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Environmental Impact Statement
Proposed Commercial Development
2885 Carp Road
Geographic Township of Huntley
Ottawa, Ontario

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Submitted to:

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Proposed Commercial Development
2885 Carp Road
Geographic Township of Huntley
Ottawa, Ontario

December 15, 2022
Project: 102180.001 - V01

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EXECUTIVE SUMMARY

GEMTEC Consulting Engineers and Scientists Limited (GEMTEC) was retained by Bekim Holding Inc. to complete an Environmental Impact Statement (EIS) for the property located at 2885 Carp Road in the Township of Huntley, City of Ottawa, Ontario. This EIS has been completed in support of a proposed commercial development and was completed in accordance with all federal, provincial and municipal policies and guidelines, as applicable.

In support of this EIS a desktop review and a field investigation was completed in September 29, 2022, to identify the presence or absence of natural heritage features and species at risk (SAR) on-site. The focus of the site investigation was to describe, in general, the natural and physical setting of the subject property with a focus on confirming the presence or absence of natural heritage features and potential SAR or their habitat as identified in the desktop review.

Following completion of the desktop review and site investigations no natural heritage features were identified on-site or within the study area. The following SAR and their habitat were identified as having a potential to occur on-site: eastern small-foot myotis, little brown myotis, tri-colored bat and loggerhead shrike. No butternut trees were observed on-site.

No potential impacts are anticipated to occur to natural heritage features or significant wildlife habitat.

Additionally, to provide protection to potential SAR and their habitat on-site, should any SAR be discovered throughout the course of the proposed works, operations should stop and the species at risk biologist with the local MECP district should be contacted immediately for further direction. Furthermore, to ensure compliance with all applicable legislation, all best management practices and adherence to vegetation clearing windows for birds and bats, outlined in Section 7 should be followed to ensure no negative impacts occur to natural heritage features on-site.

The proposed project complies with the natural heritage policies of the Provincial Policy Statement and the City of Ottawa Official Plan. No negative impacts to identified natural heritage features or their ecological functions are anticipated as a result of the proposed project as long as all mitigation measures in Section 7 are enacted and best management practices followed.

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1.0 INTRODUCTION

GEMTEC Consulting Engineers and Scientists Limited (GEMTEC) was retained by Bekim Holding Inc. to complete an Environmental Impact Statement (EIS) for the property located at 2885 Carp Road, in the Geographic Township of Huntley, City of Ottawa, Ontario (hereafter referred to as "the subject property"). The location of the subject property is illustrated on Figure A.1 in Appendix A.

1.1 Purpose

The proponent is seeking to develop a commercial facility on an approximately 1.23 ha property. Based on *Section 4.8 – Natural Heritage, Greenspace and the Urban Forest* of the City of Ottawa Official Plan (Ottawa, 2022) an EIS is required demonstrating that the proposed development will not negatively impact any potential natural heritage features, which may be present within the study area. The study area is defined as the property boundary and the adjacent lands encompassing an area of 120 m beyond the property boundary. The subject project and the extents of the study area are illustrated on Figure A.2 in Appendix A.

1.2 Objective

The 2020 Provincial Policy Statement (PPS) (MMAH, 2020) issued under Section 3 of the Planning Act states that "development and site alteration shall not be permitted in: significant wetlands in Ecoregions 5E, 6E and 7E." Furthermore, the 2020 Provincial Policy Statement dictates "development and site alteration shall not be permitted in: significant wetlands in the Canadian Shield north of Ecoregion 5E, 6E and 7E, significant woodlands in 6E and 7E, significant valleylands in 6E and 7E, significant wildlife habitat and significant areas of natural and scientific interest unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions." Similarly, the PPS dictates that "development and site alteration shall not be permitted in" fish habitat or habitat of endangered or threatened species "except in accordance with provincial and federal requirements."

The objective of the work presented herein is twofold; 1) to identify and evaluate the significance of any natural heritage features, as defined in the Provincial Policy Statement (MMAH, 2020), on the subject property and within the broader study area and; 2) to assess the potential impacts from the proposed site plan control application on any natural heritage features identified and to recommend appropriate and defensible mitigation measures to ensure the long-term protection of any natural heritage features identified.

To meet these objectives, the EIS presented herein has been completed in accordance with the following provincial and municipal regulations, policies and guidelines:

- Provincial Policy Statement (MMAH, 2020);
- Endangered Species Act (Ontario, 2007);
- Conservation Authorities Act (Ontario, 1990);

- Natural Heritage Reference Manual (OMNR, 2010);
- City of Ottawa Official Plan (Ottawa, 2012a); and
- City of Ottawa EIS Guidelines (Ottawa, 2012b)

1.3 Physical Setting

The subject property is located at 2885 Carp Road, in the Geographic Township of Huntley, City of Ottawa, Ontario. The subject property currently consists of cultural meadow and business sector. To the north the site is bound by Carp Road, and to the south by 500 Osmond Daley Drive. To the west the site is bound by 390, 370, and 350 White Lake Circle. To the east the site is bound by 2877 Carp Road.

1.4 Land Use Context

The subject property is situated within a larger peri-urban area consisting of commercial, light industrial, mineral extraction, residential and agricultural land uses. The existing land use designation from the City of Ottawa is general rural area. The City of Ottawa zoning by-law is rural commercial zone (RC9).

2.0 METHODOLOGY

2.1 Desktop Review

A desktop information gathering exercise was completed to aid in the scoping of field investigations and to gather information relating to natural heritage features which may be present on the subject project or within 1 km of the subject property. An additional component of the desktop review was to assess the potential presence of SAR to occur on the subject property or within the study boundary based on a review of publicly accessible occurrence records and a review of SAR habitat requirements and range maps.

Information regarding the potential presence of natural heritage features and SAR within the vicinity of the site was obtained from the following sources:

- Make a Map: Natural Heritage Areas (OMNRF, 2014a)
- Land Information Ontario (OMNRF, 2011);
- City of Ottawa Official Plan (City of Ottawa, 2012a)
- Ontario Geological Survey (OGS, 2019);
- Fisheries and Oceans Canada SAR Maps (DFO, 2019);
- Natural Heritage Information Centre Biodiversity Explorer (OMNRF, 2013);
- Breeding Bird Atlas of Ontario (Cadman et al., 2007)
- Ontario Herpetofaunal Atlas (Oldham and Weller, 2000);
- Carp River Watershed/Subwatershed Study (Robinson, 2004);
- Carp Road Corridor Community Design Plan (City of Ottawa, 2004);
- Wildlife Values Area (OMNRF, 2020a);
- Wildlife Values Site (OMNRF, 2020b); and
- Ontario Reptile and Amphibian Atlas (Ontario Nature, 2019).

2.2 Field Investigations

A field investigation was undertaken to describe, in general, the natural and physical setting of the subject property with a focus on identifying natural heritage features and any potential SAR or their habitat that may exist at the subject property. In addition, the health and diameter of all trees greater than 10 cm in diameter at breast height (DBH) were recorded and critical rootzone calculated in order to facilitate the retention of trees during development. A Tree Conservation Report is provided in Appendix D.

A single field investigation was completed in support of this EIS on September 29, 2022. Site conditions during the site investigation were as follows: 19°C, sunny (0% cloud cover), Beaufort wind 3, no precipitation. Photographs of site features taken during field investigations are provided in Appendix B. A summary of all wildlife observed during the site investigation is provided in Table C.1 of Appendix C.

2.2.1 Ecological Land Classification

Vegetation communities on the subject property were delineated during the desktop review stage of this EIS using publicly available air photos and confirmed in the field on September 29, 2022, following the Ecological Land Classification System for Southern Ontario (Lee et al., 2008). Vegetation communities were confirmed in the field by employing the random meander methodology while documenting dominant vegetation species within the various vegetation community forms.

2.3 Data Analysis

An evaluation of the significance of natural heritage features, the sensitivity of identified flora and fauna and the potential impacts posed by the proposed development was undertaken through an analysis of desktop and field investigation data using the approaches and criteria outlined in the following documents:

- Natural Heritage Reference Manual (OMNR, 2010);
- Significant Wildlife Habitat Technical Guide (OMNR, 2000);
- Significant Wildlife Habitat Ecoregion Criterion Schedules (OMNRF, 2015a); and
- Significant Wildlife Habitat Mitigation Support Tool (OMNRF, 2014b).

