

June 17, 2020

Julie Stewart, Planner County of Lanark 99 Christie Lake Road Perth, ON K7H 3C6

Township of Beckwith 1702 9th Line Carleton Place, ON K7C 3P2

RE: Plan of Subdivision

3160 9th Line Beckwith Part Lot 3, Concession 8

Parts 1-3, 27R-2652, Parts 1 & 2, 27R-2874, Part 1, 27R-9676

**Township of Beckwith** 

Owner(s): Cameron Young and June Young

ZanderPlan Inc. was originally retained by the property owners to assist with some potential severances for their property located at 3160 9th Line in the Township of Beckwith. A registry office search was completed and along with subsequent discussions with the Township and County it was determined the property was no longer eligible for new lot creation through Consent. Options for further lot creation were limited to a Plan of Subdivision or an Official Plan Amendment to permit additional lots. The owners now wish to proceed with an application for a Plan of Subdivision to create 11 new lots on the property. The application will also include a small lot addition onto an existing waterfront lot where the owners currently reside, with a civic address of 3144 9th Line Road. A new internal roadway will be constructed providing public road frontage for the new lots. Dalton Lane, a private road providing access for three abutting lots, will be maintained as part of the application. Dalton Lane will be located entirely on one of the proposed subdivision lots. All pre-existing buildings and structures have been removed to facilitate the new subdivision.



#### SUBJECT PROPERTY

The subject property is located at 3160 9th Line Road, falling in Part of Lot 3, Concession 8 in the Township of Beckwith. The property measures 9.636 hectares in size with 442 metres of frontage on 9th Line and 213 metres of water frontage on Mississippi Lake (See Figure 1). A private road known as Dalton Lane falls on the north side of the property, providing access to abutting waterfront lots. This road will be maintained as part of the subdivision.



Figure 1 – Aerial View of 3160 9<sup>th</sup> Line

The single dwelling and several agricultural outbuildings shown in the air photo at Figure 1 have all bee removed with appropriate permits and approvals. The residential dwelling at 3144 9<sup>th</sup> Line has its own individual access located immediately south of Dalton Lane. The driveway meanders through the fields to the waterfront lot. All buildings on the subject property will be removed. A new internal subdivision road will connect to 9<sup>th</sup> Line providing access for all the subdivision lots. A small lot addition onto the back of #3144 Ninth Line will provide the lot direct access to the subdivision road. Dalton Lane will be maintained falling entirely on one of the subdivision lots. Overall, the proposal will result in the removal of two existing 9<sup>th</sup> Line accesses (#3144 and #3160) replacing them with one new subdivision road while maintaining Dalton Lane in its current location. The new subdivision will propose three (3) new waterfront lots and eight (8) new interior lots. A block for common access to the water has also been provided.



# **TOWNSHIP OF BECKWITH ZONING BY-LAW No. 91-14**

The subject property is zoned Rural (RU) and Floodplain (FP) on the Township of Beckwith Zoning By-Law Schedule A (See Figure 2). The floodplain mapping is limited to the shoreline areas along the Mississippi Lake frontage. Lots abutting the subject property fall in either the Rural or Limited Services Residential (RLS) zones.

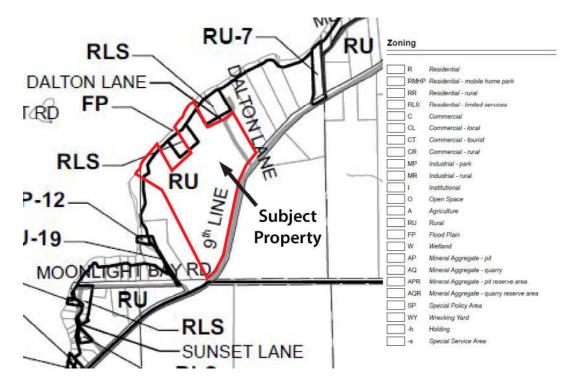


Figure 2 - Township of Beckwith Zoning By-Law Schedule A

**Section 3.0** of the Zoning By-Law sets forth the General Provisions for development within the Township. While development has been contemplated for each lot as part of a Servicing Options Report, there is no planned development for individual lots at this time. The majority of the General Provisions deal directly with site development or specific uses which will be implemented at the time of a building permit, but some are still applicable to the Subdivision Application being made.

