



Muncaster
Environmental
Planning Inc.

September 17, 2021

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

Dear Mr. Goldstein:

**RE: 525 Leggett Drive – Brookstreet Apartment Building
Environmental Impact Statement**

This Environmental Impact Statement (EIS) assesses a proposed 31 story apartment building adjacent to the existing Brookstreet Hotel and above ground parking structure. The apartment will be approximately 130 metres south of Terry Fox Drive and 260 metres east of Legget Drive, in the Kanata North portion of the urban area of the City of Ottawa. The municipal address is 525 Leggett Drive.

A 31 storey apartment building is proposed. There will be 256 apartments, including studios and one, two, and three bedroom apartments. Two levels of underground vehicle and bicycle parking will be provided. Amenity areas are provided on the ground floor. Two connections will be made from the apartment building to the existing parking structure at 525 Legget Drive. The parking structure will provide additional resident parking spaces along with visitor and restaurant parking spaces. A 361m² restaurant is proposed for the top floor.

The development will be located on a new severed lot that will have frontage to Terry Fox Drive. The severed lot will be approximately 7075m² and will contain the access driveway from Terry Fox Drive to the building, along with the apartment building itself and associated landscaping and pathways.

The development is proposed to drain via roof drains and an internal drainage system to a storm sewer which runs along the west side of the existing parking structure. This storm sewer has sufficient capacity to convey drainage to the stormwater management pond to the east. The additional drainage is anticipated to result in a two percent increase in the required volume of the stormwater management pond and less than a 10mm increase in the total water level in the pond. These increases are both very small and are not expected to adversely affect the function of the stormwater management pond. As such, the proposed development is not anticipated to have any adverse effects on downstream infrastructure.

Site Context

The adjacent land use is dominated by The Marshes Golf Club immediately to the east and south of the site and existing business park developments. Shirley's Brook runs through the Marshes Golf Course and is approximately 110 metres to the east of the site (and also to the south of the site), with a stormwater management pond immediately to the east of the proposed apartment location (Figure 1). For the purposes of this report Terry Fox Drive is considered to be in an east-west alignment.

The site is designated *Urban 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. No environmental constraints are shown for the site on Schedule K of the Official Plan, with unstable slopes mapped along the portion of Shirley's Brook to the south of the site. 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 portion of the Greenbelt is over one kilometre to the northeast of the site. The closest Urban Natural Area is the low-rated Banchory Woods, approximately 250 metres to the northwest of the site. There are no Provincially Significant Wetlands or Areas of Natural and Scientific Interest in this portion of Kanata North, with Shirley's Bay the closest such feature approximately 2.4 kilometres to the east.

Colour aerial photography (1976 - 2019) was used to assess the natural environment features in the general vicinity of the site. A site review was completed on August 3rd, 2021 (08:10 – 09:30), with an air temperature of 17° C, sunny skies and calm winds. The field survey and this report were completed by Bernie Muncaster, who has a Master's of Science in Biology and over thirty-three years of experience in completing natural environment assessments.

Existing Conditions

The site is disturbed from a natural environment perspective with existing buildings and associated asphalt accesses, a landscaped berm with many planted trees, created stormwater management ponds, asphalt walkways, and surface parking (Photo 1). The stormwater management pond to the east will not be impacted, with the east edge of the apartment building approximately 15 metres west of the west edge of the stormwater management pond. Surface access to the new development will be closer to the stormwater management pond. There is no natural fish habitat potential in the stormwater management pond due to the artificial bottom, armor stone sides, and associated lack of in-water habitat structure (Photo 3).

The south portion of a berm along the east edge of the site, west of the pathway and stormwater management pond has limited tree cover and is dominated by non-native and/or aggressive vegetation including white bedstraw, Canada thistle, orchard grass, reed canary grass, timothy, white sweet clover, common milkweed, narrow-leaved goldenrod, tufted vetch, purple loosestrife, tufted vetch, common burdock, wild carrot, curled dock, field sow-thistle, common dandelion, wild grape, yellow goat's-beard, common St. John's wort, bird's-foot tick trefoil, and wormseed mustard.

The north portion of the berm is treed with many coniferous plantings (Photos 1 and 2). Ten tamaracks (14cm – 22cm diameter at breast height (dbh)) are the most common plantings, with five white spruce between 4cm and 24cm dbh, six Colorado spruce (18cm to 26cm dbh) and six Austrian pine in the 8cm to 18cm dbh range. Reduced needle coverage was noted on many of the tamaracks. Wild grape coverage was heavy on the lower branches on some of the white spruce. The remaining coniferous plantings appeared to be in good condition. Regenerating stems of the conifers are also present, along with pin cherry, hawthorn, and tartarian honeysuckle shrubs.