3.0 EXISTING ENVIRONMENT

3.1 Ecoregion

The site is situated Ecoregion 6E-11 (Lake Simcoe-Rideau), which extends from Lake Huron in the west to the Ottawa River in the east. The climate of Ecoregion 6E is categorized as humid, high to moderate temperate ecoclimate with a mean annual temperature range between 4.9°C to 7.8°C with annual precipitation ranging between 759 mm to 1,087 mm (Crins et al., 2009).

The eastern portion of the Ecoregion, which the subject property is located, is underlain by glaciomarine deposits as a result of the brief post-glacial incursion of salt water from the Champlain Sean along the St. Lawrence Valley. This Ecoregion falls with Rowe's (1972) Great Lakes-St. Lawrence Forest Region, including its Huron-Ontario and Upper St. Lawrence sections, and a small part of the Middle Ottawa Forest section (Crins et al., 2009).

3.2 Study Area Land Use

Figure 1 below provides an illustration of the temporal changes in land use within the study area from 1976, 1991, 2008, and 2021 aerial imagery available from GeoOttawa.

In 1976 , the subject site was in a regenerative state from past agricultural uses. The northeastern portion of the subject property appears to be abandoned tilled field. Surrounding areas included predominantly agricultural, some rural-residential and industrial. The industrial development appears to be a quarry operation adjacent northwest of the subject site.

By 2002, on-site regeneration had led to treed vegetative cover. Tree coverage appears to be a plantation and not natural recovery. Based on the survey data, this was likely to have been a coarse mineral coniferous plantation of red pine. Industrial development and the lake northwest of site increased in size, appears to longer be in operation due to vegetative recovery around the lake.

By 2008, the subject site is unchanged since 2002 photograph. The northwestern land and former quarry operation has been residentially developed. Further residential development south of the subject site is also evident.

By 2021, the subject site has been clear cut on the southwestern portion of the site with additional tree coverage lost on the adjacent southern property. The surrounding area has been heavily residentially developed. Some agricultural land remains east of the subject site.

Figure 1 – Temporal Changes in Land Use within Study Area

3.2.1 Carp River Watershed/Subwatershed Study & Carp Road Corridor Community Design Plan

The Carp River Watershed/Subwatershed Study (Robinson, 2004) was completed to provide, in part, initial guidance on approaches required to protect and restore environmental values within the Carp River watershed. The Carp River watershed encompasses an area of approximately 30,600 ha surrounding the former municipalities of West Carleton, Kanata and Goulbourn. The Carp River Watershed/Subwatersehd Study (CRSWS) identifies opportunities and constraints for improvement of the Carp River Watershed while providing a series of Best Management Practices (BMPs) that may be implemented in order to protect, enhance or restore the environment. The desktop review did not identify any watercourses within the study area, as such the Carp River Watershed BMPs do not apply.

The Carp Road Corridor Community Design Plan (CRCCDP) is a Council approved guide to the long-term growth and development of the Carp Road Corridor. The CRCCDP provides guidelines for the day-to-day decision-making on land use planning and sets out the community's priorities for the future (Ottawa, 2004). The Carp Road Corridor extends from Stittsville to Fitzroy Harbour

and is a significant rural employment area. Schedule 2 of the CRCCDP identifies the subject property as a moderate recharge area, and therefore requires a groundwater impact assessment. A Hydrogeological Assessment has been completed under separate cover.

3.3 Landforms, Soils and Bedrock Geology

The topography of the site is relatively flat, but appears to occur on an elevated mound when considering the surrounding study area. The topopgraphy slopes downward gradually southeast and northwest of site. The topography also slopes gradually downwards towards Carp Road from the center of site. The site has a topographical high of 121 mASL in the central portion and a topographical low of 116 mASL in the northeast corner.

A single topographical landform, as mapped by Chapman and Putnam (1984) is described on the subject property, sand plains of the Ottawa Valley Clay Plains.

The Ontario Geological Survey (OGS, 2019) identifies one surficial soil unit on the subject property, coarse textured glaciomarine deposits. These deposits consist of sand, gravel, minor silt and clay with littoral, foreshore, and basinal deposits. Part of the study area in the northeast corner is situated over stone-poor sandy silt to silty sand-textured till on Paleozoic terrain.

Bedrock on the site is composed of the Ottawa Group, Simcoe Group and Shadow Lake Formation comprised of limestone, dolostone, shale, arkose and sandstone.

3.4 Surface Water, Groundwater and Fish Habitat

The desktop review identified a local wetland and two waterbodies mapped by the NHIC within the study area. The local wetland and one of the waterbodies is mapped as occurring on-site within the southwestern portion of site. The second mapped waterbody occurs partially within the study area and partially off-site along the southeastern study area boundary.

Based on field observations from the 2022 site visit, the local wetland and waterbody on-site are no longer present. Furthermore, geoOttawa and the Mississippi Valley Conservation Authority do not have the local wetland mapped on-site. The area mapped as wetland and waterbody was instead reflective of a dry, heavily disturbed cultural meadow habitat based on field observations.

The waterbody within the study area was present at the time of the site investigation. Aerial photography indicates the waterbody has been present since at least 1976. By 2019 most of the surrounding vegetation had been removed. Further vegetation is removed by present day, fragementing the habitat surrounding the waterbody. The parcel containing the waterbody appears to have been developed beginning in 2019 and the waterbody appears to be used as a storm water management pond associated with the development.

No other surface water, groundwater, or fish habitat features were identified on-site.

A fisheries assessment was not conducted as part of this EIS. However, based on observations demonstrating that the mapped local wetland and waterbody on-site are no longer present, no fish habitat is anticipated to occur on-site.

Groundwater investigations were not completed in support of this EIS.

3.5 Vegetation Communities

Vegetation communities on-site were characterized by GEMTEC on September 29, 2022, following protocols utilized in the Southern Ontario Ecological Land Classification System (Lee et al., 2008). Two vegetation communities are described on-site, a cultural meadow (CUM) and a business sector (CVC_1). Table 3.1 below provides a summary of the various vegetation communities identified on-site, while Figure A.3 illustrates the vegetation communities on-site.

The dominant vegetation community on-site was identified as a cultural meadow type (CUM), occupying 0.54 ha. This community occurred within the southern and northern portions of site. Some trees were present along the edges of this community, including red pin (*Pinus resinosa*), Manitoba maple (*Acer negundo*), American elm (*Ulmus americana*), American basswood (*Tilia americana*), bur oak (*Quercus macrocarpa*), and ash (*Fraxinus sp.*). Dominant ground cover vegetation within this community were grasses (*Gramineae sp.*). Also present amongst the ground cover vegetation was dandelion (*Taraxacum officinale*), vipers bugloss (*Echium vulgare*), white clover (*Trifolium repens*), wild parsnip (*Pastinaca sativa*), common mullein (*Verbascum thapsus*), common burdock (*Arctium minus*), and common milkweed (*Asclepias syriaca*).

The business sector community was comprised of a gravel driveway with access to Carp Road, a gravel parking lot, a one-storey office building, and a storage structure. This community was located centrally on-site and was a total of 0.69 ha. Vegetation was representative of heavily disturbed environments, with little to no ground cover present.

As mentioned, a tree conservation report was conducted for the property to identify trees to be retained and protected under future development and, where feasible, identify opportunities to offset the loss of trees that cannot be retained or contribute to the City's forest cover targets. The Tree Conservation Report (TRC) completed for the subject property is provided in Appendix D.

3.6 Wildlife

Wildlife observed on-site and within the study area during field investigation completed in 2022 are summarized in Table C.1 in Appendix C.

4.0 NATURAL HERITAGE FEATURES

Natural heritage features are defined in the PPS as “features and areas, including *significant wetlands, significant coastal wetlands, fish habitat, significant woodlands* south and east of the Canadian Shield, *significant valleylands* south and east of the Canadian shield, *significant habitats of endangered species and threatened species, significant wildlife habitat* and *significant areas of natural and scientific interest*, which are important for their environmental and social values as a legacy of the natural landscape of an area”.

4.1 Significant Wetlands and Surface Water Features

As described in the Natural Heritage Reference Manual (OMNR, 2010), wetlands mean “lands that are seasonally or permanently covered by shallow water, as well as lands where the water table is close to or at the surface.” While *significant* in regards to wetlands means “an area identified as provincially significant by the Ontario Ministry of Natural Resources and Forestry using evaluation procedures established by the Province, as amended from time to time.” As mentioned in Section 1.2, the PPS dictates “development or site alteration shall not be permitted in significant wetlands in Ecoregion 5E, 6E, 7E”

No provincially significant wetlands were identified during the desktop review, nor were they identified on-site. However, desktop review through NHIC mapping indicate that an unevaluated wetland and an associated waterbody occur on-site. As mentioned in section 3.4, the 2022 field investigation observed that the local wetland and associated waterbody are no longer present. The MVCA and City of Ottawa mapping support this conclusion as the local wetland is not mapped by either database.

