

Development Plan Eligibility

**1688487 Ontario Inc.
Kennedy Drive - Residential Development
Lot 14, Concession 13
Township of Cavan-Monaghan**

July 6, 2015

MNRF File No. : 15-CAVA-PET-INF-1967

Proponent Name: 1688487 Ontario Inc.
Mr. David Thomas
28-B Albert Street
Oshawa, ON L1H 8S5

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Niblett Environmental Associates Inc.
Biological Consultants

July 6, 2015

PN 13-092

1688487 Ontario Inc.
c/o Mr. David Thomas
28-B Albert St.
Oshawa, ON, L1H 8S5

**Subject: Kennedy Drive Subdivision
Township of Cavan-Monaghan**

**Eastern Meadowlark Compensation
Endangered Species Act
Development Plan**

Dear Mr. Thomas,

NEA has prepared this Development Plan, as required under the Ontario Endangered Species Act, for development of a subdivision in the Hamlet of Mount Pleasant; Township of Cavan-Monaghan that impacts on the habitat of eastern meadowlark.

The plan was prepared as per the Information Summary, ESA, 2007 Clause 23.2 Development Plan Request, Peterborough District MNR.

If you require further details on the habitat or compensation plan, please contact me.

Sincerely,

A handwritten signature in blue ink, appearing to read "C. Ellingwood".

Chris Ellingwood
President and Sr. Terrestrial and Wetland Biologist

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1.0 Introduction and Background

1.1 Project Location and Description

The property for the Kennedy Drive Draft Plan of Subdivision is located at Part Lot 14, Concession 13, geographic township of Cavan-Monaghan, Peterborough County. The proposed development is located just south of Mount Pleasant Road, extending south off Kennedy Drive. The property is surrounded by a small subdivision to the northwest and open meadows and hedgerow areas to the east and south. The property is found on the upper slopes of a large drumlin with development being proposed along the crest of the drumlin feature.

1.2 Planning Policies

The proposed development is for the creation of 13 lots with access being from the extension of Kennedy Drive. Since this proposed subdivision appears to be within the area of Mount Pleasant designated as 'Settlement Area' (Schedule 'A' Land Use; Cavan Monaghan Official Plan), Section 23.2(1) of Ontario Regulation 242/08, under the Endangered Species Act, 2007 applies.

23.2 (1) This section applies to a person who carries out any of the following development activities in an area where it is likely to damage or destroy the habitat of bobolink or eastern meadowlark:

1. Development of land designated as an area of settlement in an official plan of a municipality approved under the Planning Act before January 1, 2013.

(2) Subsection 10 (1) of the Act does not apply, with respect to the habitat of bobolink or eastern meadowlark, to a person carrying on a development activity if the following conditions are satisfied:

1. Before beginning any part of the development activity, the person must prepare a development plan in accordance with subsection (3) and submit it to the Ministry.

2. After the development plan is submitted to the Ministry, the person may begin the development activity, but shall not perform any part of the development activity that is likely to damage or destroy the habitat of bobolink or eastern meadowlark between May 1 and July 31 of any year.

3. The development activity shall be carried out in accordance with the development plan.

4. In an area that is situated outside of the area where the development activity occurs and that meets the criteria set out in subsection (4), the person carrying on the development activity shall,

i. within 12 months of the commencement of the activity, create new habitat for bobolink or eastern meadowlark, or if habitat for bobolink or eastern meadowlark already exists in the outside area, enhance the existing habitat, by ensuring that the area meets the requirements of subsection (5), and

ii. in each of the five years following the creation of the new habitat or the enhancement of the existing habitat, maintain the habitat by carrying out the measures described in subsection (6). O. Reg. 65/12, s. 3.

(3) A development plan referred to in paragraph 1 of subsection (2) shall include the following:

1. The name and contact information of the person on whose behalf the development activity is being carried out.

2. With respect to the area of bobolink or eastern meadowlark habitat that is likely to be damaged or destroyed by the development activity, a description of,

i. the area's location, including a detailed map,

ii. the ecoregion in which the area is located, and

iii. the size of the area in hectares.