Green ash and crabapple plantings up to 12cm and 14cm dbh, respectively are between a pathway east of the berm described above and the stormwater management pond to the east (Photo 4). Approaching Terry Fox Drive, manicured grassed areas also contain crabapples up to 20cm dbh and smaller stems of amur maple and ash (Photo 5). The highly invasive black swallowwort is dense in areas adjacent to the mowed grass.

These trees are shown on the Landscape Plan and Tree Conservation Report prepared by NOVATECH.

Wildlife observed during the early August survey included ring-billed gull, double-crested cormorant, rock pigeon, great-crested flycatcher, American goldfinch, red-winged blackbird, European starling, American robin, and woodchuck. No evidence of raptor use or trees with potential wildlife cavities were observed on the site.



Photo 1 – Location of proposed apartment building adjacent to existing parking structure. View looking north towards Terry Fox Drive with conifer plantings on a grassed berm to the left. Berm will be removed



Photo 2 – Planted tamaracks on the grassed berm. View looking north



Photo 3 – Stormwater management pond and golf course play area to the east of the proposed apartment footprint. View looking southeast



Photo 4 – Plantings between pathway and stormwater management pond to the east of the apartment footprint. View looking north



Photo 5 – Mowed areas to the north of the apartment footprint and east of the access to Terry Fox Drive. View looking north

Species at Risk

No butternuts or other Species at Risk were observed during the early August field survey. On August 1st, 2021 the Ontario Ministry of the Natural Resources' Make a Map: Natural Heritage Areas website was reviewed. 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 - 82). Two Species at Risk, bobolink and eastern meadowlark, were identified in the search, with snapping turtle, a species of special concern also noted. These species are discussed below.

The threatened Blanding's turtle is also known from the general area including South March Highlands to the west and Shirley's Brook and Shirley's Bay to the east. No tributaries to Shirley's Brook with aquatic habitat potential were observed or are mapped for the site. 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 suitable turtle habitat in the vicinity of the site is considered limited to Shirley's Brook and the adjacent wetland habitat. At its closest point the suitable wetland habitat is approximately 105 metres from the outer edges of the proposed development. The artificial stormwater management pond is not considered suitable turtle habitat due to its hardened sides and bottom, and lack of natural features, including woody vegetation and available shallow water.

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. 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.

The potential Species at Risk in the City of Ottawa was also reviewed. 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, chimney swift, eastern meadowlark, barn swallow, bank swallow, bobolink, whip-poor-will, bald eagle, golden eagle, cerulean warbler, least bittern, eastern cougar, lake sturgeon and American eel. The forage fish that are Species at Risk or Species of Special Concern reported in the City of Ottawa, bridle shiner and channel darter, are not known from the Shirley's Brook system.

The habitat requirements of the above species along with those listed as special concern were reviewed. Species at Risk considered to have the potential to be on or adjacent to the site are butternut, which is found in a variety of habitats in Ottawa, and Blanding's turtle. 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 proposed building site.

The potential Category 2 Blanding's turtle habitat includes Shirley's Brook and adjacent meadow marsh habitat, which at its closest point is approximately 105 metres to the east of the site. By definition the Category 2 habitat extends 30 metres from the meadow marsh adjacent to Shirley's Brook, the edge of the suitable habitat. Thus, the Category 2 habitat ends approximately 75 metres to the east of the site. The small portions of the site with permeable surfaces, the grassed and planted areas, would be considered Category 3 Blanding's turtle habitat, as the Category 3 habitat extends 220 metres from the west 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 wetland communities are present within or to the west of the site and adjacent Category 3 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.

Other Natural Heritage Features

No forests with significant woodlands potential, significant valleylands, significant wildlife habitat, or Areas of Natural and Scientific Interest are on or adjacent to the site. Shirley's Brook supports fish and turtle habitat and is approximately 110 metres from the site at its closest point. Provided the mitigation measures identified below are properly implemented no impacts on the Shirley's Brook corridor are anticipated.

Recommendations

Tree Retention and Plantings

Consideration should be giving to transplanting the planted trees from the berm to be removed to open areas in the vicinity of the hotel or golf course. In addition, the habitat and aesthetic values associated with the landscaped vegetation to be removed can be partially offset with plantings associated with the apartment building, as outlined in the Landscape Plan prepared by NOVATECH.

Where possible, the existing tree plantings should be retained. 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;

Wildlife

To protect breeding birds, the woody vegetation removal should not occur between April 15th and August 15th, unless a breeding bird survey conducted within five days of the woody vegetation removal identifies no active nests in the trees or shrubs. No stick nests or other evidence of raptor utilization on the site was observed.

