Muncaster Environmental Planning Inc.

December 31, 2019

Mr. Richard Goldstein
KRP Properties, Construction Dept.
555 Legget Drive, Tw B Suite 300
Kanata, Ontario
K2K 2X3

Dear Mr. Goldstein:

RE: 2707 Solandt Drive
Tree Conservation Report and Environmental Impact Statement - Revised

This Environmental Impact Statement (EIS) and Tree Conservation Report (TCR) assesses an office building development for an approximately two hectare site on the north side of Solandt Drive, about 300 metres east of Legget Drive, in the Kanata North portion of the urban area of the City of Ottawa. The municipal address is 2707 Solandt Drive. The adjacent land use is dominated by existing business park developments, with The Marshes Golf Club to the north and east of the site. Shirley's Brook is within the northwest edge of the site. For the purposes of this report Solandt Drive is considered to be in an east-west alignment. The EIS has been revised to address City of Ottawa comments received on December 10th.

An eight story office building is proposed for the site, with 172 surface parking spots, (augmenting the existing 391 spots immediately to the east of the site at 2705 Solandt Drive), barrier-free and cycling parking spots, and landscaped areas (Map 2). The development will be on full municipal services and a stormwater detention pond in the northeast corner of the site will be provide quantity treatment for the stormwater runoff from the site, with quality treatment to be provided by a stormceptor treatment manhole (NOVATECH, 2019). The pond will outlet to an existing stormwater channel within a City stormwater easement along the east edge of the site.

Site Context

The site is designated *Employment Area* on Schedule B of the City of Ottawa Official Plan. There are no portions of the City's Natural Heritage System on or adjacent to the site, as shown on the Schedule L3 Overlay of the Official Plan. Unstable slopes along Shirley's Brook are shown for the site and adjacent lands on Schedule K of the Official Plan. An area of organic soils is mapped to the east of the site within the golf course lands. No organic sites were identified for the site in the geotechnical studies completed by Golder (2019).

The site is not part of or adjacent to a natural area, as identified in the former Region's Natural Environment System Strategy or the Urban Natural Area Environmental Evaluation Study. The closest Urban Natural Area is the low-rated Banchory Woods, approximately 500 metres to the

north of the site (Muncaster and Brunton, 2005). There are no Provincially Significant Wetlands or Areas of Natural and Scientific Interest in the vicinity of the site, with Shirley's Bay the closest such feature approximately two kilometres to the northeast. No unevaluated wetlands are mapped on geoOttawa for the site, with an area of unevaluated wetland mapped on the golf course approximately 250 metres to the east of the site.

The majority of the site is treed, with more open areas in the northwest and east portions, the latter also contains a north-south City stormwater easement and associated stormwater channel. The site and adjacent lands were in agricultural use on 1976 aerial photography. A temporary relocation of Shirley's Brook was constructed in the northwest portion of the site as part of The Marshes Golf Club development. The temporary channel was out of service by 2002. The dry channel for this relocation remains visible on the site but it is not connected to any channels and was dry during all three field surveys.

Methodology

The Environmental Impact Statement component of this report includes an assessment of the terrestrial and aquatic features, including the potential for specimen trees, significant woodlands, Species at Risk and fish habitat. Surveys of the site and adjacent lands were completed on November 7th, 2018 from 09:45 to 11:25, July 7th, 2019 from 06:35 to 08:30, and August 26th from 12:30 to 13:30. Weather conditions during the November survey included a light to moderate breeze, an air temperature of 12° C, and cloudy skies. The July 7th and August 26th surveys were completed under sunny skies, a light breeze, and air temperature of 18° C on July 7th and 27° C on August 26th.

The field surveys and this report were completed by Bernie Muncaster, who has a Master's of Science in Biology and over thirty-one years of experience in completing natural environment assessments. The purpose of the Tree Conservation Report component is to establish which vegetation should be retained and protected on the site and to assess adjacent trees. The owner of the site is Wesley Clover International and the site is managed KRP Properties. It is proposed to remove the woody vegetation not identified for retention in 2020 before the breeding bird season.

