Muncaster
Environmental
Planning Inc.

July 18, 2013

Mr. Greg Leblanc
1963 Old Carp Road
Carp, ON
K0A 1L0

Dear Mr. Leblanc:

RE: 3119 Carp Road, West Carleton
Environmental Impact Statement and Tree Conservation Report

I have completed an Environmental Impact Statement (EIS) and Tree Conservation Report for a proposed commercial – industrial subdivision at 3119 Carp Road (PIN 045920001). The 14.2 hectare site is on the west side of Carp Road, immediately south of the Carp Airport. The site is described as Part of Lot 12, Concession 3, March Geographic Township in the City of Ottawa.

Background and Project Description

A commercial – industrial subdivision of twelve lots and two new public streets is planned for the site (Map 2). The streets will be configured in a tee with a single access onto Carp Road, utilizing the alignment of an existing access road. None of the lots will have direct access onto Carp Road. Each of the parcels will be serviced by individual wells and septic systems.

The site and most of the adjacent lands are designated *Carp Road Corridor Rural Employment Area* on Schedule A of the City of Ottawa Official Plan, with *General Rural* and *Sand and Gravel Resource Areas* to the west of the site. The site is zoned Rural Commercial (*RC9*). Lands to the east of the site are designated *General Rural Area.* The forests in the west portion of the site are part of the City's Natural Heritage System, as shown on Schedule L3 of the Official Plan. There are no natural areas, as identified in the Region of Ottawa-Carleton's Natural Environment System Strategy on the site, but the lands to the northwest, southwest and further to the west are part of the low rated Carp Airport Natural Area (White, 1997). Much of this Natural Area has been impacted by sand extraction to the west of the site and a residential and commercial development is draft approved for the Carp Airport lands to the north and northwest. There are no Areas of Natural and Scientific Interest or provincially significant wetlands in the general area of the site.

491 Buchanan Crescent, Ottawa, ON K1J 7V2
Tel (613) 748-3753; Fax (613) 748-6376

Methodology

This EIS was prepared in accordance with Section 4.7.8 of the City of Ottawa Official Plan (2003) following the EIS Guidelines (2nd Edition April 2012) and the Guidelines for City of Ottawa Tree Conservation Report, found at http://ottawa.ca/en/development-application-review-process-0/2-environmental-impact-statement-eis-process/ and http://ottawa.ca/en/env_water/tlg/trees/preservation/guidelines/index.html, with guidance from the Natural Heritage Reference Manual (OMNR, 2010). The field surveys and this report were completed by Bernie Muncaster, who has a Master's of Science in Biology and over twenty-four years of experience completing natural environment assessments. The purpose of the Tree Conservation Report component is to determine any tree stands that should be retained and protected. The owner of the site is Greg Leblanc. It is proposed to remove the trees not identified for retention later in 2013 or early 2014 outside of the breeding bird period.

The major focus of the EIS component are to determine if Species at Risk utilization is occurring on or adjacent to the site and the significance of the forests in the west portion of the site. The EIS will provide the methodology to mitigate as required negative impacts on significant features and functions. To attain this objective, as required mitigation measures will be developed based on field observations of the features and functions of the natural environment. Potential Species at Risk in the general area were identified from Ministry of Natural Resources databases, the Ontario Breeding Bird Atlas and Species at Risk reported for the overall City of Ottawa.

For the purposes of this report Carp Road is assumed to be in a north-south orientation.

The natural environment features of the site and adjacent lands were reviewed on April 30th, 2013, under cloudy skies, a light breeze and an air temperature of 15° C. The condition of the soybean fields were also photographed on July 16th, 2013.

Existing Conditions

The site is a combination of cultural meadows and woodlands and young and intermediate-aged forests, with deciduous hedgerows adjacent to some of the fields (Map 1). The topography of the site is generally level and well drained sandy soils dominate the area (Schut and Wilson, 1987). An existing access road connects Carp Road to the site and continues west through the site to the former extraction areas west of the site.