**Section 3.22** of the Zoning By-Law sets forth provisions for Setbacks including policies for water setbacks. Three of the proposed subdivision lots will have water frontage on Mississippi Lake. For any lot created after June 1, 1999 the setback shall be the greater of *a) 30 metres from the High Water Mark; b) 15 metres from the top of bank; c) development limits established by the regulatory floodline; d) development limits established by environmental impact assessments; or* 



e) development limits established by the erosion hazard limit (Sec. 3.22b). The waterfront lots proposed on the subdivision plan all have upwards of 100 metres in depth, more than enough room to locate new development beyond the 30 metres from the High Water Mark of the Lake.

Until such time that development is proposed on each individual lot, the remaining general provisions of the Zoning By-law would not apply to the subdivision application.

The majority of the lots have a minimum area of at least 6,000 m2 (1.5 acres) with varying frontages on the proposed road. It is assumed that, as a condition of Draft Plan Approval, the subject lands will need to be re-zoned to an appropriate Residential zone, with possible exceptions required to recognize the frontages on the cul-de-sac.

#### TOWNSHIP OF BECKWITH OFFICIAL PLAN

The subject property falls outside of the Community Development Areas and is designated Rural Lands on the Official Plan Schedule A – Land Use (See Figure 3). There is a small amount of floodplain identified along the Mississippi Lake waterfront on Official Plan Schedule B – Constraints (See Figure 4). Beyond the limited floodplain mapping the property is relatively free from any identified constraints.

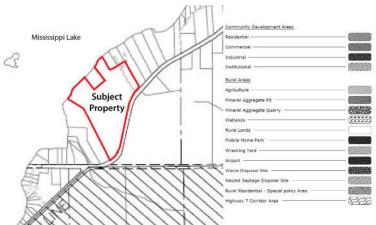


Figure 3 - Township of Beckwith Official Plan Schedule A - Land Use



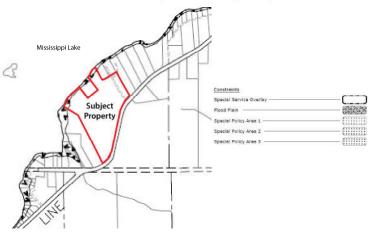


Figure 4 – Township of Beckwith Official Plan Schedule B – Constraints

**Section 2** of the Official Plan sets forth a number of objectives with respect to the direction for development and planning decisions within the Township. Subdivision development of the property will occur on private servicing where they can be provided at reasonable cost to each of the lots proposed (Sec 2.2i). A variety of appropriate lands uses shall be permitted in rural areas not consisting of agriculture or mineral aggregate resources (Sec. 2.2vi). New residential uses on the subdivision lots will be compatible with the various residential uses abutting the property with minimal impacts anticipated (Sec. 2.2vii). The new subdivision road will ensure an efficient hierarchy of roads that can accommodate any new traffic created by development (Sec. 2.2x). Development will be adequately setback from roads and waterbodies to ensure the natural heritage system on and abutting the subject property is maintained (Sec. 2.2xii). A new subdivision on the subject property would meet many of the objectives outlined in Section 2 of the Official Plan.

Section 3 of the Official Plan outlines the Basis of the Plan with respect to the various settlement areas and the proximity of the Township to the City of Ottawa. The Official Plan dictates the primary focus for growth shall be in the Community Development Areas of the Township (Sec. 3.1) but there is a need to provide for limited development in the rural areas including development and redevelopment around Mississippi Lake (Sec. 3.2). The development will be controlled and supported through a number of underlying studies that ensure redevelopment next to the lake reduces environmental impacts and maintains water quality (Sec. 3.2). The property is outside of any agriculturally designated areas, has no identified mineral aggregate resources and has no natural heritage features that could be affected by the new subdivision (Sec. 3.4). Subdivision development of the property would be supported by the policies of Section 3 of the Official Plan.