Potential Species at Risk

The Ministry's Make a Map: Natural Heritage Areas website was reviewed on June 30th, 2019. This site allows for a search of Threatened and Endangered species covered by the 2008 *Endangered Species Act*, as well as other species of interest. A search was conducted on the 1 km squares including the site and adjacent areas (18VR22 - 81 and 82). Two Species at Risk, eastern whip-poor-will and butternut, were identified in the search. Eastern whip-poor-will requires large wooded areas with open patches, and/or open woodlands or alvar. The forest is too small at approximately 1.5 hectares and the understory too thick for potential use by this ground nester. Butternut is medium-sized tree found in a variety of upland habitats and is present in many areas of Kanata. The health of many butternuts is in decline due to the butternut canker, a fungus. No butternuts were observed on or within 50 metres of the site.

The threatened Blanding's turtle is also known from the general area including South March Highlands and Kizell Pond to the west and Shirley's Bay to the east. Although no turtles were observed on or adjacent to the site, Shirley's Brook is considered Category 2 Habitat for Blanding's turtle. This is discussed in more detail below. Snapping turtle, a species of special concern, is also known from the Kanata North area. Both species were identified in the Ontario Reptile and Amphibian Atlas for the overall 10km square 18VR22 that includes the overall site and general area.

The breeding birds listed in the Ontario Breeding Bird Atlas for the 10 km square 18VR22 included eastern whip-poor-will, barn swallow, bank swallow, eastern meadowlark and bobolink as threatened Species at Risk. Bobolink and eastern meadowlark utilize larger areas of grasslands, including hay fields. Larger areas of grassland such as hay fields are not in proximity to the site. The grassed areas associated with The Marshes Golf Club are cut too regularly to provide suitable nesting habitat. Barn swallow utilizes barns and other structures with open beams for nesting and forages in open areas for flying insects. No suitable structures were observed on or adjacent to the site for barn swallow or chimney swift, which uses open, un-lined brick chimneys, although barn swallow was observed flying over the golf course to the north of the site. Bank swallow is a colonial nester; burrowing in eroding silt or sand banks and sand pit walls; habitat not present on or adjacent to the site.

Many endangered and threatened species have historically been reported in the overall City, including butternut, American ginseng, eastern prairie fringed-orchid, wood turtle, spiny softshell, Blanding's turtle, musk turtle, Henslow's sparrow, loggerhead shrike, little brown myotis, northern long-eared bat, olive hickorynut, bald eagle, golden eagle, cerulean warbler, least bittern, eastern cougar, lake sturgeon, and American eel. No cavity trees that may be used by bats for potential summer maternity bat colonies were observed on or adjacent to the site. The forage fish that are Species at Risk or Species of Special Concern reported in the overall City of Ottawa, bridle shiner and channel darter, are not known from the Shirley's Brook system as reflected on the Department of Fisheries and Oceans' Species at Risk mapping.

Based on the habitat present on and adjacent to the site, butternut and Blanding's turtle are the most likely Species at Risk to be found on or adjacent to the site.

Existing Conditions

The topography of the site is generally level, with a very gentle slope to the north. Golder (2019) reported that the subsurface conditions at this site are expected to consist of about 4 to 6 metres of sand, silty clay and glacial till overlying bedrock, with the bedrock mapped as dolomitic limestone of the Oxford Formation. This is consistent with borehole observations with topsoil at the surface, underlain by silty sand to sand, silty clay and finally glacial till (Golder, 2019). Bedrock was encountered between 3.7 and 7.5 metres below the ground. Groundwater was observed by Golder (2019) on November 16th, 2018 at between 1.6 and 2.2 metres below the ground surface.

Upland Poplar-Birch Deciduous Forest

The site is dominated by a young upland poplar-birch deciduous forest (Map 1, Photos 1, 2 and 3) dominated by trembling aspen and large-toothed aspen up to 36cm dbh, with white birch, grey birch, red maple, and white spruce in the 20cm to 23cm dbh and Scot's pine up to 30cm dbh. Young birch trees were more dominant in the west portion of the site (Photo 3). Windthrow was extensive in areas, especially in the west portion of the forest. Fungus and bark damage were common on many of the poplar and birch trees. A twin-stem white pine, with the larger stem 38cm dbh, in the west portion appeared to be in good condition, but similar sized white pines in the southeast corner showed bark damage and had poor form (Photo 4). The conifer component, including white spruce, white pine, and Scot's pine, was greater in the south portion. Many trails were throughout the small forest (Photo 2). The east edge of the forest, west of the stormwater channel described below, is dominated by regenerating poplar and birch stems.