Cultural Meadow

Three fields used for pasture and cultivation are in the east half of the site. The fields were planted in soybeans in 2013 (Photos 1 and 2). Vegetation in the periphery of the meadow habitat includes bluegrass, meadow grass, brome grass, wild carrot, aster, goldenrod, white clover, red clover, common mullein, rough-fruited cinquefoil and common dandelion. Scattered Scot's pine up to 26cm diameter at breast height (dbh) and regenerating white spruce are in the north

representation of the meadow habitat along with tartarian honeysuckle, red raspberry and common juniper shrubs.

Deciduous Hedgerows

White elm, trembling aspen, eastern cottonwood, Manitoba maple and large-toothed aspen are the dominant trees in the deciduous hedgerows, with the largest trees in the range of 46 to 48cm dbh (Photo 3). A few Scot's pine up to 22cm dbh are also present and the central-east hedgerow contains a 54cm dbh white spruce (Photo 4). Tartarian honeysuckle, apple, common buckthorn and hawthorn shrubs are among the trees in the deciduous hedgerows. Wild grape growth is extensive on many of the trees and trunk decay is present in some of the larger poplars.

Cultural Woodland

White birch up to 25cm dbh are dominant in the cultural woodland representation in the northeast corner of the site, with trembling aspens up to 15cm dbh common. Smaller grey birch, red cedar and white spruce are also present along with a few Scot's pine up to 22cm dbh. Most of the trees appear to be in good condition. The understorey and ground flora of the woodland is highly disturbed and includes common dandelion, blue grass, brome grass, white clover, common mullein, aster, common milkweed, white bedstraw, bull thistle, ox-eyed daisy, red raspberry and tartarian honeysuckle.

Dry-fresh White Cedar-Ash-Poplar Mixed Forest

Much of the west portion of the site is a young to intermediate-aged mixed forest with extensive historical logging through the forest (Photo 5, Map 1). The largest trees are white spruce up to 47cm dbh with white cedar, red maple, white ash, white pine and white birch in the range of 32 to 38cm dbh (Photo 7). Smaller red ash, basswood and sugar maple are also present. Groves of white cedar and white spruce with many trees greater than 35cm dbh are in the northwest corner of the site. The logging and wind throw (Photo 6) has resulted in many areas of open canopy where a ground flora reflecting disturbed conditions has developed, including white clover, common dandelion, Pennsylvania sedge, ground ivy, common strawberry, common mullein, goldenrod and heal-all. The understorey reflects the open canopy as well including common juniper, red raspberry, tartarian honeysuckle, blackberry, common buckthorn, red-osier dogwood, prickly ash and prickly gooseberry along with regenerating white cedar and poplar stems. Other than the wind throw most of the trees appear to be in generally good condition with fungus noted on some of the maple stems and a few spruce with extensive needle die back.

Dry-fresh Poplar Deciduous Forest

Large-toothed aspen and trembling aspen are dominant in the young deciduous forest in the southwest corner of the site (Map 1). The largest aspens are up to 34cm dbh. Scattered red pine, white elm and Scot's pine are up to 22cm dbh. Common buckthorn is dominant in the understorey along with regenerating poplar and elm stems. The forest is scrubby in nature with wind throw common (Photo 8) and wild grape coverage is on many of the trees and shrubs.

Red Pine Plantation

Planted red pines are adjacent to the poplar deciduous forest in the southwest portion of the site (Photo 9, Map 1). The pines are young, up to 20cm dbh. Wind throw is common in the plantation. The understorey is limited and includes common juniper and regenerating white spruce. Common dandelion, rough-fruited cinquefoil, white bedstraw and asters are representative of the ground flora.

No channels with potential aquatic habitat or wetland habitat were observed on or adjacent to the site outside of the former excavation areas to the west of the site.

Wildlife observations included wild turkey, northern flicker, Cooper's hawk, Canada goose, ring-billed gull, white-breasted nuthatch, red-winged blackbird, black-capped chickadee, American crow, song sparrow, chipping sparrow, American robin, European starling and white-tailed deer pellets. No stick nests, evidence of cavity use or other specialized wildlife functions were observed on the site.