The partially off waterbody is not anticipated to be impacted by the proposed development due to the distance from site, being ~100 metres from the site boundary at its closest point. As mentioned is section 3.4, the waterbody may have once been a natural feature that has since been heavily disturbed. The surrounding habitat has been heavily fragmented, isolating the waterbody from adjacent natural features. In its current state, the waterbody appears to serve as a stormwater management pond within a light industrial land use context.

As the local wetland and waterbody on-site are no longer present, and due to the partially off-site waterbody not providing wildlife habitat, no impacts from the proposed development on significant wetlands or surface water features are anticipated on-site. Significant wetlands and surface water features are not discussed or evaluated further in this EIS.

4.2 Significant Woodlands

Significant woodlands are defined in the Natural Heritage Reference Manual (OMNR, 2010) as “an area which is ecologically important in terms of features such as species composition, age of trees and stand history; functionally important due to its contribution to the broader landscape

because of its location, size or due to the amount of forest cover in the planning area; or economically important due to site quality, species composition, or past management history."

At the local scale, significant woodlands are defined and designated by the local planning authority. Generally, most planning authorities have defined significant woodlands as any woodland that contains any of the four criteria listed in Section 7.2 of the natural heritage reference manual (OMNR, 2010), including: woodland size, ecological functions, uncommon characteristics and economic and social functional values. Furthermore, the City of Ottawa provides a supplementary document *Significant Woodland: Guidelines for Identification, Evaluation, and Impact Assessment* (Ottawa, 2020) to evaluate woodlands and ensure compliance with the city's policies.

However, as outlined in Section 3.5 above, the site is primarily vacant with treed hedgerows. No woodland or forest communities have been identified on-site during the desktop review or site investigation. As such, significant woodlands are not present on-site or within the study area and they are not discussed or evaluated further in this EIS.

4.3 Significant Valleylands

Valleylands are defined in the natural heritage reference manual (OMNR, 2010) as 'a natural area that occurs in a valley or other landform depression that has water flowing through or standing for some period of time". The identification and evaluation of significant valleys lands in Ontario is based on the recommended criteria from the MNRF and is the responsibility of local planning authorities.

In Southern Ontario, conservation authorities have identified valleylands as part of their regulation mapping (i.e., floodplain mapping); however, where valleys lands have not been defined, their physical boundaries are generally determined as the 'top-of-bank' or 'top-of-slope' associated with a watercourse. For less well-defined valleys, the physical boundary may be defined by riparian vegetation, flooding hazard limits, ordinary high water marks or the width of the stream meander belt (OMNR, 2010).

As discussed in Section 3.2, the site is relatively flat, further more no valleylands were identified on-site during the desktop review or the site investigations. As such significant valleylands are not discussed or evaluated further in this EIS.

4.4 Significant Areas of Natural and Scientific Interest

The MNRF identifies two types of areas of natural and scientific interest (ANSI) in Ontario: life sciences ANSIs typically represent significant segments of Ontario's biodiversity and natural landscapes, while earth science ANSIs typically represent significant examples of bedrock, fossils or landforms in Ontario (OMNR, 2010).

No ANSI have been identified on-site or adjacent to the site during the desktop review or during site investigations. Therefore, ANSI are not discussed or evaluated further in this EIS.

4.5 Significant Wildlife Habitat

The natural heritage reference manual (OMNR, 2010), in combination with the significant wildlife habitat technical guide (MNRF, 2000) and the significant wildlife habitat ecoregion criterion schedules (MNRF, 2015) were used to identify and evaluated potential significant wildlife habitat on-site. The significant wildlife habitat is broadly categorized as habitats of seasonal concentration of animals, rare vegetation communities, specialized habitats for wildlife, habitats of species of conservation concern and animal movement corridors. Table C.3, C.4, C.5 and C.6 in Appendix C, provide the screening rationale for each category of significant wildlife habitat, respectively.

4.5.1 Habitats of Seasonal Concentrations of Animals

Seasonal concentration areas are habitats where large numbers of species congregate at one particular time of the year. The significant wildlife habitat technical guides (OMNR, 2000) and significant wildlife habitat ecoregion criterion schedules (OMNRF, 2015a) identify 12 types of seasonal concentration habitats that may be considered significant wildlife habitat. These 12 types of seasonal habitat are presented in Table C.3 in Appendix C, including a brief description of the rationale as to why they are or are not assessed further in this EIS.

Following review of Table C.3 in Appendix C, no habitats of seasonal concentrations of animals have been identified on-site, as such they are not discussed or evaluated further in this EIS.

4.5.2 Rare Vegetation Communities

Rare vegetation communities in the province are described generally as those with an S1 to S3 ranking by the NHIC, and typically include communities such as sand barrens, alvars, old growth forests, savannahs and tallgrass prairies.

The vegetation communities identified on-site and described in Section 3.4 of this report are not ranked by the NHIC as S1, S2 or S3 and are therefore not considered to be rare vegetation communities. As such, rare vegetation communities are not discussed or evaluated further in this EIS.

4.5.3 Specialized Habitats for Wildlife

Specialized wildlife habitats are microhabitats that provide a critical resource to some groups of wildlife. The significant wildlife habitat technical guide (OMNR, 2000), defines eight specialized habitats that may constitute significant wildlife habitat, these eight types of specialized wildlife habitats are evaluated in Table C.4 in Appendix C.

Following review of Table C.4 in Appendix C, no specialized habitats for wildlife have been identified on-site or within the study area and are not evaluated or discussed further in this EIS.

4.5.4 Habitats of Species of Conservation Concern

Provincial rankings are used by the Natural Heritage Information Centre to set protection priorities for rare species, similar to those described in Section 4.5.2 above for vegetation communities. Provincial rankings (S-ranks), are not legal designations such as those used to define the various protection statuses of species at risk, they are only intended to consider factors within the political boundaries of Ontario that might influence a particular species abundance, distribution or population trend.

Based on the guidance provided in the Significant Wildlife Habitat Ecoregion Criterion Schedules (MNRF, 2015), when a plant or animal element occurrence is recorded for any species with an S-rank of S1 (extremely rare), S2 (very rare), S3 (rare to uncommon) or SH (historically present), the corresponding vegetation ecosite is considered to provide *candidate* habitat for species of conservation concern and further consideration within the EIS is warranted.

The Significant Wildlife Habitat Ecoregion Criterion Schedules (OMNRF, 2015), provides five general habitat types known to support a wide range of species of conservation concern in Ontario. The five general habitat types for Ecoregion 6E-11 are provided in Table C.5 in Appendix C, including a brief rationale as to why they are or are not considered further in this EIS. Following review of Table C.5 in Appendix C, no habitat of species of conservation concern have been identified on-site or within the study area and are not evaluated or discussed further in this EIS.

4.5.5 Animal Movement Corridors

Animal movement corridors are elongated areas used by wildlife to move from one habitat to another and allow for the seasonal migration of animals (OMNRF, 2015). The Significant Wildlife Habitat Ecoregion Criterion Schedules for Ecoregion 6E-11 (OMNRF, 2015), identifies two types of animal movement corridor: amphibian movement corridors and deer movement corridors. As per guidance presented in MNRF, 2015, animal movement corridors should only be identified as significant wildlife habitat when a *confirmed or candidate* significant wildlife habitat has been identified by the MNRF district office or by the regional planning authority.

Following review of Table C.6 in Appendix C, no animal movement corridors have been identified on-site. Furthermore, the MNRF has not identified any animal movement corridors on the publicly available data sets for wildlife values area (OMNRF, 2020a) or wildlife values site (OMNRF, 2020b). As such, animal movement corridors are not discussed or evaluated further in this EIS.

4.6 Fish Habitat

The protection of fish and fish habitat is a federal responsibility and is administered by the Department of Fisheries and Oceans Canada (DFO). Fish habitat as defined in the Fisheries Act (Canada, 1985) means, “spawning grounds and nursery, rearing food supply and migration areas on which fish depend directly or indirectly in order to carry out their life processes.”

When development is unable to avoid resulting in the harmful alteration, disturbance or destruction of fish habitat from typical project impacts such as temperature change, sedimentation, infilling, reduction of nutrient and food supply, etc., an authorization under the Fisheries Act is required for the project to proceed.