Tartarian honeysuckle shrubs are common in the understory of the upland deciduous forest, with prickly ash, slender willow, Bebb's willow, common buckthorn, glossy buckthorn, blackberry, red raspberry, hawthorn, highbush cranberry, red-osier dogwood, and chokecherry also present. Regenerating birch, poplar, white spruce, white poplar, white pine, bur oak, and Scot's pine stems were also noted in the understory. The forest canopy was open in many areas, where Canada goldenrod was common. Other ground flora in the upland deciduous forest was also generally reflected of disturbed conditions including tall goldenrod, early goldenrod, narrow-leaved goldenrod, small white aster, heart-leaved aster, blue grass, Pennsylvania sedge, cow vetch, and common strawberry, thicket creeper, wild grape, bladder campion, spreading dogbane, lower hop clover, white bedstraw, timothy, field horsetail, tall buttercup, helleborine, poison ivy, and Canada anemone, with shinleaf and royal fern also observed.

Shirley's Brook

The Kanata North Environmental /Stormwater Management Plan (CH2MHill, 2000) concluded that the aquatic habitat potential of Shirley's Brook in the general vicinity of the site is generally limited by the lack of runs and riffle habitat and the dominance of clay, silts or exposed bedrock substrate. This appears to still be the situation in the northwest corner of the site where fines were the dominant substrate and the channel is clearly entrenched as part of an extended homogeneous reach (Photo 5). However, some cobble substrate was present and other forms of aquatic habitat structure included undercut banks, a meandering alignment with permanent flow, clear water, and submerged and floating vegetation (common waterweed and variable-leaved pondweed). Several forage fish were observed, including brook stickleback. Fish diversity was low in past fish community sampling in the general vicinity of the site, with common shiner, white sucker, brook stickleback, central mudminnow, and bluntnose minnow noted. Shirley's Brook was considered to support a tolerant warm-water fish community. The wetted width of the channel on July 7th averaged 1.8 metres, with average water depths estimated in the 50cm range. After an extended period of minimal precipitation, flow was still present in Shirley's Brook in the northwest corner of the site on August 26th, with water depths averaging 30cm. The Shirley's Brook and Watt's Creek Subwatershed Study (Dillon, 1999) noted that groundwater flows in the clay and till surficial geology units were too slow to be of significance in terms of base flow contributions to the channel.

Other Features

No wetland habitat was present adjacent to Shirley's Brook in the northwest corner of the site, as there is a clear rise in elevation to the east of the channel, and off-site to the west. Small areas of culture meadow upland habitat along the Shirley's Brook corridor were dominated by June meadow grass, orchard grass, reed canary grass, cow vetch, crown vetch, thicket creeper, wild grape, bird's-foot trefoil, black swallowwort, ox-eye daisy, purple loosestrife, Canada goldenrod, and Canada thistle, along with tartarian honeysuckle and red raspberry shrubs (Photo 6).

The City's north-south stormwater easement on the east edge includes an open channel dug in the late 1990s and modified in the 2000s with construction south of Solandt Dive (Photo 7). The City's infrastructure mapping shows the channel is the outlet for all stormwater off Solandt Drive east of March Road. It is a channel dug and maintained to provide a connection between two concrete headwalls. There was no natural channel in this area before the stormwater infrastructure was dug. The stormwater channel is open for approximately 125 metres between concrete headwalls. The water depth was generally less than 5cm, with some ponding south of the north headwall. Evidence of former beaver dams were noted adjacent to the channel and as indicated below beaver cuttings were common in the east portion of the upland forest. Reed canary grass, soft-stem bulrush and broad-leaved cattail were common vegetation along the channel, with a small area of cattails adjacent to the west side of the north portion of the channel.

Another cultural meadow is along the east edge of the site and includes an access trail from Solandt Drive to the golf course north of the site and a sanitary sewer (Photo 8). Common ground flora in the meadow habitat included June meadow grass, timothy, common brome grass, common burdock, cow vetch, bladder campion, field horsetail, thicket creeper, tall goldenrod, white clover, wild carrot, common yarrow, ox-eye daisy, and black swallowwort.