Photo 1 – South field of soybeans. View looking south from existing access road

Photo 2 – Central field of soybeans. View looking west

Photo 3 – East-west deciduous hedgerow of mostly poplar along south side of access road from Carp Road. View looking west

Photo 4 – White spruce in east-west hedgerow in the north portion of the site. View looking north

Photo 5 – Southeast part of the mixed forest in the west portion of the site.

Photo 6 – Wind throw is common in the mixed forest in the west portion of the site.

Photo 7 – This white pine is one of the larger trees in the west mixed forest

Photo 8 – The poplar deciduous forest in the southwest corner of the site is young and wind throw is common

Photo 9 – Red pine plantation in the southwest portion of the site.

Species at Risk and other Significant Natural Heritage Features

No flora or fauna or ecological conditions were identified in the background review or field surveys which would result in a significant wildlife habitat designation on the site. Significant wildlife migration corridors are not possible due to the adjacent land uses, including areas of active and past extraction, the Carp Airport, agricultural lands and the Carp Road corridor. No examples of seasonal wildlife concentrations such as deer yards, snake and bat hibernacula, waterfowl staging and moulting areas, raptor roosts, bird nesting colonies and potential shorebird staging areas were observed on or are reported for the site. Some waterfowl staging may occur in the former extraction ponds to the west of the site. This function it is not anticipated to be impacted by the proposed development that at its closest point will be in the range of 100 metres to the east of the ponds.

A search was completed on the 10 km square (18VR21) which includes the site and general area. Six species of interest were identified for the overall 10 km square, including the endangered American ginseng and loggerhead shrike, the threatened Blanding's turtle, and milksnake, a species of special concern. Two provincially rare species were also identified for the general area; ram's-head lady slipper and long-styled rush. Milksnake is relatively common in portions of eastern Ontario but is not often seen. It is found in open woodlands, clearings and around farmhouses where it hunts its major prey item, mice. Loggerhead shrike utilizes grazed pastures with short grass and scattered shrubs, especially hawthorn. No loggerhead shrike nests have been reported in the City of Ottawa since 2002. The ram's-head lady's-slipper orchid is found in mature coniferous forests or coniferous fens and swamps. American ginseng requires rich, moist, undisturbed and relatively mature sugar maple-dominated deciduous woods in areas of circumneutral soil such as over limestone or marble bedrock. Colonies are often found near the bottom of gentle slopes facing south-east to south-west; a warmer microhabitat that is usually well-drained and species-rich. The forest canopy is dominated by sugar maple, white ash, bitternut hickory and basswood. Long-styled rush grows in moist terrestrial habitat, including low-lying pockets of outcrops. No suitable habitat was observed for these species on or adjacent to the site. The greater water depths and lack of wetland vegetation in or adjacent to the excavation ponds do not appear to represent suitable habitat for Blanding's turtle. There are no wetland areas on the site and the site is not between the excavation ponds and wetland habitat to the north, south or east of the site. Thus potential turtle movement between the excavation ponds and wetland habitat in the general area would not occur through the site.

The breeding birds listed in the Ontario Breeding Bird Atlas for the 10 km square 18VR21 identified whip-poor-will, eastern meadowlark, barn swallow and bobolink as Species at Risk in the overall 10 km square. Bobolink and eastern meadowlark utilize larger areas of grasslands, including hay fields. Barn swallow utilizes barns and other structures with open rafters for nesting and forages in open areas for flying insects. Whip-poor-will requires large wooded areas with open patches, and/or open woodlands or alvar, habitat not present on or adjacent to the site. No structures were observed on the site that may be utilized by barn swallow. The tilled fields do not represent suitable bobolink or eastern meadowlark habitat in their current condition. However if the fields were to be used for haying or pasture they may represent suitable habitat.

If this change in land use occurs the fields should be surveyed for grassland Species at Risk during the nesting season from late May to early July.

