (Bobolink)* (OMNRF 2011). The bird surveys will be completed in May and June 2018. The survey methodology, figures showing the survey points, photographs, and survey results will be included in an addendum to this report. Any additional regulatory and/or mitigation requirements under the Ontario Endangered Species Act (ESA) will also be included in the addendum.

7.0 CLOSURE

We trust that the above information is sufficient; should you have any questions or require further information, please do not hesitate to contact the undersigned, at your convenience.

Sincerely,



Dr. Andrew McKinley, EP, RP Bio.
Senior Biologist, McKinley Environmental Solutions

8.0 REFERENCES

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Ontario Ministry of Natural Resources and Forestry (OMNRF) (2014b) General Habitat Description for the Bobolink.

Ontario Ministry of Natural Resources and Forestry (OMNRF) (2014c) General Habitat Description for Eastern Meadowlark.

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<<http://www.ontario.ca/environment-and-energy/species-risk-ontario-list>>



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APPENDIX A

Master Plant List



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TABLE A: VEGETATION

Common Name	Scientific Name	Provincial S rank	Brunton Significance Ranking for the City of Ottawa (Brunton, 2005)	Vegetation Type
Common Cattail	<i>Typha latifolia</i>	S5	Common	Aquatic
Awnless Brome	<i>Bromus inermis</i>	SNA	Common	Grass
Brome Grass	<i>Bromus sp.</i>		n/a	Grass
Orchard Grass	<i>Dactylis glomerata</i>	SNA	Common	Grass
Barnyard Grass	<i>Echinochloa crusgalli</i>	SNA	Common	Grass
Reed Canary Grass	<i>Phalaris arundinacea</i>	SE5	Common (locally abundant introduction)	Grass
Timothy	<i>Phleum pratense</i>	SNA	Common	Grass
Common Yarrow	<i>Achillea millefolium</i>	S5	Common	Herbaceous
Common Ragweed	<i>Ambrosia artemisiifolia</i>	S5	Common	Herbaceous
Common Burdock	<i>Arctium minus</i>	SNA	Common	Herbaceous
Common Milkweed	<i>Asclepias syriaca</i>	S5	Common	Herbaceous
Lamb's Quarters Pigweed	<i>Chenopodium album</i>	SNA	Common	Herbaceous
Chickory	<i>Cichorium intybus</i>	S5	Common	Herbaceous
Canada Thistle	<i>Cirsium arvense</i>	S5	Common	Herbaceous
Bull Thistle	<i>Cirsium vulgare</i>	SNA	Common	Herbaceous
Queen Anne's Lace	<i>Daucus carota</i>	SNA	Common	Herbaceous
Daisy Fleabane	<i>Erigeron annuus</i>	S5	Common	Herbaceous
Rough Sunflower	<i>Helianthus divaricatus</i>	S5	Common	Herbaceous
Ox-eye Daisy	<i>Leucanthemum vulgare</i>	SNA	Common	Herbaceous
Bird's-foot Trefoil	<i>Lotus corniculatus</i>	SNA	Common	Herbaceous
Common Mallow	<i>Malva neglecta</i>	SNA	Common	Herbaceous
White Sweet Clover	<i>Melilotus albus</i>	SNA	Common	Herbaceous
Common Plantain	<i>Plantago major</i>	S5	Common	Herbaceous
Curled Dock	<i>Rumex crispus</i>	SNA	Common	Herbaceous
Canada Goldenrod	<i>Solidago canadensis</i>	S5	Common	Herbaceous
Sow Thistle	<i>Sonchus arvensis</i>	SNA	Common	Herbaceous
New England Aster	<i>Symphotrichum novae-angliae</i>	S5	Common	Herbaceous
Dandelion	<i>Taraxacum officinale</i>	SNA	Common	Herbaceous
Red Clover	<i>Trifolium pratense</i>	SNA	Common	Herbaceous
White Clover	<i>Trifolium repens</i>	SNA	Common	Herbaceous
Common Mullein	<i>Verbascum thapsus</i>	SNA	Common	Herbaceous

Smooth Serviceberry	<i>Amelanchier laevis</i>	S5	Common	Shrub
Wild Red Raspberry	<i>Rubus idaeus</i>	S5	Common	Shrub
Bebb's Willow	<i>Salix bebbiana</i>	S5	Common	Shrub
Slender Willow	<i>Salix petiolaris</i>	S5	Common	Shrub
Silver Maple	<i>Acer saccharinum</i>	S5	Common	Tree
Sugar Maple	<i>Acer saccharum</i>	S5	Common	Tree
White Ash	<i>Fraxinus americana</i>	S5	Common	Tree
Tamarack	<i>Larix laricina</i>	S5	Common	Tree
Norwegian Spruce	<i>Picea abies</i>	SNA	n/a	Tree
White Spruce	<i>Picea glauca</i>	S5	Common	Tree
Scots Pine	<i>Pinus sylvestris</i>	SNA	Rare (frequently planted)	Tree
Trembling Aspen	<i>Populus tremuloides</i>	S5	Common	Tree
Weeping Willow	<i>Salix Alba</i>	SNA	Frequently Planted Non-Native Ornamental	Tree
American or White Elm	<i>Ulmus americana</i>	S5	Common	Tree