A retaining wall and berm separate the site from the surface parking lot to the east. Conifer plantings up to 25cm dbh are to the east of the retaining wall on the berm. The critical root zones of these plantings would not extend onto the site. Along the north property line, white pine plantings up to 30cm dbh are common, with smaller white spruce. The critical root zone of these trees would extend onto the north edge of the site by up to three metres. There is a sidewalk north of Solandt Drive and thus no trees are to the south of the site. Meadow habitat is common to the west of the site, with poplar and birch trees up to 20cm dbh adjacent to the site further north of Solandt Drive. The critical root zone of these trees would extend onto the west edge of the site by up to one metre.

Wildlife

The only Species at Risk observed on or adjacent to the site during the field surveys were barn swallows flying over the golf course to the north. No structures are present on the site that may be used for barn swallow nesting. Other wildlife observed included American crow, Canada goose, European starling, black-capped chickadee, American woodcock, great-crested flycatcher, yellow warbler, common yellowthroat, American robin, northern cardinal, common grackle, red-winged blackbird, gray catbird, barn swallow, cedar waxwing, song sparrow, American goldfinch, red squirrel, grey squirrel, woodchuck, green frog, and many beaver cuttings in the

east portion of the forest (Photo 9). No cavity trees, stick nests, or other evidence of raptor use were observed on or adjacent to the site.

Photo 1 – Typical poplar trees in the centre portion of the upland deciduous forest. View looking northwest

Photo 2 – There are many open areas in the upland deciduous forest. This example is in the central portion of the forest, with view looking west

Photo 3 – Young birch were dominant in the west portion of the upland deciduous forest. View looking southwest

Photo 4 – The largest trees on-site were a couple of white pines in the south portion of the upland forest. This example is in the southwest corner of the site. View looking north

Photo 5 – Shirley's Brook is the northwest edge of the site. View looking north

Photo 6 – Meadow habitat on-site to the east of Shirley's Brook. View looking west

Photo 7 – North-south stormwater channel in the stormwater easement in the east edge of the site. View looking north from Solandt Road

Photo 8 – Access trail, retaining, wall, berm and coniferous plantings on and adjacent to the east edge of the site. View looking south from the north property line

Photo 9 – Beaver cutting in the east edge of the site, west of the stormwater channel

Significant Woodlands

Based on recent changes, a forested area is now considered significant woodlands in the urban area of the City of Ottawa if the forest is 0.8 hectares in size or larger and is 60 years of age and older at the time of evaluation. As the site and adjacent lands were an agricultural field in 1976, there is no potential for significant woodlands on or adjacent to the site. There are no forests contiguous to the on-site upland deciduous forest.

Significant Wildlife Habitat

The potential for significant wildlife habitat was assessed using the guidance in OMNR (2010) and MNRF (2015). No flora, fauna or ecological conditions identified in the background review or field survey that would trigger a Significant Wildlife Habitat designation with respect to the ELC communities present were observed on the site. For example, the cultural habitats and upland forest do not support waterfowl stopover or staging areas, colonial nesting bird breeding habitat or other examples of seasonal concentration areas, rare vegetation communities as noted in MNRF (2015), or rare or specialized habitats including seeps or springs. Wetland habitats for significant amphibian breeding are not present.

No forest interior habitat is present and thus potential nesting of species of special concern such as wood thrush and eastern wood-pewee is unlikely and these birds were not heard or seen during the early morning July survey. No evidence of raptor wintering areas was noted and old growth forest is not present. The overall forest is not large enough to meet the size criterion for deer winter congregation areas and areas of broken and fissured rock for potential use by snakes were not observed.

The site is isolated from an environmental perspective due to the adjacent business park developments, with no natural areas in the vicinity of the site.