**Section 4** of the Official Plan sets forth General Development Policies common to a number of land use categories. **Section 4.1** provides policy direction for Access to Public Roads requiring all new development to have frontage on a public road maintained year round by the municipality or other public authority. New development must be carefully located so that no traffic hazard is created by the new use. A new road will be constructed as part of the subdivision which will provide access to each of the proposed lots. This new road will allow two residential driveways, located at #3144 and #3160 9<sup>th</sup> Line respectively, to be removed. The new intersection to 9th Line has been positioned the required separation distance from nearby roads / lot entrances. A Traffic Impact Study has been completed in support of the proposed subdivision which will be outlined in detail later in this report.

Section 4.5 of the Official Plan sets forth policies for the Division of Land which can occur in two different ways: by consent and by plan of subdivision. A lot created through the Consent process shall have a minimum area of 0.8 hectares (2 acres) in the Rural Lands designation (Sec. 4.5(2a)) and a minimum frontage per the zoning by-law (Sec. 4.5(2b)). General Policies for consent are found under Section 4.5.1 of the Official Plan. The size and shape of parcels created in the proposed subdivision will be appropriate for single dwellings and will conform with the provisions of the Zoning By-law (Sec. 4.5.1(i)). A small lot addition will be added to the waterfront lot at #3144 9th Line to ensure it has proper access (Sec. 4.5.1(iii)) to the new subdivision road which will require approval from Council (Sec. 4.5.1(iv)). The new road will avoid strip development by providing alternative frontage options that do not require the lots to front onto 9th Line Road (Sec. 4.5.1(vi)). While some floodplain is identified along the water, potentially affecting three of the proposed lots, each has been provided adequate depth to place development beyond 30 metres from the constraint. There have been no other environmental constraints or hazards identified through the EIS that would affect development (Sec. 4.5.1(xv)). A hydrogeological investigation has been completed to assess the quality and quantity of groundwater in support of the lots proposed (Sec. 4.5.1(xvi)). The proposed subdivision would comply with the general policies for the division of land.

**Section 4.5.3** of the Official Plan sets forth Additional Policies for Plans of Subdivision. All lots in a Plan of Subdivision are required to gain access from internal roads (Sec. 4.5.3(i)) which will be provided by the new subdivision road. However, Dalton Lane is an existing private road on the property providing access to three abutting waterfront lots, two of which at #129 and #139 Dalton Lane respectively are developed. The third waterfront lot is vacant. These abutting lots will need their access maintained over Dalton Lane requiring special conditions to potentially be included in the subdivision agreement (Sec. 4.5.3(i)). Site servicing reports will be submitted to show the lot sizes are adequate to provide individual on-site sewage disposal systems for each of



the new lots (Sec. 4.5.3(ii)). The subdivision will not be phased since it contains less than 25 lots (Sec. 4.5.3iii). All the lots will average area of greater than 0.6 hectares (1.5 acres) in size and none of the lots will be less than 0.4 hectares (1 acre) in size (Sec. 4.5.3vii). All applicable additional subdivision policies found in Section 4.5.3 can be met.

**Section 4.6** of the Official Plan sets forth policies for Natural Heritage Features. As part of the subdivision application an Environmental Impact Statement was completed to assess the potential for / presence of natural heritage features or potential habitat for species-at-risk (SAR) on-site. Development is not anticipated to impact potential Turtle or Eel habitat that may be present in Mississippi Lake. Breeding Bird surveys were conducted which did not result in the discovery of any SAR birds and structures did not show signs of Barn Swallow, Chimney Swift or Bats. There were no Endangered or Threatened Species (Sec. 4.6.1) or Significant Wildlife Habitat (Sec. 4.6.4) identified on the property. All development will occur upland of the water with no anticipated impacts on Fish Habitat (Sec. 4.6.3). No Areas of Natural and Scientific Interest (ANSIs) were identified (Sec. 4.6.2) nor were any Significant Woodlands (Sec. 4.6.5), Significant Wetlands (Sec. 4.6.6), or Significant Valleylands (Sec. 4.6.7). The proposed subdivision would comply with the Natural Heritage Features Policies of the Official Plan.