A fisheries assessment was not conducted as part of this EIS, however, based on observations demonstrating that the mapped local wetland and waterbody on-site are no longer present, and that the partially off-site waterbody has been heavily disturbed, no fish habitat is anticipated to occur on-site. As such fish habitat is not disussed or evaluated further in this EIS.

4.7 Species at Risk

The probability of occurrence for species at risk to occur on-site and within the broader study area was determined through the desktop review stage of this EIS, as described in Section 2.1, and through the site specific surveys conducted as part of this EIS, outlined in Section 2.2.

Table C.7 in Appendix C, provides a summary of all species at risk which were determined to have the potential to occur on-site or within the broader study area, their protection status under the provincial Endangered Species Act (Ontario, 2007), their regional distribution, their probability of occurrence and a brief rationale of that probability. Impacts to endangered or threatened SAR determined to have a moderate or high potential to occur on-site or within the broader study area are discussed further in the Section 6.3.

5.0 PROPOSED PROJECT

The proposed project assessed for potential impacts on the natural heritage features determined to be present within the broader study area includes the construction of a commercial facility on an existing 1.23 hectare property.

Components of the development will include: tree clearing and vegetation grubbing, fill placement and elevation grading, septic system installation, and general landscaping activities.

Water servicing on-site will consist of a 25 mm diameter building service connection from the existing well located on the north edge of the access roadway, east of the proposed building. Water demands for the development were estimated using the Ministry of Environment's Design Guidelines for Drinking Water Systems (2008). The maximum fire flow requirements for the site are 60 L/s. Three underground potable water storage tanks are proposed to supplement low yielding wells to meet fire flow water demands. The tanks will receive water from the wells that are filled during off peak hours. Each tank is to have a capacity of 45,000 L, which is sufficient for the required facility demand volume of 113,322 L.

Wastewater from the proposed development will be managed through the installation of a new septic tank and bed located south of the proposed building, which will service the building via a 150 mm diameter sanitary service lateral.

Stormwater management on-site will consist of surface storage within a swale in conjunction with a weir, and subsurface storage within a dry well. The swale will direct excess stormwater to the roadside ditch on Carp Road over a rock weir acting as an outlet. Surface storage in the swale will be utilized during storm events to adequately control flow and achieve targetable release rates. The total volume of surface storage is 226 m^3. An underground drywell is proposed to capture and store runoff coming from the north-western end of the subject property as well as some o the external areas. The dry well has a capacity of 4 m^3.

Grading for the site has been designed to direct as much runoff as possible to the Carp Road roadside ditch east of the site, and to provide minimum grades and slopes in compliance with design guidelines. Erosion and sediment control measures will be implemented during construction to reduce the environmental impacts to the receiving watercourses.

6.0 IMPACT ASSESSMENT

Potential impacts to natural heritage features on-site and within the broader study area are assessed for direct, indirect and cumulative effects based on the proposed project outlined in Section 5. Natural heritage features identified in Section 4 of this report as present or likely to be present are discussed in the subsections below.

Potential effects to the environment of the site from the proposed development outlined in Section 5 include: an increase in impervious surface, increase in stormwater generation, short-term increases in sedimentation and/or erosion and increased noise generation.

6.1 Species at Risk

As outlined in the Endangered Species Act (Ontario, 2007), only species listed as threatened or endangered and their general habitat receive automatic protection. When a species-specific recovery strategy is developed, a specific habitat regulation will be established, which eventually replaces the automatic habitat protection. Species of special concern and their habitat do not receive protection under the ESA.

Potential impacts associated with the proposed project to threatened or endangered species identified as having a moderate or high potential to occur on-site in Section 4.7, are discussed on a species-by-species basis in the subsections below.

6.1.1 Eastern Small-footed Myotis

Eastern small-footed myotis (*Myotis leibii*) is the smallest (typically 3-5 g), insectivorous bat found in Ontario. The fur of an eastern small-footed myotis is golden-brown in colour, with a distinct black mask across the face. The eastern small-footed myotis is very similar in appearance to the little brown myotis, and is distinguishable by their small foot and keeled calcar (Fraser, MacKenzie & Davy, 2007).

The eastern small-footed myotis is found throughout eastern North America. In Ontario the species has been observed in the areas sough of Lake Superior across to the Ontario-Quebec border (Humphrey, 2017).

Eastern small-footed myotis overwinter primarily in caves and abandoned mines with low humidity and temperatures and stable microclimates (Humphrey, 2017). In comparison to other Ontario bat species, they are able to tolerate much colder temperatures, drier conditions and draftier locations for hibernating (Humphrey, 2017). During the spring and summer months, they utilize a variety of habitats for roosting, including under rocks or rock outcrops, in buildings, under bridges, or in caves, mines or hollow trees (Ontario, 2019a).

Although the habitat on-site does not meet the requirements to support bat maternity colonies, given the availability of habitat and buildings on-site and within the study area, there is a potential

for eastern small-footed myotis to occur on the property, primarily for foraging or non-maternal roosting. Impacts to eastern small-footed myotis are primarily associated with summer roost habitat loss, encroachment and increased wildlife-human interaction. Mitigation measures intended to protect eastern small-footed myotis from impacts of the proposed development are discussed in Section 7.

6.1.2 Little Brown Myotis

Little brown myotis (*Myotis lucifugus*) is a small (typically 4-11 g), insectivorous bat. The fur of a little brown myotis is bi-coloured; fur is a glossy brown with a darker coloured base. The tragus of the little brown myotis is long and thin, with a rounded tip (Fraser, MacKenzie & Davy, 2007).

In Canada, little brown myotis' occur throughout all of the provinces and territories (except Nunavut), with its range extending south through the majority of the United States as well. In Ontario, the little brown myotis is widespread in southern Ontario and has been found as far north as Moose Factory and Favourable Lake (Ontario, 2019b).

Little brown myotis overwinter in caves and abandoned mines, they require highly humid conditions and temperatures that remain above the freezing mark (Ontario, 2019b). During the summer months, maternity colonies are often located in buildings or large-diameter trees. Little brown myotis roost in trees and buildings. Foraging occurs over water and along waterways, forest edges and in gaps in the forest. Open fields and clear-cuts are not typically utilized for foraging (COSEWIC, 2013b).

Although the habitat on-site does not meet the requirements to support bat maternity colonies, given the availability of habitat and buildings on-site and within the study area, there is a potential for little brown myotis to occur on the property, primarily for foraging or non-maternal roosting. Impacts to little brown myotis are primarily associated with habitat loss, encroachment and increased wildlife-human interaction. Mitigation measures intended to protect little brown myotis from impacts of the proposed development are discussed in Section 7.

6.1.3 Tri-colored Bat

Tri-colored bat (*Perimyotis subflavos*) is a small (typically 5-7 g), insectivorous bat. The fur is uniformly coloured on the ventral and dorsal sides, however when parted fur shows three distinct colour bands. The base of the hair is blackish, with a blonde middle and brownish tip. The snout of the tri-coloured bat is also distinct, with swollen bulbous glands present (Fraser, MacKenzie & Davy, 2007).

In Canada, the tri-colored bat has only been recorded in southern parts of Nova Scotia, New Brunswick, Quebec and central Ontario. In Ontario it occurs primarily from the southern edge of Lake Superior across to the Ontario-Quebec border and south (COSEWIC, 2013).

Tri-colored bat overwinter in in caves or mines, and have very rigid habitat requirements; they typically roosting the deepest parts where temperatures are the least variable, and have the strongest correlation with humidity levels and warmer temperatures (COSEWIC, 2013). In the spring and summer, tri-colored bat utilize trees, rock crevices and buildings for maternity colonies. Foraging is mainly done over watercourses and streamside vegetation (COSEWIC, 2013).

Although the habitat on-site does not meet the requirements to support bat maternity colonies, given the availability of summer roost habitat and buildings on-site and within the study area, there is a potential for tri-colored bat to occur on the property, primarily for foraging or non-maternal roosting. Impacts to tri-colored bat are primarily associated with habitat loss, encroachment and increased wildlife-human interaction. Mitigation measures intended to protect tri-colored bat from impacts of the proposed development are discussed in Section 7.

6.1.4 Loggerhead Shrike

Loggerhead shrike (*Lanius ludovicianus*) is a medium-sized grassland songbird of about 21-23 cm in length, referred to as a passerine raptor (Cadman et al., 2007). The top of the head, back, and rump area are dark grey with the underparts being white to greyish. The wings are black with a white patch that is easily perceived during flight. A black facial mask covers the eye and extends over the beak. Loggerhead shrikes are notable for its raptor-like beak and its predatory behavior, often impaling prey for ease of consumption and to store in times of food scarcity (Cadman et al., 2007).