Impact Analysis and Recommendations

Species at Risk and other Significant Natural Heritage Features

Other than barn swallows flying over the golf course to the north, no Species at Risk was observed for the site, including no butternut observations on or adjacent to the site. No potential structures for chimney swift or barn swallow are present. Blanding's turtles are known from several areas of the Shirley's Brook watershed in the general area of the site, including Shirley's Bay to the east, South March Highlands and the Kizell Pond to the west, and the North Branch of Shirley's Brook to the north. Although no Blanding's turtle have been reported in the immediate vicinity of the site and there is no natural connection between the site and the above natural areas, as a caution it is assumed that Shirley's Brook provides suitable Blanding's turtle Category 2 habitat as defined in the General Habitat Description. No tributaries to Shirley's Brook with aquatic habitat potential were observed or are mapped for the site. There is no anticipation that Blanding's turtle will utilize the upland terrestrial habitat of the site for nesting or migrating, as no adjacent wetland parcels are present.

The potential Category 2 Blanding's turtle habitat is limited to Shirley's Brook itself as the habitat adjacent to the entrenched channel is raised and is upland. By definition the Category 2 habitat extends 30 metres from the normal high water mark of Shirley's Brook, the edge of the suitable habitat. Thus, the Category 2 habitat extends into the northwest corner of the site, as shown by the dashed blue line on Map 2. The balance of the site would be considered Category 3 Blanding's turtle habitat, as the Category 3 habitat extends 220 metres from the east edge of the Category 2 habitat. The primary purpose with respect to Blanding's turtle habitat of the Category 3 lands is to provide movement corridors between wetlands. As the Category 3 habitat leads only to developed areas via the site, they cannot support overland travel corridors from Shirley's Brook to wetlands as no wetlands are present within or to the north, east, or south of the Category 3 lands, other than parcels less than 0.5 hectares on the golf course lands. There is no indication that Blanding's turtle would utilize the site to migrate to other suitable habitats from Shirley's Brook. Thus, the primary purpose of Category 3 Blanding's turtle habitat is not applicable to the Category 3 lands on the site.

The retention of the Category 2 Blanding's turtle habitat, will also provide suitable protection for the aquatic habitat of Shirley's Brook. There will be no site disturbances within 30 metres of Shirley's Brook.

The young on-site forest is not considered significant woodlands and significant wildlife habitat is not present. The 1.6 hectare forest is highly disturbed by cutting, windthrow, and non-native species in the understory and ground flora, and no forest interior habitat is present. The forest is not contiguous with off-site forests, was not identified for retention in studies such as Muncaster and Brunton (2005) and does not appear to provide any economic or social functions.

Regardless, the on-site forest does provide some ecological functions including local wildlife habitat, and an area of tree cover with associated climate, air quality, wildlife, and nature appreciation benefits. Potential impacts during construction of the office development and associated removal of trees and other vegetation includes impacts on wildlife, increased erosion and release of sediments and other potential contaminants from truck traffic and construction activity, harm to wildlife remaining in the work area during construction, and impacts associated with an increase in noise, dust and light. The following mitigation measures are designed to address these potential impacts.

Tree Retention

Due to the footprint of the proposed office building, associated surface parking, and required urban servicing and associated grading, no tree retention is anticipated for the site outside of the Shirley's Brook corridor as shown on Map 2. The Grading Plan produced by NOVATECH (see Grading Plan 119110-GR) for the site shows grade raises over one metre will be required.

In terms of planting sensitivities, tree and shrub species that have a high water demand are not recommended for the site due to the clay soils. These species include willows, poplars, and elm. See Golder (2019) for more information on locations with respect to structures and adjacent plantings in clay soils. To ensure adaptability and longevity, it is important that native trees from a local seed stock be used for planting whenever possible. Recommended species for planting include a mix of coniferous and deciduous trees such as sugar maple, red maple, basswood, red oak, tamarack, and white spruce, along with nannyberry, elderberry, and dogwood shrubs

The follow important mitigation measures are to be properly implemented:

1. No tree removal or other site disturbances within 30 metres of Shirley's Brook as shown on Map 2 and described above;

2. To protect breeding birds, no tree removal should occur between April 15th and August 15th, unless a breeding bird survey conducted by a qualified biologist within five days of the woody vegetation removal identifies no active nests in the vegetation to be removed. Tree removal should begin in the south portion of the site and extend north, allowing any wildlife to relocate to the golf course to the north;