Provincial ranks (assigned by NHIC)

S5 = Very common within the province with > 1000 occurrences, populations or records

S4 = Common within the province with 21 - 1000 occurrences, populations or records

S3 = Rare within the province with 6 - 20 occurrences, populations or records

SNA = Ranking not available

SE5 = Very common exotic with > 1000 occurrences, populations or records within the province

S? = Unranked, or if followed by a ranking, temporarily assigned (eg. S4?)

APPENDIX B

Bird and Wildlife Sightings



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TABLE B: BIRDS

Common Name	Scientific Name
Cedar Waxwing	Bombycilla cedrorum
Northern Cardinal	Cardinalis cardinalis
American Crow	Corvus brachyrhynchos
Blue Jay	Cyanocitta cristata
Dark-eyed Junco	Junco hyemalis
Ring-billed Gull	Larus delawarensis
Song Sparrow	Melospiza melodia
House Sparrow	Passer domesticus
Black-capped Chickadee	Poecile atricapilla
Common Grackle	Quiscalus quiscula
American Goldfinch	Spinus tristis
European Starling	Sturnus vulgaris
American Robin	Turdus migratorius
Mourning Dove	Zenaida macroura

TABLE C: OTHER WILDLIFE

Common Name	Scientific Name
Eastern Grey Squirrel	Sciurus carolinensis
Red Squirrel	Sciurus vulgaris
Eastern Chipmunk	Tamias striatus

APPENDIX C

OMNRF Information Request Response



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mckinleyenvironmental@gmail.com

www.mckinleyenvironmental.com

**Ministry of Natural
Resources and Forestry**

Kemptville District

10 Campus Drive
Postal Box 2002
Kemptville ON K0G 1J0
Tel.: 613 258-8204
Fax: 613 258-3920

**Ministère des Richesses
naturelles et des Forêts**

District de Kemptville

10, promenade Campus
Case postale, 2002
Kemptville ON K0G 1J0
Tél.: 613 258-8204
Télééc.: 613 258-3920



Tue. Dec 12, 2017

Andrew McKinley
McKinley Environmental Solutions
PO Box 45505, 3151 Strandherd Dr.
Ottawa, Ontario
K2J 5N1
(613) 620-2255
mckinleyenvironmental@gmail.com

Attention: Andrew McKinley

Subject: Information Request - Developments
Project Name: Avalon North & Aquaview EIS
Site Address: 352 Aquaview Drive, Ottawa, Ontario
Our File No. 2017_CUM-4335

Natural Heritage Values

The Ministry of Natural Resources and Forestry (MNRF) Kemptville District has carried out a preliminary review of the above mentioned area in order to identify any potential natural resource and natural heritage values.

There are no known natural heritage features (e.g. Provincially Significant Wetlands, Areas of Natural and Scientific Interest, etc.) identified on or in close proximity to the site.

Municipal Official Plans contain information related to natural heritage features. Please see the local municipal Official Plan for more information, such as specific policies and direction pertaining to activities which may impact natural heritage features. For planning advice or Official Plan interpretation, please contact the local municipality. Many municipalities require environmental impact studies and other supporting studies be carried out as part of the development application process to allow the municipality to make planning decisions which are consistent with the Provincial Policy Statement (PPS, 2014).

The MNRF strongly encourages all proponents to contact partner agencies and appropriate municipalities early on in the planning process. This provides the proponent with early knowledge regarding agency requirements, authorizations and approval timelines; Ministry of the Environment and Climate Change (MOECC) and the local Conservation Authority may require approvals and permitting where natural values and natural hazards (e.g., floodplains) exist.

Kemptville District

District de Kemptville

10 Campus Drive
Postal Box 2002
Kemptville ON K0G 1J0
Tel.: 613 258-8204
Fax: 613 258-3920

10, promenade Campus
Case postale, 2002
Kemptville ON K0G 1J0
Tél.: 613 258-8204
Télééc.: 613 258-3920

As per the Natural Heritage Reference Manual (2010) the MNRF strongly recommends that an ecological site assessment be carried out to determine the presence of natural heritage features, and species at risk and their habitat on site. The MNRF can provide survey methodology for particular species at risk and their habitats.