**Section 4.8** of the Official Plan sets forth policies for Cultural Heritage and Archaeological Resources, their identification and protection. The subject property is not considered to be a cultural heritage site with respect to Official Plan policy, but its proximity to Mississippi Lake, an area with pre-contact Aboriginal archaeological potential, warrants further archaeological evaluation. A Stage 1, 2 and 3 Assessment was completed by Paterson Group to assess any potential archaeological resources present.

The Stage 1 Assessment included a screening review of updated MTCS databases along with historical maps and aerial photos (Sec. 4.8.2.1). The Stage 2 Assessment utilized test pitting and identified a concentration of several artifacts predating 1900. The site was designated BgGa-11 and named the McEachen Site. The Stage 3 Assessment included the recovery of the artifacts found in this area, none of which included intact culturally significant deposits. All areas of the site had been disturbed by modern farming with evidence of deeply redeposited modern items like plastics and wire nails. It was recommended that no Stage 4 Assessment was required for the site. The proposed subdivision has had the necessary archaeological assessments completed in order to support development.

**Section 4.12** of the Official Plan sets forth Land Use Compatibility policies to ensure development can be provided in a manner compatible with surrounding uses. The existing buildings on the



property have already been removed to facilitate the lot creation and subsequent redevelopment. The new lots along the water will be of adequate size that development will be well setback from any abutting uses and would not result in loss of privacy for any of the lots. Development will be consistent with Ministry of Environment Guidelines and will not result in environmental damage or degradation. A traffic study supports the introduction of a new road and the increased traffic on 9th Line from these new residential lots. Dwellings are anticipated to be of similar scale and massing to surrounding uses. Given the adequate separation distances that can be achieved through development all new dwellings and associated development will be compatible with surrounding land uses and features in conformity with Section 4.12.

**Section 4.17** of the Official Plan sets forth Separation Distance policies requiring new lands uses be well separated from any potential nuisance sources such as railways, major highways, industrial uses and livestock operations, to name a few examples. With the exception of agricultural uses to the southeast within the Agriculture designation there are no other known or potential nuisance sources near the new subdivision. Within the agriculture designation there are no livestock facilities that could potentially affect subdivision development. The barn structure on the subject property will be removed. Based on an evaluation of surrounding lands there do not appear to be any that would require separation distances beyond what can be provided by the orderly development of each lot.

**Section 4.19** of the Official Plan sets forth provisions for Setbacks from Water applicable to new buildings and structures. Certain uses, like marinas, marine facilities, docks and boathouses are exempted from the setback requirements of this section, but all new residential dwellings and associated accessory structures like sheds and detached garages would need to comply. The three waterfront lots proposed as part of the subdivision are designed with sufficient depth to locate new uses thirty metres or more from the high water mark and beyond any development limits related to flood lines or potential natural features or hazards (Sec. 4.19.1). No setback reductions have been requested for these lots.

**Section 5** of the Official Plan sets forth Land Use Policies for the Community Development Areas in the Township. The subject property is located outside of the Community Development Areas identified on Schedule A to the Official Plan. Section 5 policies would not apply to the proposed subdivision.

**Section 6** of the Official Plan sets forth Land Use Policies for Rural Areas providing policies for all the underlying land use designations. **Section 6.4** speaks to Flood Plains which are identified along the shoreline of the property. The flood plains are mapped by the local conservation



authority (Sec. 6.4.1) and are based on a two-zone flood hazard delineation (Sec. 6.4.2). On Mississippi Lake the flood hazard is defined by the flood fringe and the floodway. No development is proposed within the floodplain area and all new uses within the subdivision will be located beyond any areas where development may be restricted.

**Section 6.5** of the Official Plan sets forth Rural Area policies which is the designation of the subject property per Official Plan Schedule A. The creation of lots may take place by severance or Plans of Subdivision in accordance with Section 4 policies (Sec. 6.5.1.1(ii)). Development of the property will be in accordance with other applicable sections of the plan (Sec. 6.5.1.1(iii)) and will be located to minimize impacts on the lake and/or any other natural heritage features. Development of multiple residential uses is not proposed on the property, but the eleven (11) residential lots created will be supported through the various required studies (Sec. 6.5.1.1(v)). Assuming all studies and reports support development the new subdivision would meet the Rural Lands policies of Section 6.5.