3. Trees to be retained are to be protected with sturdy temporary fencing at least 1.3 metres in height installed from the tree trunk a distance of ten times the retained tree's diameter where possible. Signs, notices, or posters are not to be attached to any tree. No grading, heavy machinery traffic, stockpiling of material, machinery maintenance and refueling, or other activities that may cause soil compaction are to occur within three metres of the critical root zone of the trees to be retained and protected. The root system, trunk, or branches of the trees to be retained are to be protected and not damaged. 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, burlap or woodchips and kept moist until the roots can be buried permanently. A covering of plastic should be used to retain moisture during an extended period when watering may not be possible. Any roots that

must be cut are to be cut cleanly to facilitate healing and as far from the tree as possible. Overhanging branches from retained trees, including those adjacent to the site, that may be damaged during construction are to be pruned by a qualified arborist prior to construction. Exhaust fumes from all equipment during construction will not be directed towards the canopy of the adjacent retained trees.

All of the supports and bracing for the protective fencing should be placed outside of the protected area and should be installed in such a way as to minimize root damage. Also, since the desired effect of the barrier is to prevent construction traffic from entering the tree's critical root zone, the barrier should be kept in place until all site servicing and construction has been completed;

4. Silt fencing is also recommended around the perimeter of the work area. It is important that the fencing is well dug in to filter any surface water flows and isolate the work areas for wildlife. For example, temporary fencing properly installed prior to construction along the Shirley's Brook setback will protect the aquatic habitat of the channel and isolate the Category 2 turtle habitat. Temporary fencing should also be installed along the north and west property line setback limits to protect the critical root zones (ten times the trunk diameter) of adjacent trees that may extend onto the site and along the other site peripheries to isolate the site;

5. The extent of exposed soils is to be kept to a minimum at all times. Re-vegetation of exposed, non-developed areas with native species is to be achieved as soon as possible to reduce surface erosion;

6. Where required seepage barriers such as silt fencing, straw bale check dams, and other sediment and erosion control measures will be installed to OPSD requirements in any temporary drainage ditches, around disturbed areas during construction, and stockpiles of fine material. These control measures must be properly maintained to maximize their function during construction and will be removed at the completion of construction once the site has stabilized. Any dewatering of groundwater is to be properly treated before release or directed to the sanitary system;

7. The contractor is to be aware of potential Species at Risk in the vicinity of the site including butternut and Blanding's turtle. Appendix 1 of City of Ottawa (2015) describes these species. The project biologist for this project is Bernie Muncaster (613-748-3753). Any Species at Risk sightings are to be immediately reported to the project biologist and the Ministry of the Environment, Conservation and Parks and activities modified to avoid impacts until further direction by the Ministry;

8. As recommended in City of Ottawa (2015) prior to beginning work each day, wildlife is to be checked for by conducting a thorough visual inspection of the work space and immediate surroundings. See Section 2.5 of City of Ottawa (2015) for additional recommendations on construction site management with respect to wildlife. Any turtles, snakes, or other sensitive wildlife in the work areas are to be relocated to the north. Animals should be moved only far enough to ensure their immediate safety. See

Appendix 1 and the links in Section 4 of City of Ottawa (2015) for suggestions on how to effectively relocate turtles and snakes;

9. Municipal by-laws and provincial regulations for noise will be followed and utilities will be located in the vicinity of the site prior to construction;

10. Waste will be managed in accordance with provincial regulations. The contractor will have a spill kit on-hand at all times in case of spills or other accidents; and,

11. Snow removal is not to be stored in the west portion of the site to keep any snow piles an extended distance from Shirley's Brook.