The loggerhead shrike was once well established in southern Ontario, likely as a result of the clearing of land for agriculture throughout the late 19th century (Cadman et al., 2007). The population has seen a significant decline in Ontario in part due to habitat loss from the natural succession of abandoned agricultural fields transitioning back to forested habitat on the Canadian shield and through the northern portion of the Lake Simcoe-Rideau region. However, suitable unoccupied habitat continues to exist within the region, indicating other factors than habitat loss are contributing to decline, which are thought to include road mortality, pesticides, predation, weather extremes, and the West Nile virus (Cadman et al., 2007; COSEWIC, 2014). Between the first and second breeding bird atlas, the probability of observation declined by 63% province wide (Cadman et al., 2007). The current distribution of loggerhead shrike is concentrated through the Lake Simcoe-Rideau region, primarily within the Carden and Napanee core breeding areas (Cadman et al., 2007).

The loggerhead shrike prefers open areas dominated by grasses and/or forbs, interspersed with scattered shrubs or trees and bare ground for its breeding habitat. Suitable habitat generally includes pasture, old fields, prairie, savannah, pinyon-juniper woodland, shrub-steppe, and alvars (COSEWIC, 2014). Winter and migration habitat are typically similar to breeding habitat requirements (COSEWIC, 2014). Territory size ranges from 2.7 to 47.0 ha and is corelated to the abundance of trees and shrubs – increasing perch density will decrease territory size (COSEWIC,

2014). In the eastern United States and Ontario, shrikes appear to prefer areas with relatively short grass, in which they may have greater foraging success or where they can forage with more energetic efficiency (COSEWIC, 2014).

Breeding bird surveys were outside of the scope for this EIS; however, the subject site and surrounding study area does not provide the necessary habitat conditions as detailed in the General Habitat Description “large, open, frequently-grazed grasslands situated on limestone bedrock with shallow soil or other substrates” (MECP, 2021). As such, loggerhead shrike are not expected to occur on-site and no negative impacts are anticipated to occur to loggerhead shrike or their habitat from the proposed development. Loggerhead shrikes are not discussed or evaluated further in this EIS.

6.2 Cumulative Impacts

Potential cumulative impacts associated with the proposed project include a minor increase in storm water generation, minor increases in nutrient loading to adjacent aquatic features, and minor loss and fragmentation of meadow / field habitat.

Cumulative impacts to the natural environment at the site due to increased human presence are expected to be negligible given the existing commercial and industrial development in the surrounding study area of the Carp corridor.

Cumulative impacts such as those listed above can be mitigated by implementing the proposed setbacks and recommended mitigation measures outlined in Section 7 below.

7.0 RECOMMENDED AVOIDANCE AND MITIGATION MEASURES

The following avoidance and mitigation measures have been recommended by GEMTEC in order to minimize or eliminate potential environmental impacts identified in Section 6. As such, recommended avoidance and mitigation measures should be enforced through Site Plan Controls.

7.1 Species at Risk

7.1.1 Eastern Small-footed Myotis, Little Brown Myotis & Tri-colored Bat

To protect roosting and foraging bats, tree removal where required should take place outside of the spring and summer active season (typically April 1 to September 30), when bats are more likely to be using forest habitat. Similarly, prior to removal of existing site structures, a bat exit survey should be completed if removal cannot adhere to the spring and summer active season. If vegetation clearing must be conducted during the spring and summer timing window than a roost survey should be conducted be a qualified professional.

7.2 Wildlife

The following avoidance and mitigation measures are provided in effort to minimize impacts to on-site and off-site wildlife:

- To protect wildlife during construction, construction should be completed in accordance with the best practices outlined in Protocols for Wildlife Protection During Construction, from the City of Ottawa (Ottawa, 2015).
- Development plans should incorporate the City of Ottawa Bird Safe Guidelines to inform building, landscape and lighting design to minimize the threat of bird collisions.
- Vegetation removal should occur outside of April 1 to September 30 to avoid the key breeding bird period and bat summer active season. The timing window provides protection of migratory birds, roosting bats and avoids contravention of the Migratory Bird Convention Act and Endangered Species Act. If vegetation clearing activities must take place during the aforementioned timing window than a nest and roost survey shall be conducted by a qualified professional.
- Installation of silt fence barriers around the entire construction envelope to prohibit the emigration of wildlife into the construction area, silt fencing should be checked daily and following each precipitation event.
- Cover all stock piled material with a geotextile to prevent turtles from nesting in the material between May 1 and August 1 of any year.
- Perform daily pre-work sweeps of the construction area to ensure no species at risk are present and to remove any wildlife from inside the construction area.
- Should any species at risk be discovered throughout the course of the proposed works, the species at risk biologist with the local MECP district shall be contacted immediately

and operations ceased to avoid any negative impacts to species at risk or their habitat until further direction is provided by the MECP.

7.3 Best Practice Measures for Mitigation of Cumulative Impacts

The following best practice measures are provided for the mitigation of cumulative impacts resulting from general construction and development activities;

- To protect trees identified to be retained during construction, the Critical Root Zone (CRZ) should be identified and fenced. The CRZ is defined as 10 cm from the base of the tree for every centimetre in diameter of the tree trunk measured at breast height.
- Maintain as much permeable surface as possible in future development plans to minimize the generation of stormwater runoff.
- Silt fencing should be installed along all setbacks to provide visual demarcation of the setbacks and to prevent machinery encroachment and sediment transport.
- Erosion and sediment control measures should be maintained until all disturbed ground has been permanently stabilized.
- In effort to offset the effect of vegetation clearing, consideration should be given to landscape planting with native tree species indicative of the Great Lakes – St. Lawrence Forest Region, such as white cedar, white spruce, red maple, and red oak.
- Implementation and adherence to the proposed stormwater management plan.

7.4 Carp River Watershed/Subwatershed Study & Carp Road Corridor Community Design Plan BMPs

The site does contain any Headwater Drainage Features (HDFs), watercourses or wetlands, accordingly BMPs relating to watercourse buffers and stream restoration do not apply to the proposed development.

With respect to terrestrial systems, the CRCCDP (Robinson, 2004) highlights the need for the protection of core woodland areas (woodlands greater than 50 years of age), riparian habitats and natural linkage corridors. However, as the site does not contain significant urban woodlands, riparian habitat or natural linkage corridors, the environmental protection recommendations from the CRCCDP do not directly apply to the site or the proposed development. Furthermore, the environmental protection measures of the CRCCDP relate to environmental features shown on Schedule 2 of the CRCCDP; none of which occur on the site.

8.0 CONCLUSIONS

The proposed project supported by this EIS is the development of a commercial storage facility on an existing 1.23 ha property.

Based on the results of the impact analysis, impacts to the natural environment are anticipated to be minimal. Provided that mitigation measures recommended in Section 7 are implemented as proposed, no significant residual negative impacts are anticipated from the proposed future development.

Following review of the information pertaining to the natural heritage features of the site, the following general conclusions are provided by GEMTEC in regards to the Environmental Impact Statement.

- No significant negative impacts to natural heritage features identified on-site, including surface water features, significant wildlife habitat, and habitats of species at risk, from future industrial construction are anticipated.
- The proposed project complies with the natural heritage policies of the Provincial Policy Statement.
- The proposed development complies with the natural heritage polices of the City of Ottawa Official Plan, the Carp Road Corridor Community Development Plan and the Carp River Watershed/Subwatershed Study.

9.0 LIMITATION OF LIABILITY

This report and the work referred to within it have been undertaken by GEMTEC Consulting Engineers and Scientists Ltd (GEMTEC), and prepared for Bekim Holding Inc. and is intended for the exclusive use of the Bekim Holding Inc. This report may not be relied upon by any other person or entity without the express written consent of GEMTEC and the Bekim Holding Inc. Nothing in this report is intended to provide a legal opinion.

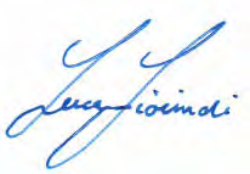
The investigation undertaken by GEMTEC with respect to this report and any conclusions or recommendations made in this report reflect the best judgements of GEMTEC based on the site conditions observed during the investigations undertaken at the date(s) identified in the report and on the information available at the time the report was prepared.

This report has been prepared for the application noted and it is based, in part, on visual observations made at the site, all as described in the report. Unless otherwise stated, the findings contained in this report cannot be extrapolated or extended to previous or future site conditions, or portions of the site that were unavailable for direct investigation.