The City's Bird-Safe Design Guidelines (City of Ottawa, 2020) are to be incorporated into the building design and also be addressed during the construction, and operational phases of this project. This will involve treating glass to make it more visible as a barrier to birds through minimizing the transparency and reflectivity of glazing, eliminating design traps such as glass passageways or corners that are invisible to birds, designing landscaping to reduce the risk of collisions, designing and managing exterior lighting to minimize impacts on night migrating or nocturnal birds, and turning off or minimizing interior lighting, especially during spring and fall migration periods (City of Ottawa, 2020). The site's location in the general vicinity of Shirley's Bay and the Ottawa River corridor may increase the potential for bird strikes;

Many helpful wildlife oriented mitigation measures are detailed in the City's Protocol for Wildlife Protection during Construction (City of Ottawa, 2015). Contractors are to review in detail and understand the City's Protocol for Wildlife Protection during Construction prior to commencement of construction. The contractor is to be aware of the potential Species at Risk in the vicinity of the expansion site including Blanding's turtle and butternut. Appendix 1 of City of Ottawa (2015) describes these species. Bernie Muncaster (613-748-3753) is the project biologist for this proposal. Any Species at Risk sightings are to be immediately reported to the Ministry of the Environment, Conservations, and Parks and the project biologist and work that may impact the species suspended immediately.

As recommended in City of Ottawa (2015) prior to beginning work each day, the work areas are to be checked for wildlife by conducting a thorough visual inspection of the work space and immediate surroundings. See Section 2.5 of the City's Protocol for Wildlife Protection during

Construction (City of Ottawa, 2015) for additional recommendations on construction site management.

Any turtles and snakes are to be relocated to the Shirley's Brook corridor to the east. 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. Only trained personnel can relocate Species at Risk.

Sediment and Erosion Control

Additional recommended mitigation measures for sediment and erosion control and general environmental protection include:

- The extent of exposed soils is to be kept to a minimum at all times. Re-vegetation of exposed, non-developed areas is to be achieved as soon as possible. The objective with respect to erosion and sediment controls will be to ensure that the surface water runoff leaving the site is not degraded with respect to water quantity or quality.
- Any groundwater that must be removed from the work area will be pumped into a proper filter mechanism such as a sediment trap or filter bag prior to release to the environment;
- Seepage barriers such as silt fencing, straw bale check dams and other sediment and erosion control measures will be installed as required to OPSD requirements in any temporary drainage ditches and around disturbed areas during construction and stockpiles of fine material. These control measures must be properly maintained to maximize their function during construction;
- Silt fencing is also recommended along the east side of the work area, with wings of at least five metres at the north and south edges. The fencing must be properly keyed in to filter runoff and maintained as required including repair of broken panels and removal of accumulated sediment;
- 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; and,
- 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.

Conclusion

A 31 story apartment building is proposed on generally developed land adjacent to the existing Brookstreet Hotel and above ground parking structure. No significant natural heritage features are on the site, with the Shirley's Brook corridor about 105 metres to the east. Although the Shirley's Brook corridor is identified as Category 2 Blanding's turtle habitat and Category 3 habitat would extend onto the small permeable areas of the site, the migratory function of Category 3 habitat is not considered applicable to the site. Butternut is the only other Species at Risk considered to have the potential to be in proximity to the site. No butternuts were observed on or within 50 metres of the proposed building area.

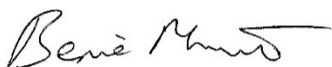
Provided the mitigation measures recommended in this report are properly implemented, no impacts are anticipated on the Shirley's Brook corridor or the natural environment in general.

References

- CH2M Hill. 2001. Kanata North Environmental/Stormwater Management Plan. Final Report. February, 2001. 71 pp. & append
- City of Ottawa. 2015. Protocol for Wildlife Protection during Construction. August, 2015. 14 pp & Append.
- City of Ottawa. 2020. Bird-Safe Design Guidelines. September, 2020. 24 pp & Append
- Dillon Consulting Ltd. 1999. Shirley's Brook and Watt's Creek Subwatershed Study. June 1999.
- Muncaster, B.W. and D.F. Brunton. 2005. Urban Natural Areas Environmental Evaluation Study. Prepared for the City of Ottawa.
- Ontario Ministry of Natural Resources. 2010. Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement, 2005. 2nd Edition. March 2010. 233 pp.
- Ontario Ministry of Natural Resources and Forestry. 2015. Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E. January, 2015. 38 pp.