Although the north-south stormwater channel in the east portion of the site is not fish habitat by definition and no fish were observed in the stormwater channel during the field surveys, there is the potential for forage fish to be in the channel. The channel will be retained in its existing location but a culvert will be installed to provide access to the existing surface parking to the east at 2705 Solandt Drive. The following additional mitigation measures are recommended for the culvert installation:

- The summer period is recommended for the culvert installation due to the generally reduced flow, decreased potential for sediment input, and the greater growing season afforded for re-vegetation of disturbed areas. If the proposed timing of the work is to take place between October 15th and April 15th, it may be necessary to have any exposed areas covered with erosion control blankets to keep the soil in place and prevent erosion from occurring during the spring freshet time period;
- As required, rock protection is to be installed at the culvert ends to stabilize the channel and culvert. All material placed in the channel must be washed and clean of fines;
- Any stockpiling of material will be properly protected with appropriate erosion and sediment control measures. During the culvert installation, mitigation measures are to be deployed to address the potential for contamination of the water with sediment and/or other deleterious substances;
- All in-water work should be completed in the dry by de-watering, as required, the work area and diverting and/or pumping flows around temporary cofferdams of clean shot rock or steel plates placed at the limits of the work area. If water was present and once the work area is isolated, the area is to be de-fished by a qualified biologist, with any fish released to Shirley's Brook to the west. Two weeks should be allowed prior to the de-fishing to obtain a Scientific Collectors Permit from the MNRF for the de-fishing; and,
- Any dewatering from the work area will be treated in a sediment trap or similarly effective sediment control prior to downstream release. Pumps and hoses will be used to convey the flow of the watercourse during the culvert installation. Rock flow checks, following approved specifications, will be installed downstream of the work area. Silt or debris that has accumulated around the temporary cofferdams will be removed prior to their withdrawal. Proper sediment and erosion control measures will be utilized. Silt fencing will be installed along the work area and will remain in place and frequently inspected until all components of the work area are stabilized.

Schedule of Proposed Works

It is proposed to remove the woody vegetation not identified for retention in 2020 before the beginning of the breeding bird period on April 15th. City of Ottawa staff (Forester – Planning) is to be contacted at least two business days prior to any tree removal so that staff have the opportunity to verify that any protective fencing, if applicable, has been properly installed. A Tree Cut Permit will be required for all trees greater than 10cm dbh.

Conclusion

The majority of the site is currently forested, following agricultural use until the 1980s. The young forest is small and is disturbed by non-native species and cutting. No specimen trees or potential wildlife cavity trees were observed in the forest. There are no off-site forests contiguous with the on-site forest. The fish habitat in Shirley's Brook and potential Blanding's turtle habitat are the significant natural heritage features, as identified in the City of Ottawa Official Plan and the Provincial Policy Statement, associated with the site. As assessed above, the proposed development is not anticipated to impact these features with a 30 metre natural setback retained from the normal high water mark of the channel.

Due to large footprint of the proposed office building and surface parking, and associated extensive grading and other urban servicing requirements, no tree retention is anticipated for the site outside of the Shirley's Brook setback. No potential co-owned trees of note are along the site boundaries and these trees will be retained and protected within the typical urban setbacks from property lines and other mitigation measures identified above.

It is important that mitigation measures outlined in this report are properly implemented and maintained.

References

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Ontario Ministry of Natural Resources and Forestry. 2015. Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E. January, 2015. 38 pp.

Please call if you have any questions or comments on this revised Environmental Impact Statement and Tree Conservation Report.

Yours Sincerely,
MUNCASTER ENVIRONMENTAL PLANNING INC.

Bernie Muncaster, M.Sc.
Principal

\2707 Solandt Drive EISTCR

Legend

Site

Vegetation Community

Vegetation Communities

1 Cultural Meadow

2 Upland Poplar - Birch Deciduous Forest

Approx. Scale 1:1,800

0 20 40 60

METRES

Map 1	FILE: 15-18	August 21, 2019

Prepared for: KRP Properties

Prepared by: Muncaster Environmental Planning Inc.

ENVIRONMENTAL IMPACT STATEMENT/TCR
CURRENT CONDITIONS

2707 Solandt Drive
Kanata North, City of Ottawa

Legend

- Site
- Vegetation Community
- 30 m Shirley's Setback
- Area of tree retention

Vegetation Communities

1. Cultural Meadow
2. Upland Poplar - Birch Deciduous Forest

Approx. Scale 1:1,800

0 20 40 60
METRES

Map 2	FILE: 15-18	December 21, 2019

Prepared for: KRP Properties

Prepared by: Muncaster Environmental Planning Inc.

ENVIRONMENTAL IMPACT STATEMENT/TCR
PROPOSED CONSERVED VEGTATION

2707 Solandt Drive
Kanata North, City of Ottawa