**Section 7** of the Official Plan sets forth policies for Roads with provisions for each classification of road. The new subdivision will gain access off of 9th Line Road, described as a Primary Local Road in the Official Plan (Sec. 7.3). Direct access to all the subdivision lots will come from the new interior subdivision road with no individual site accesses to 9th Line proposed. A traffic study has been prepared to support the new road location and slight increase in traffic expected from new residential dwellings in the subdivision. The property also contains an existing Private Road known as Dalton Lane, addressed under Section 7.4. This lane will be located entirely on one of the proposed subdivision lots and is proposed to be maintained in its current state.

The proposed subdivision plan for the property would see the creation of eleven (11) new residential building lots, three (3) of which will be waterfront lots and eight (8) interior lots. Lot sizes have been designed to accommodate residential dwellings on private servicing with frontage provided to all lots via the new subdivision road. Subdivision development is permitted in the Rural Lands designation subject to the completion of supporting studies in accordance with the general development policies and rural area land use policies of the Official Plan. Overall, redevelopment of the property into a residential subdivision would comply with the goals, objectives and policies of the Township of Beckwith Official Plan.

## COUNTY OF LANARK SUSTAINABLE COMMUNITIES OFFICIAL PLAN (SCOP)

The subject property is designated Rural Lands and Flood Plain on the January 2017 version of the County of Lanark SCOP Schedule A – Land Use (See Figure 5). This schedule is difficult to read



once zoomed in further, therefore the 2012 version of Schedule A is also included to show the subject lands more closely (See Figure 6). These land use designations are the same as those seen in the Township's Official Plan earlier in this report. The SCOP includes 4 sections: 1) Sustainable Communities; (2) Sustainable Environment; (3) General Policies; and (4) Land Use Schedule.



Figure 5 - County of Lanark SCOP Schedule A (2017 Version)

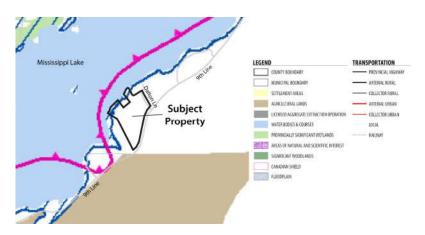


Figure 6 - County of Lanark SCOP Schedule A (2012 Version)

Part 1 (Sections 1.0 to 4.0) of the County Official Plan sets forth policies for Sustainable Communities which are intended to guide residential and non-residential development in areas not required for resource development or natural heritage. The Plan seeks to implement a number of objectives to meet these sustainable community policies. The proposed subdivision will broaden the range of housing options in the rural areas of the Township to meet the requirements of a growing population (Sec. 1.2.3). The development will be located along Mississippi Lake with adequate sizes for lots in order to maintain these waterfront areas (Sec. 1.2.6). Development will not impact any natural heritage areas (Sec. 1.2.7) and is located on land



free of any natural or man-made hazards (Sec. 1.2.8). The proposed subdivision will lead to the creation of a new sustainable rural community.

Part 1 - Section 3.0 of the Official Plan outlines Rural Area policies intended for the long-term orderly development of rural areas. The Plan aims to ensure residential and non-residential development is consistent with rural service levels, the distinct character of waterfront and rural areas is maintained, and development is compatible with the environment and any resource based uses (Sec. 3.3.1). Lot creation shall take place by consent or plan of subdivision (Sec. 3.3.3). Abutting uses along Mississippi Lake include residential and/or seasonal dwellings on varying lot sizes. The new subdivision would implement the same land use pattern in a compatible and efficient manner (Sec. 3.3.4.1) on private sewage and water services (Sec. 3.3.4.2). Through zoning regulations and subdivision controls the redevelopment of the property will ensure a larger range of housing with appropriate separation distance to abutting uses and designations that protect and maintain the natural features and areas along the lake (Sec. 3.3.4.5). Lot sizes have been provided to accommodate development on private servicing (Sec. 3.3.4.7) that are supported by a hydrogeology study showing the new lot creation can be appropriately serviced (Sec. 3.3.4.8). The rural area policies of the County Official Plan would support the redevelopment of the property with a new eleven (11) lot subdivision.