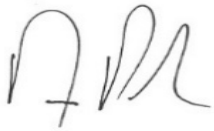
Should new information become available during future work or other studies, GEMTEC should be requested to review the information and, if necessary, re-assess the conclusions presented herein.

We trust this report provides sufficient information for your present purposes. If you have any questions concerning this report, please do not hesitate to contact our office.

Sincerely,



Luca Fiorindi, B.A., Dip.
Junior Biologist



Drew Paulusse, B.Sc.
Senior Biologist

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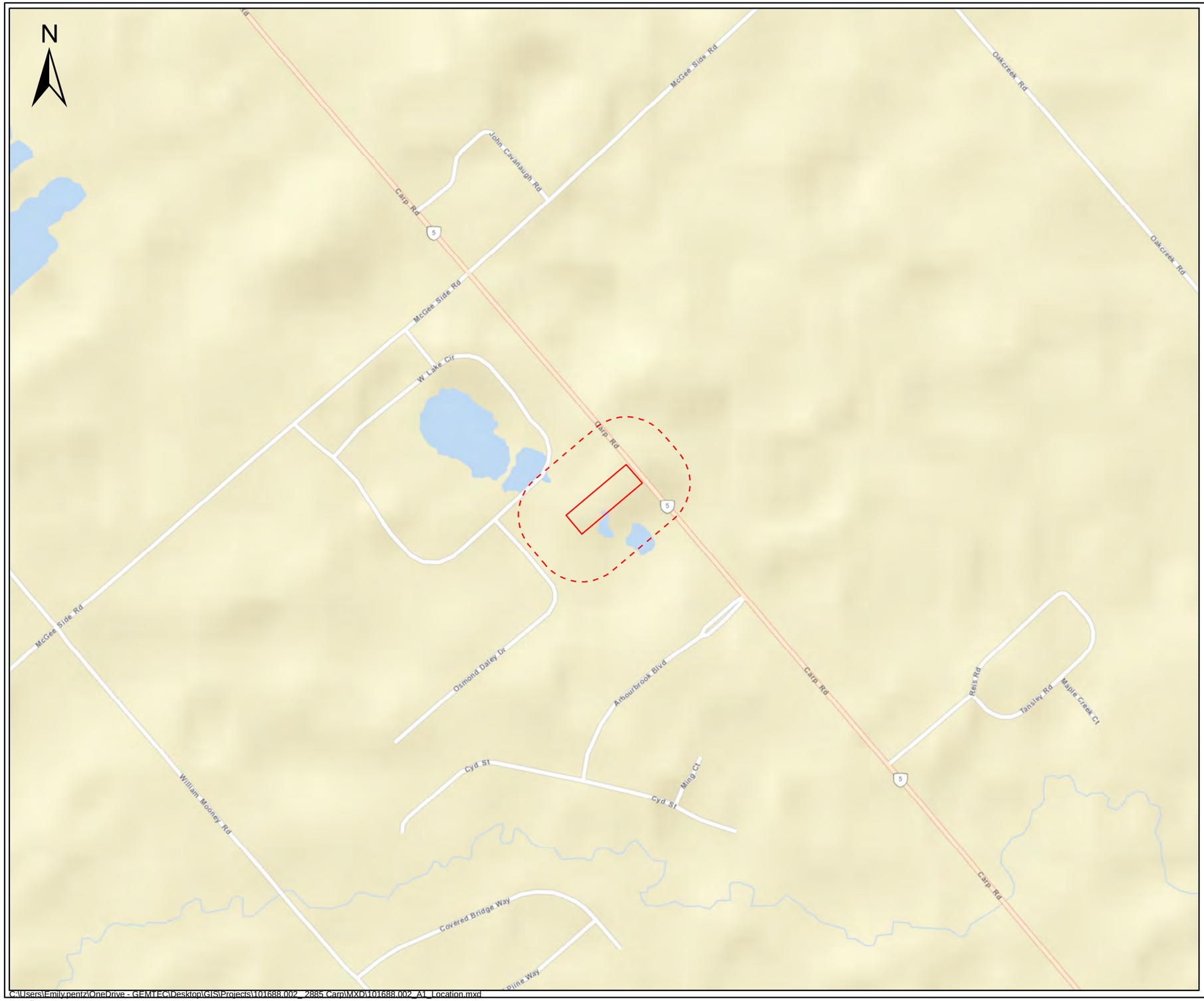
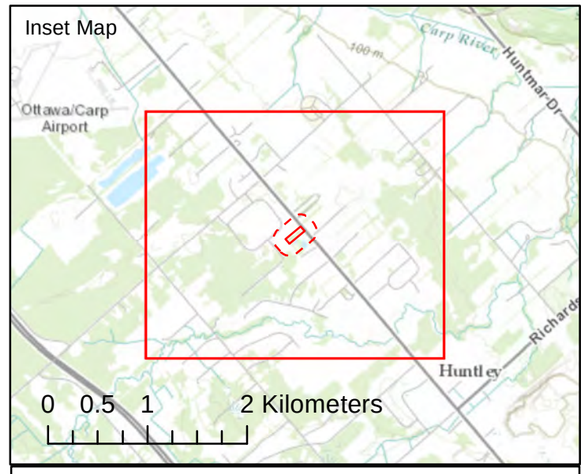
APPENDIX A

Report Figures
Figure A.1 – Site Location
Figure A.2 – Site Layout
Figure A.3 – Vegetation Communities
Figure A.4 – Development Concept



Legend

- Property Boundary
- Study Area



Scale
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Client: Bell & Associates Architecture

Project: 101688.002

Location: 2885 Carp Road
City of Ottawa, Ontario

Drwn By:	Chkd By:	
EP	TW	Site Location

Date: August 2022

Rev. 0

Figure A.1

C:\Users\Emily.pentz\OneDrive - GEMTEC\Desktop\GIS\Projects\101688.002_ 2885 Carp\MXD\101688.002_A1_Location.mxd
Coordinate System: NAD 1983 UTM Zone 18N
Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Legend

- Property Boundary
- Study Area
- Waterbody
- Local Wetland

Scale
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Client: Bell & Associates Architecture

Project: 101688.002

Location: 2885 Carp Road
City of Ottawa, Ontario

Drwn By: EP | Chkd By: TW | Site Layout

Date: August 2022

Rev. 0

Figure A.2

Coordinate System: NAD 1983 UTM Zone 18N
Service Layer Credits: MVC DRAPE 2019 Imagery: Rideau Valley Conservation Authority (RVCA)
World Street Map: Esri, HERE, Garmin, GeoTechnologies, Inc., NGA, USGS, NRCan

Legend

- Property Boundary
- Study Area
- Waterbody
- Vegetation Community

CUM = Cultural Meadow
CVC_1 = Business Sector

Scale
1:1,800
0 35 70 Meters

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Client:	Project:
Bell & Associates Architecture	101688.002

Location
2885 Carp Road
City of Ottawa, Ontario

Drwn By:	Chkd By:	
EP	TW	Vegetation Communities

Date: November 2022	Rev.	
	0	Figure: A.3

Coordinate System: NAD 1983 UTM Zone 18N
Service Layer Credits: World Imagery: Maxar, Microsoft
Hybrid Reference Layer: Esri Community Maps Contributors, City of Ottawa, Province of Ontario, Esri Canada, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, NRCan, Parks Canada

Legend

- Property Boundary
- Study Area
- Waterbody

Development Concept

- Proposed Building
- Proposed Driveway
- Proposed Parking Area
- Proposed Septic Location
- Proposed Berm with Grading

Layer

- Temporary Structure to be Removed

Scale
1:1,800
0 25 50 100 Meters

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Client: Bell & Associates Architecture

Project: 101688.002

Location: 2885 Carp Road
City of Ottawa, Ontario

Drwn By: EP | Chkd By: TW | Development Concept

Date: December 2022

Rev. 0

Figure: A.4

Coordinate System: NAD 1983 UTM Zone 18N
Service Layer Credits: World Imagery: Maxar, Microsoft
Hybrid Reference Layer: Esri Community Maps Contributors, City of Ottawa, Province of Ontario, Esri Canada, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, NRCan, Parks Canada

APPENDIX B

Site Photographs

Site Photograph 1 – Cultural Meadow (CUM)

Site Photograph 2 – Cultural Meadow (CUM)

Site Photograph 3 – Cultural Meadow (CUM)

Site Photograph 4 - Cultural Meadow (CUM)

GEMTEC Consulting Engineers and Scientists	Project Environmental Impact Statement Proposed Commercial Development 2885 Carp Road Ottawa, Ontario	**APPENDIX B** File No. 101688.002	**Site Photographs**