The potential Species at Risk in the City of Ottawa and those listed on Parts 1 – 4 of Schedule 1 of the List of Wildlife Species at Risk provided by the Government of Canada's Species at Risk Act Public Registry, with input from the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) Canadian Species at Risk, were also reviewed. Many endangered and threatened species have historically been reported in the overall City, including butternut, American ginseng, eastern prairie fringed-orchid, flooded jellyskin, wood turtle, spiny softshell, Blanding's turtle, musk turtle, Henslow's sparrow, loggerhead shrike, little brown myotis, northern long-eared bat, olive hickorynut, chimney swift, eastern meadowlark, barn swallow, bobolink, whip-poor-will, bald eagle, golden eagle, cerulean warbler, least bittern, peregrine falcon, eastern cougar, common gray fox, lake sturgeon and American eel. The habitat requirements of these species along with those listed as special concern were reviewed.

In summary, only butternut is considered to have potential habitat on the site. No butternuts, which are found in a variety of terrestrial habitats in Ottawa, were observed on or within 25 metres of the site.

The forests in the west portion of the site do not represent significant woodlands as the forests are less than eighty years old. However the off-site contiguous portions of the woods could be older, which would identify the overall contiguous woodland as significant. However removal of portions of the on-site forest would not impact the designation of the overall woodland as significant if older woods are present elsewhere. The larger portion of the contiguous woodland to the southeast will continue to be linked with the forests immediately to the west of the site, between the site and the former extraction areas and the trees retained at the rear of the Lots 7 – 10 along the west portion of the site (Map 2). If the overall forest is considered a significant woodland it will continue to be a significant woodland after construction and operation of the proposed development.

Impact Analysis and Recommendations

No Species at Risk were observed on or adjacent to the proposed work areas and other than butternut, habitat to support the potential Species at Risk given the site's current condition is not present. The wooded areas in the west portion of the site are young to intermediate aged and have been disturbed through logging, wind throw and invasive species. The former extraction areas 100 metres to the west of the west edge of the site are now ponds and likely provide fish and waterfowl habitat. The features and functions of the pond are not anticipated to be impacted by the proposed development.

As shown on Map 2 the proposed large lot development will permit tree retention at the rear and sides of each lot which are currently treed. The recommended areas of tree retention include the northwest corner of the site where groves of white spruce and white cedar contain many trees greater than 35cm dbh. Important mitigation measures are provided below for the protection of

these retained trees. Much of the development will occur on tilled fields or areas of young and disturbed forests.

Given the level of disturbances along the Carp Road corridors, the Carp Airport and adjacent active and former extraction operations, the extent of noise, light and dust associated with the construction and operation of the subdivision is not anticipated to be distinguishable from the existing impacts associated with the adjacent activity. As the site is in an area of general disturbance, the removal of trees in the west portion of the site for the construction of the subdivision is not anticipated to have a detectable impact on the ecological features and functions of the surrounding landscape.

The following mitigation measures are recommended:

1. Sturdy protective fencing, at least 1.3 metres in height, is recommended along the edges of the work areas within ten metres of the proposed areas of tree retention. For the protection of the critical root zones the fencing is to be placed a minimum distance of ten time trunk diameter from the outer trees. No grading or activities that may cause soil compaction such as heavy machinery traffic and stockpiling of material are permitted within the fencing. No machinery maintenance or refuelling or storage of construction materials is to occur within five metres of the outer edge of the dripline of the adjacent trees to be retained and protected. The existing grade is not to be raised or lowered within the fencing and no digging is permitted within the fencing. The root system, trunk or branches of the trees to be retained must not be damaged. Exhaust fumes from all equipment during construction will not be directed towards the canopy of the retained trees. If any roots of trees to be retained are exposed during site alterations, the roots shall be immediately reburied with soil or covered with filter cloth or woodchips and kept moist until the roots can be buried permanently. Signs, notices or posters cannot be attached to any trees to be retained.