3. With respect to the development activity that the person proposes to carry out, a description of,

i. the activity, including evidence that it meets the description of one of the types of development activity set out in subsection (1),

ii. the proposed start date of the activity, and

iii. the location where each stage of the activity will occur, including a detailed map.

4. With respect to the area intended as new or enhanced habitat under subparagraph 4 i of subsection (2), a description of,

- i. the area's location, including a detailed map,*
- ii. the ecoregion in which the area is located,*
- iii. the size of the area in hectares,*
- iv. the composition of the soils covering the area, and*
- v. the percentage of the area covered by grass species at the time the development plan is submitted to the Ministry under paragraph 1 of subsection (2). O. Reg. 65/12, s. 3.*

(4) The following are the criteria that an area must meet as to its size and location before being converted into new habitat, or being enhanced as habitat, under subparagraph 4 i of subsection (2):

1. It must be located in the same ecoregion as the area in which the development activity is to be carried out.

2. The minimum size of the area must be as follows:

i. if the creation or enhancement of the habitat is required because of a development activity described in paragraph 1 of subsection (1), an area equal to the size of the habitat for bobolink or eastern meadowlark that the development activity is likely to damage or destroy,

ii. if the creation or enhancement of the habitat is required because of the development of land or of a unit described in paragraph 2 or 3 of subsection (1) and the approval of the development under the Planning Act or under the Condominium Act, 1998, as the case may be, was given before January 1, 2013, an area equal to 10 per cent of the habitat for bobolink or eastern meadowlark that the development is likely to damage or destroy, and

iii. if the creation or enhancement of the habitat is required because of the development of land or of a unit described in paragraph 2 or 3 of subsection (1) and the approval of the development under the Planning Act or under the Condominium Act, 1998, as the case may be, was given on or after January 1, 2013 but before November 1, 2014 an area equal to 50 per cent of the habitat for bobolink or eastern meadowlark that the development is likely to damage or destroy. O. Reg. 65/12, s. 3; O. Reg. 122/12, s 3.

(5) The following are the requirements that habitat created or enhanced under subparagraph 4 i of subsection (2) must meet within 12 months of the commencement of the development activity:

1. 50 to 80 per cent of the habitat must be covered with at least three different grass species and the remainder of the habitat must be covered with forbs or legumes.

2. Among the grass species referred to in paragraph 1, at least one must grow greater than 50 centimetres high under normal growing conditions. O. Reg. 65/12, s. 3.

(6) The following are the measures required to maintain new or enhanced habitat for bobolink or eastern meadowlark under subparagraph 4 ii of subsection (2):

1. If the habitat is used for pasture, exclude grazing farm animals from at least 50 per cent of the habitat from September 16 of any given year until July 31 of the following year, for a five-year period after the habitat is created or enhanced.

2. In each of the five years following the creation or enhancement of the habitat, take such actions as are necessary to maintain the grass species, forbs and legumes in the area in the proportions described in paragraph 1 of subsection (5). O. Reg. 65/12, s. 3.

(7) In this section,

“development activity” means an activity described in paragraph 1, 2 or 3 of subsection (1). O. Reg. 65/12, s. 3; O. Reg. 176/13, s. 13.

2.0 Species At Risk (SAR) Inventories

2.1 SAR Observations

In-season surveys were conducted on the entire property using the MNR protocols for Eastern Meadowlark surveys on several dates in the peak breeding season (May 22nd and June 6th, 2014). One pair of meadowlarks was confirmed in the field at the south end of the property and partially within Lot 3 on the updated draft plan of subdivision.

2.2 Habitat Description

The majority of the property is successional meadow with shrubs scattered throughout the area. Shrubs consisted of staghorn sumac (*Rhus typhina*), hawthorn (*Crataegus spp*), wild apple (*Malus domestica*) and European buckthorn (*Rhamnus cathartica*). A few hedgerows were found in the area suggesting the open areas were once used for agricultural purposes. Trees regenerating in these hedgerows included American basswood (*Tilia americana*), American white elm (*Ulmus americana*), sugar maple (*Acer saccharum*), white ash (*Fraxinus americana*), trembling aspen (*Populus tremuloides*) and eastern white cedar (*Thuja occidentalis*).