Site Photograph 5 – Business Sector (CVC_1)

Site Photograph 6 – Business Sector (CVC_1)

Site Photograph 7 – Business Sector (CVC_1)

Site Photograph 8 – Business Sector (CVC_1)

APPENDIX C

Report Summary Tables

TABLE C.1
SUMMARY OF WILDLIFE OBSERVED ON-SITE AND ADJACENT TO SITE

Common Name	Scientific Name	S-Rank	Evidence
Avian Species			
American crow	*Corvus brachyrhynchos*	S5B	Heard calling
American goldfinch	*Spinus tristis*	S5B	Heard calling
Blue jay	*Cyanocitta cristata*	S5	Heard calling
Merlin	*Falco columbarius*	S5B	Observed foraging
Ring-billed gull	*Larus delawarensis*	S5B, S4N	Heard calling
White-breasted nuthatch	*Sitta carolinensis*	S5	Heard calling
Amphibian Species			
American toad	*Anaxyrus americanus*	S5	Heard calling
Northern leopard frog	*Lithobates pipiens*	S5	Observed on-site
Mammalian Species			
Red squirrel	*Tamiasciurus hudsonicus*	S5	Heard calling, observed foraging

Notes:

Subnational Conservation Status Ranks:

S1 - Critically Imperilled, at very high risk of extirpation, very few populations or occurrences or very steep population decline

S2 - Imperiled, at high risk of extirpation, few populations or occurrences or steep population decline

S3 - Vulnerable, at moderate risk of extirpation, relatively few populations or occurrences, recent and widespread population decline

S4 - Apparently Secure, at a family low risk of extirpation, many populations or occurrences, some concern for local population decline

S5 - Secure, at very low or no risk of extirpation, abundant populations or occurrences, little to no concern for population decline

Qualifiers:

S#B - Conservation status refers to the breeding population of the species

S#N -Conservation status refers to the non-breeding population of the species

S#M - Migrant species, conservation status refers to the aggregating transient population of the species

TABLE C.2
SCREENING RATIONALE FOR SIGNIFICANT WOODLANDS

Woodland Criteria	Further Considered in EIS	Rationale
Woodland Size	No	Contiguous woodlands are not present on-site or within the study area. Woodlands on-site are representative of a woodlot inclusion and are not deemed to be contiguous with significant woodland as mapped by the NHIC.
Ecological Functions		
a) Woodland Interior	No	Interior woodlands are not present on-site or within the study area.
b) Proximity	No	Woodlands on-site are not contiguous and do not provide linkages to other natural heritage features.
c) Linkages	No	Woodlands on-site are not contiguous and are not proximate to other natural heritage features.
d) Water Protection	No	Woodlands on-site are not contiguous and do not provide water protection to nearby natural hydrological processes.
e) Diversity	No	Woodlands on-site are not contiguous and no rare species communities were observed on-site.
Uncommon Characteristics	No	Woodlands on-site are not contiguous and do not exhibit uncommon characteristics.
Economical and Social Functional Values	No	Woodlands on-site are not contiguous and do not contain high productivity in terms of economically valuable products, high social value such as recreational use, identified historical cultural or educational values.

TABLE C.3
SCREENING RATIONALE FOR HABITATS OF SEASONAL CONCENTRATION AREAS

Wildlife Habitat	Further Considered in EIS	Rationale
Winter Deer Yard	No	No significant stands of mast producing trees, no large coniferous forest stands on-site to provide protection and cover from winter elements. As outlined in the Significant Wildlife Habitat Criteria Schedules (OMNRF, 2015) winter deer yards and deer management are an MNRF responsibility. Based on review of publically available data from the OMNRF on Land Information Ontario Geo-hub, no Stratum I deer yards, Stratum II deer yards, or winter congregation areas have been identified on-site or within the broader study area.
Colonial Bird Nesting Habitat	No	No suitable habitat located on-site or within the study area to support colonial bird nesting.
Waterfowl Stopover and Staging Areas	No	Suitable cultural meadow habitat located on-site or within the study area, however, it is not sufficient to meet the defining use criteria for waterfowl use (i.e. no fields with sheet water).
Shorebird Migratory Stopover Area	No	Shorebird stopover sites are typically well-known and have a long history of use. The site does not contain suitable shoreline habitat for shorebird foraging.
Raptor Wintering Area	No	The site does not contain a suitable mix of forest and upland habitat to meet the defining use criteria for raptor wintering.
Bat Hibernacula	No	Cave and crevice habitat is not present on-site or within the study area.
Bat Maternity Colonies	No	No suitable treed habitat on-site or in the study area to support bat maternity colonies.
Turtle Wintering Area	No	No suitable surface water features or aquatic habitat on-site or within the study area to support turtle wintering area.
Reptile Hibernaculum	No	No structures such as large rock piles, bedrock outcrops, cervices or other karstic features have been identified on-site.
Migratory Butterfly Stopover Area	No	The site is not located within 5 km of Lake Ontario and therefore does not meet the defining criteria.
Landbird Migratory Stopover Area	No	The site is not located within 5 km of Lake Ontario and therefore does not meet the defining criteria.

TABLE C.6
SCREENING RATIONALE FOR ANIMAL MOVEMENT CORRIDORS

General Habitats of Species of Conservation Concern	Further Considered in EIS	Rationale
Amphibian Movement Corridor	No	No *confirmed* wetland amphibian breeding habitat has been identified on-site.
Deer Movement Corridor	No	No winter deer yards have been identified on-site by the OMNRF.

TABLE C.4
SCREENING RATIONALE FOR SPECIALIZED WILDLIFE HABITATS

Specialized Wildlife Habitat	Further Considered in EIS	Rationale
Waterfowl Nesting Area	No	The site lacks suitable upland habitat adjacent to wetlands necessary to support waterfowl nesting.
Bald Eagle and Osprey Nesting, Foraging and Perching Habitat	No	The site lacks suitable forest community adjacent to a riparian area to support nesting, foraging and perching habitat for Bald Eagle and Osprey.
Woodland Nesting Raptor Habitat	No	No suitable forested habitat has been identified on-site.
Turtle Nesting Habitat	No	While suitable heavily disturbed mineral soils are present on-site, as outlined in the criteria schedules, exposed soils are required to be adjacent (<100 m) or within suitable marsh, shallow water, bog or fen habitats. Exposed soils on site are not within 100m of any suitable habitat outlined in the criteria schedule.
Seeps and Springs	No	No seeps or springs were indentified on-site.
Woodland Amphibian Breeding Habitat	No	No suitable wetland or pond habitat is present on-site to support woodland amphibian breeding habitat.
Wetland Amphibian Breeding Habitat	No	No wetland habitat or surface water on-site or within the study area to support wetland amphiban breeding.
Woodland Area-Sensitive Bird Breeding habitat	No	No woodlands of adequate size occur on-site to support woodland area-sensitive bird breeding habitat. Needs large mature forest > 30 ha, with interior habitat at least 200 m from forest edge

TABLE C.5
SCREENING RATIONALE FOR HABITAT FOR SPECIES OF CONSERVATION CONCERN

General Habitats of Species of Conservation Concern	Further Considered in EIS	Rationale
Marsh Breeding Bird Habitat	No	No suitable wetlands have been identified on-site or adjacent to site to support marsh breeding bird habitat.
Open Country Breeding Bird Habitat	No	No suitable meadow habitat on-site to support open country bird breeding due to recent (< 5 years) agricultural disturbances.
Shrub/Early Successional Breeding Bird Habitat	No	Candidate early successional breeding bird habitat typically includes fallow fields transitioning to early successional forest habitats that are > 10 ha but have not been actively used for farming. Habitat on-site does not meet the defining use criteria to support shrub/early successional breeding bird habitat.
Terrestrial Crayfish Habitat	No	Terrestrial crayfish are only found within southwestern Ontario (MNRF, 2012).
Special Concern and Rare Wildlife Species	No	No species of special concern or rare wildlife species were identified on-site or within the study area.