The NHRM also recommends that cumulative effects of development projects on the integrity of natural heritage features and areas be given due consideration. This includes the evaluation of the past, present and possible future impacts of development in the surrounding area that may occur as a result of demand created by the presently proposed project.

Wildland Fire

MNRF woodland data shows that the site contains woodlands. The lands should be assessed for the risk of wildland fire as per PPS 2014, Section 3.1.8 "*Development shall generally be directed to areas outside of lands that are unsafe for development due to the presence of hazardous forest types for wildland fire. Development may however be permitted in lands with hazardous forest types for wildland fire where the risk is mitigated in accordance with wildland fire assessment and mitigation standards*". Further discussion with the local municipality should be carried out to address how the risks associated with wildland fire will be covered for such a development proposal. Please see the Wildland Fire Risk Assessment and Mitigation Guidebook (2016) for more information.

Significant Woodlands

Section 2.1.5 b) of the PPS states: *Development and site alteration shall not be permitted in significant woodlands unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions.* The 2014 PPS directs that significant woodlands must be identified following criteria established by the Ontario Ministry of Natural Resources and Forestry, i.e. the Natural Heritage Reference Manual (NHRM), 2010. Where the local or County Official Plan has not yet updated significant woodland mapping to reflect the 2014 PPS, all wooded areas should be reviewed on a site specific basis for significance. The MNRF Kemptville District modelled locations of significant woodlands in 2011 based on NHRM criteria. The presence of significant woodland on site or within 120 metres should trigger an assessment of the impacts to the feature and its function from the proposed development.

Significant Wildlife Habitat

Section 2.1.5 d) of the PPS states: *Development and site alteration shall not be permitted in significant wildlife habitat unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions.* It is the responsibility of the approval authority to identify significant wildlife habitat or require its identification. The MNRF has several guiding

Kemptville District

District de Kemptville

10 Campus Drive
Postal Box 2002
Kemptville ON K0G 1J0
Tel.: 613 258-8204
Fax: 613 258-3920

10, promenade Campus
Case postale, 2002
Kemptville ON K0G 1J0
Tél.: 613 258-8204
Télééc.: 613 258-3920

documents which may be useful in identification of significant wildlife habitat and characterization of impacts and mitigation options:

- Significant Wildlife Habitat Technical Guide, 2000
- The Natural Heritage Reference Manual, 2010
- Significant Wildlife Habitat Mitigation Support Tool, 2014
- Significant Wildlife Habitat Criteria Schedule for Ecoregion 5E and 6E, 2015

The habitat of special concern species (as identified by the Species at Risk in Ontario list) and Natural Heritage Information Centre tracked species with a conservation status rank of S1, S2 and S3 may be significant wildlife habitat and should be assessed accordingly.

Water

If any in-water works are to occur, there are timing windows for which work in water should not take place (see below). Appropriate measures should be taken to minimize and mitigate impact on water quality and fish habitat, including:

- installation of sediment and erosion control measures;
- avoiding the removal, alteration, or covering of substrates used for fish spawning, feeding, over-wintering or nursery areas; and
- debris control measures to manage falling debris (e.g. spalling).

Timing windows (no in-water works) in MNRF Kemptville District*:

Warmwater and cool water	→ March 15 – June 30
St. Lawrence River & Ottawa River	→ March 15 – July 15
Coldwater	→ October 1 – May 31
Big Rideau Lake & Charleston Lake	→ October 1 – June 30

* Please note: Additional timing restrictions may apply as they relate to endangered and threatened species for works in both water and wetland areas.

Timing windows when in-water work is restricted – based on species presence:

	FISH SPECIES	TIMING WINDOW (No in-water works)
Spring:	Walleye	March 15 to May 31
	Northern Pike	March 15 to May 31
	Lake Sturgeon	May 1 to June 30
	Muskellunge	March 15 to May 31
	Largemouth/Smallmouth Bass	May 1 to July 15
	Rainbow Trout	March 15 to June 15
	Other /Unknown Spring Spawning Species	March 15 to July 15

	FISH SPECIES	TIMING WINDOW (No in-water works)
Fall:	Lake Trout	October 1 to May 31
	Brook Trout	October 1 to May 31
	Pacific Salmon	September 15 to May 31
	Lake Whitefish	October 15 to May 31
	Lake Herring	October 15 to May 31
	Other /Unknown Fall Spawning Species	October 1 to May 31

Additional approvals and permits may be required under the Fisheries Act. Please contact Fisheries and Oceans Canada to determine requirements and next steps. There may also be approvals required by the local Conservation Authority or Transport Canada. As the MNRF is responsible for the management of provincial fish populations, we request ongoing involvement in such discussions in order to ensure population conservation.