The open field communities were dominant in the southern and eastern portion of the property as abandoned hayfields. The fields were in various stages of regeneration with shrubs present in the fields, particularly in the east along the slope of the drumlin. Woody species included European buckthorn, common crabapple, staghorn sumac and hawthorn species. Herbaceous species included a number of asters and goldenrods (*Aster spp*, *Solidago spp*), timothy (*Phleum pratense*), Queen Anne's lace (*Daucus carota*), red clover (*Trifolium pratense*), awnless brome grass (*Bromus inermis*), orchard grass (*Dactylis glomerata*), alfalfa (*Medicago sativa*), goat's beard (*Aruncus diocus*) and common milkweed (*Asclepias syriaca*).

Two fairly open meadows were located in the most southern portion of the property and consisted mainly of grasses and goldenrod species. Dog strangling vine (*Cynanchum rossicum*), a highly invasive species, was also found throughout the area.

The central portion of the property was highly disturbed with open and exposed areas of sand and gravel. Overall the topography was flat to slightly rolling with sandy soils.

The southern fields where the meadowlark were observed consisted of the following:

- 65% orchard grass, timothy and awnless brome grass
- 10% other – swallow-wort, goat's beard, milkweed, red clover
- 25% goldenrod and aster spp.



Photo 1: View of open goldenrod meadows at southern portion of property looking southwest.



Photo 2: View of open meadows in southern portion of property, looking east.

2.3 Area of Habitat Being Destroyed

As previously stated, the proposed development is for the creation of 13 lots with access being from the extension of Kennedy Drive. As this development is on a drumlin, cut and fill activities will be required to allow for the establishment of relatively flat areas for building envelopes and the Kennedy Drive extension.

A site plan has been submitted to Peterborough County. The subject property does contain additional areas for compensation of meadowlark habitat along the eastern slope of the drumlin and further to the northeast corner of the property. The proposed development is estimated to remove approximately 2.5 ha (Figure 1).

The property is located in Ecoregion 6E-8 (Lake Simcoe-Rideau - Mixedwood Plains Ecozone). The property's topography is typical of the area recognized by numerous well-formed drumlins containing soils dominated by Otonabee Loam. Soils provide good drainage, are subject to moderate sheet erosion and are mildly alkaline.

3.0 Impact of Development

The County of Peterborough advertised the Complete Application for Plan of Subdivision on April 2, 2015.

The total area of the subject property is 31.461 hectares. 15.931 hectares will be dedicated to the Township of Cavan Monaghan as open space. The net area to be developed as residential lots is 15.530 hectares.

It is anticipated that Tree Clearing / Earth Excavation will commence in 2016, outside of April 15th – August 15th breeding bird window.

A copy of the current proposed plan is provided in Appendix I.

4.0 Proposal for Creation of Habitat (HEA)

As the area of habitat being destroyed is 2.5 ha of field habitat (meadowlark habitat), the compensation for an approved subdivision as per the ESA regulation Section 23.2 is equal to that of that area or 2.5 ha.

Habitat Enhancement Area

Location: Lot 14, Concession 13, Township of Cavan-Monaghan, Hamlet of Mount Pleasant, Peterborough County.

Ecoregion: 6E-8

Soil: Otonabee Loam- shallow soil over grey limestone till containing fragments of Precambrian rocks, 5 to 30 cm deep

Due to the relatively poor soils in the area, the vegetation, although dominated by a variety of grasses including orchard grass, awnless brome grass and timothy, it was estimated that 25% of the vegetation consisted of goldenrod species and the remaining 10 % included a variety of field species including common milkweed, goat's beard, Queen-Anne's lace, white sweet clover and swallow-wort. The presence of the scattered wild apple, white ash, staghorn sumac, hawthorn spp. and European buckthorn (which have grown up within former grassland) significantly reduces the suitability of the habitat for EAME, and their removal within this and adjacent habitat areas will increase habitat quality. No cattle have pastured this area for a few years now as was evident by the age of the scattered shrubs in the area.