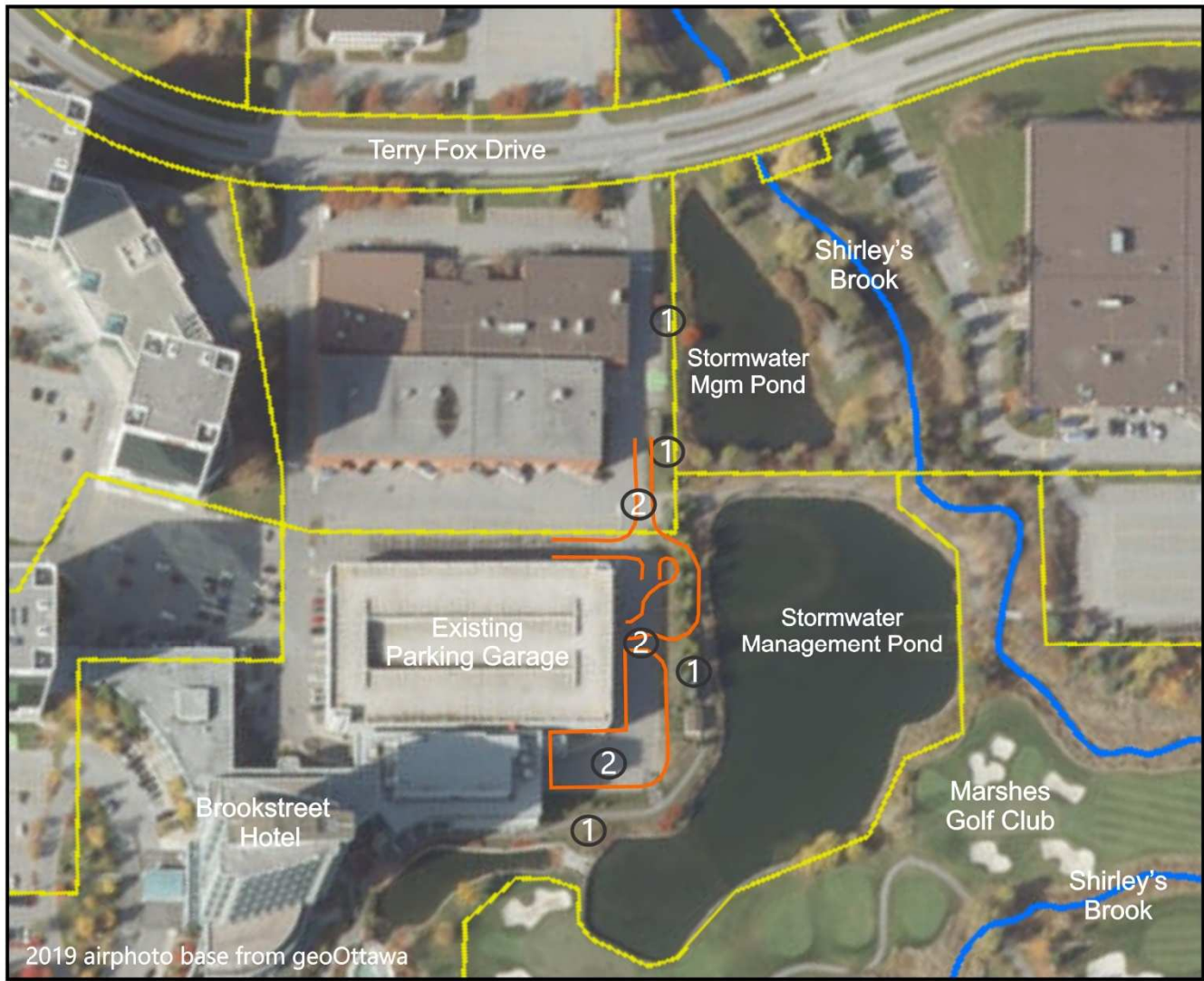
Please call if you have any questions on this scoped Environmental Impact Statement.

Yours Sincerely,
MUNCASTER ENVIRONMENTAL PLANNING INC.



Bernie Muncaster, M.Sc.
Principal



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Legend

 Apartment Footprint & Parking Access

Land Use/Vegetation

-  Amenity Area (Planted berm and pathway)
-  Developed Area



Approx. Scale 1:2,400



2019 airphoto base from geoOttawa

Figure 1

FILE: 15-18

September 11, 2021

Prepared for: **KRP Properties**

Prepared by:  Muncaster Environmental Planning Inc.

**ENVIRONMENTAL IMPACT STATEMENT
BROOKSTREET APARTMENT**

**525 Legget Drive
Kanata, City of Ottawa**