Part 1 - Section 4.0 of the County Official Plan sets forth Infrastructure Policies covering a range of issues from construction and maintenance of roads to the collection, treatment and storage of water and sewage. The Plan allows for the addition of new roads to the local or county road system without amendment to this Plan or to the local Official Plan where the roads are a result of the approval of a plan of subdivision (Sec. 4.3.6). A Traffic Impact Study has been completed to support the introduction of a new local road connecting to 9th Line. A stormwater management plan has also been prepared to support the development which is required for all proposals of more than four new lots (Sec. 4.4.3). The redevelopment of the property is not expected to impact any County Roads, utility or communication corridors, or airports.

Part 2 (Sections 5.0 to 7.0) of the County Official Plan outlines Sustainable Environment Policies including natural heritage, resources, and public health and safety. Section 5.0 outlines Natural Heritage policies. To assess the potential for natural heritage, including endangered or threatened species and their habitat, an EIS was completed by Muncaster Environmental Planning in June 2019. Two addendums to this report were provided in December 2019 and May 2020. The subject property consists mainly of cultural meadows and open fields stemming from historic farming practices. There were no significant wetlands, woodlands or valleylands identified on the property through the EIS report and no ANSIs are present. There is potential for



species habitat for certain ground birds on-site, and Mississippi Lake does comprise potential habitat as well. A full summary of the EIS will be included later in this report.

Overall, the proposed subdivision would comply with the policies of the County of Lanark Sustainable Communities Official Plan.

# **PROVINCIAL POLICY STATEMENT (PPS) 2020**

The Provincial Policy Statement (PPS) provides policy direction on matters of Provincial interest related to land use planning that provides for appropriate development while protecting resources of provincial interest, public health and safety, and the quality of the natural and built environment.

**Section 1** of the PPS outlines policies for Building Healthy Strong Communities with provisions for Managing and Directing Land Use to Achieve Efficient and Resilient Development and Land Use Patterns in Section 1.1. The proposed subdivision will promote a healthy, liveable and safe community by introducing a new range of residential uses in an area that complement existing uses (Sec. 1.1.1b) while avoiding development patterns that may cause environmental impacts on the lake (Sec. 1.1.1c). The new subdivision road will ensure the adequate infrastructure is provided to meet the projected needs of the new lots being created (Sec. 1.1.1g). Increased lot depths of waterfront lots will also help conserve the biodiversity of the lake (Sec. 1.1.1h).

**Section 1.1.5** of the PPS sets forth policies for Rural Lands in Municipalities. Permitted uses on rural lands include residential development and agricultural uses (Sec. 1.1.5.2). Development that is compatible with the rural landscape and can be sustained on rural service levels should be promoted (Sec. 1.1.5.4). The new road will provide the necessary planned infrastructure for the subdivision (Sec. 1.1.5.5). New land uses, including the creation of new lots, shall comply with MDS formulae (Sec. 1.1.5.8). The property had an existing dwelling and several outbuildings that have been removed to facilitate redevelopment. The resulting subdivision would be located along the waterfront of Mississippi Lake where several residential uses are already located. There are no barns nearby which would prohibit development of any of the new lots created. The new subdivision would comply with the policies of Section 1.1.5 of the PPS.

**Section 1.6.6** of the PPS outlines policies for Sewage, Water and Stormwater. Planning for these services shall be done in an efficient manner on either municipal or private services (Sec. 1.6.6.1). The individual on-site sewage and water servicing for each lot has been supported by Site Servicing and Hydrogeological studies in accordance with the PPS (Sec. 1.6.6.4). A stormwater



management plan will be submitted that will promote best practices, minimize impacts to public health and safety and mitigate any risks to the environment (Sec. 1.6.6.7).