The management plan for the property includes enhancements measures to create more open grassland habitat for a number of species including loggerhead shrike, eastern meadowlark, grasshopper sparrow, upland sandpiper, Henslow's sparrow and bobolinks. Part of the enhancement is to reduce the area occupied by the expanding copse of European buckthorn, staghorn sumac, wild apple and hawthorn. Removal of these shrub species will allow natural succession to occur and subsequently increase the area of more suitable habitat for grassland bird species.

Removal of shrubs and trees will take place partially in the fall months, if ground conditions are sufficiently dry, and partially during winter months. This will ultimately create an open grassland habitat with a few scattered shrubs on the periphery to provide perching sites for some of these species. Areas with insufficient grass species could be over-seeded with an appropriate blend seed mixture to meet the MNR criteria of three species of grasses.

The total area of EAME habitat that is to be removed for the development (approx. 2.5 ha) will be compensated for on a 1:1 basis, in the area to the south of the development and along the slope of the drumlin to the east. This HEA is approximately 5.0 ha in size (See Figure 1).

Meadowlarks are found on this property already and by creating suitable habitat in the same vicinity will ensure this species will continue to have suitable breeding habitat available. The majority of the areas to be rehabilitated will only require cutting of those shrub species mentioned previously, to improve the overall habitat for meadowlarks.

Niblett Environmental Associates will be retained to monitor the rehabilitation site for the 5 year period. We will collect the necessary information on the presence of eastern meadowlark, assess the habitat enhancement works and monitor the success of any plantings/seeding that may have been conducted. We will also confirm the composition of the grass species within the compensation areas to ensure it meets the MNR criteria.

Maintenance and Monitoring

Breeding bird surveys will be completed by a qualified biologist in accordance with standard protocols (MNRFB bobolink protocol and grassland bird survey methodologies) in each of the 5 years of the maintenance and monitoring period for the HEA.

An assessment of the quality of Eastern Meadowlark habitat and success of the habitat enhancement work will be completed by a qualified individual on an annual basis during the 5 year monitoring period.

Monitoring reports summarizing the results of the annual breeding bird surveys and habitat assessments will be submitted to MNRFB on or before January 31st of each of the monitoring years for 5 years, beginning January 31st 2017 and including January 31st 2022. The enhancement measures are planned for the winter of 2015-2016, with the 1st year of bird surveys in June 2016 and therefore the first monitoring report in Jan 31st, 2017.

Enhancement measures will be undertaken after the nesting and dispersal period (after Sept. 21st) and prior to April 30th.

Summary

Information on the HEA Site

as required by Part 23.2(3)4 of Ontario Regulation 242/08

Location: Lot 14, Con 13, Township of Cavan-Monaghan; County of Peterborough

See attached map (Figure 1).

Ecoregion: 6E_8

Size of HEA: 5.0 ha

Soil composition: Otonabee loam: shallow loam over grey limestone till containing fragments of Precambrian rock, from 5 cm to 30 cm deep

Percentage of area covered by grass species: 65%

**Appendix I:
Development plan M.J. Davenport-
Drawing No. 4879-01
June 2013 (Project No. 13-D-4879)**

**Appendix II:
Meadowlark Habitat and Observations (2014)**

Appendix III
EAME Habitat and Compensation Areas



Figure 1: Habitat Enhancement Areas

Appendix IV: Surveyor Experience

Surveys were conducted by Chris Ellingwood, the president and senior terrestrial biologist for NEA. His qualifications include 35 years of birdwatching experience, 23 years as a bird biologist including work for the Canadian Wildlife Service, MNR and FON, as well as 17 years as a consultant. He has acted as the regional coordinator of the second Ontario Breeding Bird Atlas and is the regional coordinator for the Marsh Monitoring Program. He specializes in grassland birds and marsh birds, including Species At Risk. He has completed IGF forms and negotiated agreements with the MNR for species at risk such as bobolinks, meadowlarks, loggerhead shrikes and barn swallows. He also participates annually (up to 20 years) in the Breeding Bird Survey, Marsh Monitoring Program, Nocturnal Owl Survey and the Forest Bird Monitoring Program.

A C.V. of the biologist can be provided.