2. Silt fencing is recommended along the west periphery of the work areas to filter any surface water flows to the west towards the former excavation areas which are now ponded. The north and south edges of the fencing should be wrapped at a 120 degree angle to the east for at least ten metres. It is important that the fencing is properly keyed in, maintained as required, including removal of accumulated silt, and removed from the site after the construction is completed and the site is stabilized;

3. If there is the potential for damage by construction equipment to the branches of trees to be retained these branches should be pruned by a qualified arborist before any construction activity;

4. Municipal by-laws and provincial regulations for noise will be followed and utilities will be located as required in the vicinity of the site prior to construction. Waste will be managed in accordance with provincial regulations;

5. The contractor will have a spill kit on-hand at all times in case of spills or other accidents Any spills will be immediately reported to the MOE Spills Action Centre (1 800 268-6060);

6. Any turtles or snakes observed during construction are to be photographed and safely relocated to the lands to the west; and,

7. For the protection of breeding birds no shrub or tree removal should occur between April 15th and July 31st, unless a survey identifies no nesting activity and the woody vegetation is removed within five days of conducting the survey. No stick nests, which may be used by raptors for breeding, were observed on or adjacent to the site.

Conclusion

A commercial – industrial subdivision is proposed for the site at 3119 Carp Road, on the west side of Carp Road immediately south of the Carp Airport. This portion of the site supports regenerating vegetation in a variety of cultural (disturbed) habitats as well as young to intermediate aged forests in the west portion of the site. All of the vegetation and communities observed are common on a local and provincial scale and the forests are disturbed by past logging, wind throw and invasive species. No Species at Risk or other significant natural heritage features were observed in the proposed development area.

With proper implementation of the mitigation measures described above, including removal of woody vegetation outside of the breeding bird period, this EIS concludes that it is the professional opinion of the author that construction and operation of the subdivision will not impact the overall landscape of the natural environment**.**

References

City of Ottawa. 2003. City of Ottawa Official Plan. As updated by City Council, 2010. Publication: 1-28. 227 pp & Sched.

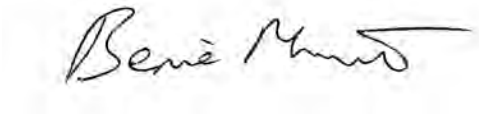
Ontario Ministry of Natural Resources. 2010. Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement, 2005. Second Edition. March 2010. 233 pp.

Schut, L.W. and E.A. Wilson. 1987. The soils of the Regional Municipality of Ottawa-Carleton (excluding the Ottawa Urban Fringe). Report No. 58 of the Ontario Institute of Pedology.

White, D.J. 1997. Summary: Natural Area Reports for Natural Areas West of the Rideau River (400 Series). Prepared for the Regional Municipality of Ottawa-Carleton, Planning and Development Approvals Department. Report #28-08c. 120 pp.

Please call if you have any questions on this EIS and Tree Conservation Report.

Yours Sincerely,
MUNCASTER ENVIRONMENTAL PLANNING INC.



Bernie Muncaster, M.Sc.
Principal

3119carpeistcr

2011 air photo from City of Ottawa E-map

Legend

Site

Vegetation Communities

Vegetation Communities

1. Cultural meadow
2. Red pine plantation
3. Cultural woodland
4. Deciduous hedgerow
5. Dry-fresh cedar-ash-poplar mixed forest
6. Dry-fresh poplar deciduous forest

Approx. Scale 1:4,700

0 50 100 150 200

METRES

Map 1	FILE: 12-40	May 8, 2013

Prepared for: Greg Leblanc

Prepared by: Muncaster Environmental Planning Inc.

3119 CARP ROAD
CURRENT VEGETATION

March Geo. Township, City of Ottawa

2011 air photo from City of Ottawa E-map

Legend

- Site
- Vegetation communities
- Areas of tree retention

Vegetation Communities

1. Cultural meadow
2. Red pine plantation
3. Cultural woodland
4. Deciduous hedgerow
5. Dry-fresh cedar-ash-poplar mixed forest
6. Dry-fresh poplar deciduous forest

Approx. Scale 1:4,700

0 50 100 150 200 METRES

Map 2	FILE: 12-40	May 8, 2013

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3119 CARP ROAD
PROPOSED CONSERVED VEGETATION

March Geo. Township, City of Ottawa