**Section 2.0** of the PPS provides policies for the Wise Use and Management of Resources including natural heritage, agriculture and mineral aggregate resources. The subject property falls outside of the agriculture designation on the Official Plan and does not contain any known resources whose extraction would serve a greater overall benefit. There are no identified natural heritage features that would be impacted by the creation of eleven new lots on the property. There are no cultural heritage or archaeological resources located on the subject property. Overall, the site is free of any features that would require the policies of Section 2.0 of the PPS to be addressed.

**Section 3.0** of the PPS provides policies for Protecting Public Health and Safety with provisions related to natural and man-made hazards. There are no man-made hazards located anywhere on the property. Some lots will front onto Mississippi Lake but there are no identified dynamic beach or erosion hazards along the shoreline. Nothing on the property would require the policies of Section 3.0 to be addressed.

Overall, the proposed subdivision would be consistent with the policies of the Provincial Policy Statement (PPS) 2020.

## **SUPPORTING STUDIES - ENVIRONMENTAL IMPACT STATEMENT (EIS)**

An Environmental Impact Statement was completed in support of the proposed subdivision by Muncaster Environmental Planning in June of 2019, with subsequent addendums in December 2019 and May 2020 respectively. The report addresses Species at Risk (SAR) and their potential habitat on the subject lands. The EIS describes the property as consisting mainly of cultural meadows with some deciduous hedgerows along laneways and shorelines. Site visits were carried out on May 29, June 6 and June 13, 2019 to compile a vegetation inventory and to carry out the breeding bird surveys for the property.

Species at risk with the potential to occur on-site include Bald Eagle, Barn Swallow, Bats, Bobolink and other breeding birds. None of these species were observed or heard calling during the point count surveys. Mississippi Lake provides suitable habitat for both American Eel and several species of turtles. Given that development of the waterfront properties will occur upland beyond the 30 metre water setback it is not anticipated and species habitat within the lake will be affected. The majority of the subject property and adjacent lands are actively being used for crop



land or are developed making their potential for species at risk or habitat minimal. Significant habitat is not considered to be present. The report includes several recommendations for development, but overall the proposed subdivision can be supported by the EIS completed for the property.

## SUPPORTING STUDIES – STAGE 1, 2 AND 3 ARCHAEOLOGICAL ASSESSMENT

A Stage 1, 2 and 3 Archaeological Assessment was completed for the proposed subdivision by Paterson Group Consulting Engineers. The Stage 1 assessment included "a review of updated Ontario Ministry of Tourism, Culture and Sport (MTCS) archaeological site databases, a review of relevant environmental, historical and archaeological literature, and primary historical research including: historical maps and aerial photographs." The Stage 1 assessment indicated the property has pre-contact Aboriginal archaeological potential due to its proximity to the Mississippi River. The study area also exhibits high historic Euro-Canadian archaeological potential based due to the historic home and barns. The Stage 2 assessment was undertaken on June 29th and July 4th, 2018. The survey identified a concentration of Euro-Canadian artifacts in an area to the east of the house which were deemed to have cultural or historic value warranting a Stage 3 assessment. More than 20 artifacts predating 1900 were recovered. The site was designated BgGa-11 and named the McEachen Site, after the family that lived on the site from 1837 to 1876.

The Stage 3 assessment of the McEachen Site (BgGa-11) included a controlled surface pickup and was undertaken between July 26th and July 31<sup>st</sup>, 2018. Test unit excavation was undertaken in a 5 x 5 m grid until the boundaries of the site were confirmed. While many artifacts were recovered related to the McEachen family and later occupants, no intact culturally significant deposits were found. "All areas of the site have been disturbed by modern farming activities as evidenced by the recovery of deeply redeposited modern items (plastics, wire nails, etc.) throughout the site, down to subsoil." No further archaeological assessment is required as the site does not meet any criteria for Stage 4 recommendation.