Species at Risk

A review of the Natural Heritage Information Centre (NHIC) and internal records indicate that there is a potential for the following threatened (THR) and/or endangered (END) species on the site or in proximity to it:

- Bobolink (THR)
- Butternut (END)
- Eastern Meadowlark (THR)
- Henslow's Sparrow (END)
- Sensitive Species (END)

All endangered and threatened species receive individual protection under section 9 of the ESA and receive general habitat protection under Section 10 of the ESA, 2007. Thus any potential works should consider disturbance to the individuals as well as their habitat (e.g. nesting sites). General habitat protection applies to all threatened and endangered species. Note some species in Kemptville District receive regulated habitat protection. The habitat of these listed species is protected from damage and destruction and certain activities may require authorization(s) under the ESA. For more on how species at risk and their habitat is protected, please see: <https://www.ontario.ca/page/how-species-risk-are-protected>.

If the proposed activity is known to have an impact on any endangered or threatened species at risk (SAR), or their habitat, an authorization under the ESA may be required. It is recommended that MNRF Kemptville be contacted prior to any activities being carried out to discuss potential survey protocols to follow during the early planning stages of a project, as well as mitigation

Kemptville District

District de Kemptville

10 Campus Drive
Postal Box 2002
Kemptville ON K0G 1J0
Tel.: 613 258-8204
Fax: 613 258-3920

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Case postale, 2002
Kemptville ON K0G 1J0
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measures to avoid contravention of the ESA. Where there is potential for species at risk or their habitat on the property, an Information Gathering Form should be submitted to Kemptville MNRF at sar.kemptville@ontario.ca.

The Information Gathering Form may be found here:

<http://www.forms.ssb.gov.on.ca/mbs/ssb/forms/ssbforms.nsf/FormDetail?OpenForm&ACT=RDR&TAB=PROFILE&ENV=WWE&NO=018-0180E>

For more information on the ESA authorization process, please see:

<https://www.ontario.ca/page/how-get-endangered-species-act-permit-or-authorization>

One or more special concern species has been documented to occur either on the site or nearby. Species listed as special concern are not protected under the ESA, 2007. However, please note that some of these species may be protected under the Fish and Wildlife Conservation Act and/or Migratory Birds Convention Act. Again, the habitat of special concern species may be significant wildlife habitat and should be assessed accordingly. Species of special concern for consideration:

- Snapping Turtle (SC)

If any of these or any other species at risk are discovered throughout the course of the work, and/or should any species at risk or their habitat be potentially impacted by on site activities, MNRF should be contacted and operations be modified to avoid any negative impacts to species at risk or their habitat until further direction is provided by MNRF.

Please note that information regarding species at risk is based largely on documented occurrences and does not necessarily include an interpretation of potential habitat within or in proximity to the site in question. Although this data represents the MNRF's best current available information, it is important to note that a lack of information for a site does not mean that additional features and values are not present. It is the responsibility of the proponent to ensure that species at risk are not killed, harmed, or harassed, and that their habitat is not damaged or destroyed through the activities carried out on the site.

The MNRF continues to strongly encourage ecological site assessments to determine the potential for SAR habitat and occurrences. When a SAR or potential habitat for a SAR does occur on a site, it is recommended that the proponent contact the MNRF for technical advice and to discuss what activities can occur without contravention of the Act. For specific questions regarding the Endangered Species Act (2007) or SAR, please contact MNRF Kemptville District at sar.kemptville@ontario.ca.

**Ministry of Natural
Resources and Forestry**

Kemptville District

10 Campus Drive
Postal Box 2002
Kemptville ON K0G 1J0
Tel.: 613 258-8204
Fax: 613 258-3920

**Ministère des Richesses
naturelles et des Forêts**

District de Kemptville

10, promenade Campus
Case postale, 2002
Kemptville ON K0G 1J0
Tél.: 613 258-8204
Télééc.: 613 258-3920



The approvals processes for a number of activities that have the potential to impact SAR or their habitat have recently changed. For information regarding regulatory exemptions and associated online registration of certain activities, please refer to the following website: <https://www.ontario.ca/page/how-get-endangered-species-act-permit-or-authorization>.

Please note: The advice in this letter may become invalid if:

- The Committee on the Status of Species at Risk in Ontario (COSSARO) re-assesses the status of the above-named species OR adds a species to the SARO List such that the section 9 and/or 10 protection provisions apply to those species; or
- Additional occurrences of species are discovered on or in proximity to the site.

This letter is valid until: Wed. Dec 12, 2018

The MNRF would like to request that we continue to be circulated on information with regards to this project. If you have any questions or require clarification please do not hesitate to contact me.

Sincerely,

Dom Ferland
Management Biologist
dominique.ferland@ontario.ca

Encl.\
-ESA Infosheet
-NHIC/LIO Infosheet