## SUPPORTING STUDIES – HYDROGEOLOGICAL INVESTIGATION & TERRAIN ANALYSIS

A Hydrogeological Investigation and Terrain Analysis was completed for the proposed subdivision by GEMTEC Consulting Engineers and Scientists to support the 11 lots on private servicing. The report concluded the site generally consists of thinly veneered unconsolidated quaternary sediments with an overburden thickness between 0.3 and 3.1 metres. Some of these thin



overburden areas will require augmentation of native soils to meet the minimum overburden thickness for on-site sewage disposal systems. Water quality available is safe for consumption but groundwater treatment is likely required. The colour found in the water is caused by iron and manganese concentrations which can be removed by manganese greensand. The quality of groundwater meets the MECP regulations with the exception of hardness, total dissolved solids, colour, organic nitrogen, sodium and iron, all of which can be treated appropriately.

The report continues on by providing various recommendations for well construction, including their location, setback to sewage disposal systems, and depth. Well ownership and septic system construction recommendations are also provided. Overall, the quality and quantity of ground water available for the residential subdivision is appropriate and can meet all applicable standards for water.

#### SUPPORTING STUDIES – TRAFFIC REPORT

A Traffic Report was completed for the proposed subdivision by Castleglenn Consultants to assess the impacts of 11 new residential lots on 9<sup>th</sup> Line. The report indicates that the amount of trips expected to be generated by 11 new residential lots is negligible, with an expected 8 vehicles per hour during morning peak hour and 11 vehicles per hour during afternoon peak hour. This results in an average frequency of 1 vehicle every ten minutes.

A site distance analysis was completed and found that approximately 145 metres of site distance was required to the south for left turns out of the site, and 125 metres to the north to complete a right turn out of the site. A site visit was conducted on October 9<sup>th</sup>, 2019 and found the required site distances could be met in both directions. Furthermore, the analysis was completed assuming traffic speeds of 70km/h. This portion of 9<sup>th</sup> Line is posted at 60km/h with recommendations for reduced speeds around curves along 9<sup>th</sup> Line Road.

The report concluded that sufficient site lines were available for the new subdivision road and vehicle trips anticipated from the new lots would generate low traffic volumes during peak hours with negligible changes on traffic patterns along 9<sup>th</sup> Line.

# SUPPORTING STUDIES – SERVICING AND STORMWATER MANAGEMENT REPORT

A Servicing and Stormwater Management Report was completed for the property by Robinson Consulting Engineers. The Mississippi Valley Conservation Authority was contacted to provide



comment on the level of treatment required for the subdivision. Quantity control is not required given stormwater is discharging to Mississippi Lake, but enhanced (80% TSS removal) quality control is required. Low Impact Development (LID) measures should also be considered.

Since the site is in a rural area the "treatment train" approach using LID measures is proposed to meet the quality control for the site. Runoff from roadways will be directed to roadside ditches and crossing culverts to be conveyed to Mississippi Lake. The grass swales proposed on-site include several factors that enhance pollutant removal. Rip-rap check dams have been incorporated into the outlet swale design to further enhance pollutant removal. A sedimentation forebay will be installed at the inlet of the outlet swale to encourage settling of sediment particles before reaching swales. Culverts with sufficient diameter for managing stormwater will be installed throughout the development area. Further erosion and sediment control measures in accordance with MECP best management practices will be required including light duty silt fencing and straw bale check dams within roadside ditches and drainage outlets.

The report concluded the proposed subdivision can be adequately developed in accordance with Township and Mississippi Valley Conservation guidelines.

#### **SUMMARY**

The property owners, Cameron and June Young, are proposing a new eleven lot plan of subdivision for their property located at 3160 9<sup>th</sup> Line in the Township of Beckwith. The subdivision will propose three (3) waterfront and eight (8) interior lots to be accessed by a new subdivision road. A small lot addition onto the waterfront property at 3144 9<sup>th</sup> Line Road will provide this lot access to the main subdivision road allowing the existing driveway to be retired. Existing development on the subject property has been removed. Dalton Lane, a private road on the north side of the property, will be maintained in its entirety and located on one of the proposed subdivision lots. The proposal is supported by several studies including an Environmental Impact Statement, an Archaeological Assessment, a HydroG and Terrain Analysis, a Servicing and Stormwater Management Report and a Traffic Study.

Should you have any further questions please do not hesitate to contact the undersigned.

Sincerely,

Tracy Zander, M.Pl, MCIP, RPP

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