TABLE C.7
SCREENING RATIONALE FOR POTENTIAL SPEICES AT RISK ON-SITE OR WITHIN STUDY AREA

Species	ESA Status	Habitat Use	Probability of Occurrence On-Site or Within Study Area	Rationale
Avian				
Bald Eagle	Special Concern	Nest in mature forests near open water.	Low	No suitable forest habitat adjacent to suitable open water and foraging area to suppory Bald Eagle activity on-site.
Bank Swallow	Threatened	Colonial nester, burrows in eroding silt, to sand banks, sand pit walls, etc.	Low	No suitable silt or sand bank habitat on-site or within study area.
Barn Swallow	Threatened	Nests in barns and other semi-open structures. Forages over open fields and meadows.	Low	No suitable nesting habitat or structures located on-site or within study area.
Bobolink	Threatened	Nests in dense tall grass fields and meadows, low tolerance for woody vegetation.	Low	No suitable grassland or agricultural field habitat on-site or within study area.
Canada Warbler	Special Concern	Prefers wet forests with dense shrub layers	Low	No preferred wet forest habitat present on-site or within the study area.
Cerulean Warbler	Threatened	Prefers mature deciduous forest habitat.	Low	Preferred mature deciduous forest habitat is not present on-site or within study area.
Chimney Swift	Threatened	Nests in traditional-style open brick chimneys.	Low	No suitable nesting habitat or structures located on-site or within study area.
Common Nighthawk	Special Concern	Nests in a variety of open sites: beaches, fields and grave rooftops.	Low	Suitable open habitat may be present within the cultural meadow habitat on-site. No historical occurrence records within 1 km of site. Species was not encountered during the field investigation.
Eastern Meadowlark	Threatened	Nests and forages in dense tall grass fields and meadows, higher tolerance to woody vegetation.	Low	No suitable grassland or agricultural field habitat on-site or within study area.
Eastern Whip-poor-will	Threatened	Nests on the ground in open deciduous or mixed woodlands with little underbrush, and bedrock outcrops.	Low	No suitable woodland habitat occurs on-site or within study area.
Eastern Wood-Pewee	Special Concern	Woodland species, often found near clearings and edge habitat.	Low	No suitable woodland or wood-edge habitat occurs on-site or within study area.
Golden Eagle	Endangered	Nests on remote, bedrock cliffs, overlooking large burns, lakes or tundras	Low	Suitable nesting habitat is not present on-site or within the study area.
Golden-winged Warbler	Special Concern	Ground nesting, edge species. Breeds in successional scrub habitats surrounded by forests.	Low	No suitable scrub habitat present on-site or within the study area.
Evening Grosbeak	Special Concern	Nests in trees or large shrubs, preferrence to large coniferous forests, will use deciduous. Overwinters in Ottawa.	Low	No suitable woodland or large shrub habitat occurs on-site or within study area.
Henslow's Sparrow	Endangered	Prefers open, moist, tallgrass fields.	Low	Preferred graassland habitat is not present on-site or within the study area.
Loggerhead shrike	Endangered	Preferes grazed pastures with short grass and scattered shrubs, especially hawthorn.	Moderate	Suitable short grass and scattered scrub habitat may be present within the study area. NHIC identifies occurrence records within 1 km of site. Species was not encountered during the field investigation.
Olive-sided Flycatcher	Special Concern	Forest edge species, forages in open areas from high vantage points in trees.	Low	No suitable woodland or wood-edge habitat occurs on-site or within study area.
Peregrine Falcon	Special Concern	Nests on cliffs near water and on more anthropogenic structures such as tall buildings, bridges, and smokestacks.	Low	Site lacks suitable nesting structure for peregrine falcon.
Red Knot	Endangered	Nests in the far north, migrant along the shorelines and lagoons of the Ottawa River.	Low	Site lacks suitable shoreline or lagoon habitat.
Red-headed Woodpecker	Special Concern	Prefers open deciduous woodlands.	Low	No suitable woodland habitat occurs on-site or within study area.
Rusty Blackbird	Special Concern	Wet wooded or shrubby areas (nests at edges of Boreal wetlands)	Low	Suitable wet wooded or shrubby habitat does not occur on-site.
Short-eared Owl	Special Concern	Ground nester, prefers open habitats, fields and marshes.	Low	No suitable open field or open marsh habitat on-site.
Wood Thrush	Special Concern	Prefers deciduous or mixed woodlands.	Low	No suitable woodland habitat occurs on-site or within study area.
Mammalian				
Eastern small-footed Myotis	Endangered	Roosts in rock crevices, barns and sheds. Overwinters in abandoned mines. Summer habitats are poorly understood in Ontario, elsewhere prefers to roost in open, sunny rocky habitat and occasionally in buildings (Humphrey, 2017).	Moderate	Potentially suitable anthropogenic stuctures adjacent to site. Potential summer habitat present within study area.
Little Brown Myotis	Endangered	Maternal colonies known to use buildings, may also roost in trees during summer. Affinity towards anthropogenic structures for summer roosting habitat and exhibit high site fidelity (Environment Canada, 2015).	Moderate	Potentially suitable anthropogenic stuctures adjacent to site. Potential summer habitat present within study area.
Northern myotis (Northern Long-eared Bat)	Endangered	Occurs throughout eastern North America in associated with Boreal forests. Roosts mainly in trees, occasionally anthropogenic structures during summer (Environment Canada, 2015). Overwinters in caves and abandoned mines.	Low	Species affinity is for Boreal forests and species rarely rosots in anthropogenic structures.
Tri-colored Bat	Endangered	Roosts in trees, rock crevices and occasionally buildings during summer. Overwinters in caves and mines.	Moderate	Potentially suitable anthropogenic stuctures adjacent to site. Potential summer habitat present within study area.
Reptilian				
Blanding's Turtle	Threatened	Inhabits quiet lakes, streams and wetlands with abundant emergent vegetation. Frequently occurs in adjacent upland forests.	Low	No historic occurrence data for species on NHIC database for the site. No critical habitat has been identified on-site. The site does provide potentially suitable aquatic habitat for Blanding's turtle.
Snapping Turtle	Special Concern	Highly aquatic species, found in a wide variety of wetlands, water bodies and watercourses.	Low	No historic occurrence data for species on NHIC database for the site. No critical habitat has been identified on-site. The site does provide potentially suitable aquatic habitat for snapping turtle.
Plants				
American Ginseng	Endangered	Rich, moist, relatively mature deciduous forests.	Low	Suitable habitat does not occur on-site.
Butternut	Endangered	Inhabits a wide range of habitats including upland and lowland deciduous and mixed forests.	Low	Majority of the site is open and in a regenerative state. No occurrence records within 1 km of site. No butternuts were observed on-site during Tree Conservation Report.
Lichens				
Pale-bellied Frost Lichen	Endangered	Grows on the bark of hardwood trees such as white ash, black walnut, American elm and ironwood. Can also be found growing on fence posts and boulders.	Low	Species believed to be extirpated from the Ottawa area.
Insects				
Bogbean Buckmoth	Endangered	Preferred food plant is bog bean, present in a variety of wetlands including bogs, swamps and fens.	Low	Preferred wetland habitat is not present on-site. Only known populations are extant and located south of White Lake, Arnprior and within the Richmond Fen.
Gypsy Cuckoo Bumble Bee	Endangered	Inhabits a wide range of habitats: open meadows, agricultural and urban areas, boreal forests and woodlands.	Low	Currently the only known population is in Pinery Provincial Park
Monarch Butterfly	Special Concern	Caterpillars require milkweed plants confined to meadow and open areas. Adult butterflies use more diverse habitat with a variety of wildflowers	Moderate	Potentially suitable foraging habitat for monarch butterflies occurs on-site.
Mottled Duskywing	Endangered	Larval food plant (New Jersey Tea) found in sandy areas and alvars.	Low	Sandy areas and alvars not present in the study area.
Nine-spotted Lady Beetle	Endangered	Habitat generalist	Low	No recent occurrence reports in the area, thought to be locally extirpated.
Rusty-patched Bumble Bee	Endangered	Habitat generalist	Low	Currently the only known population occurs in Pinery Provincial Park.
Traverse Lady Beetle	Endangered	Habitat generalist	Low	No new records of traverse lady beetle in Ontario, species thought to be absent in former habitats.
West Virginia White Butterfly	Special Concern	Requires mature moist deciduous woods with larval host plant toothwort.	Low	Necessary vegetation and toothwort plant not present on-site or within study area.
Yellow-banded Bumble Bee	Special Concern	Habitat generalist; mixed woodlands, variety of open habitat	Moderate	Potentially suitable foraging habitat for yellow-banded bumble bee occurs on-site.

APPENDIX D

Tree Conservation Report

GEMTEC
www.gemtec.ca

Tree Conservation Report
Proposed Commercial Development
2885 Carp Road
Geographic Township of Huntley
Ottawa, Ontario

GEMTEC
www.gemtec.ca

Submitted to:

Bekim Holding Inc.
213 Huntsville Drive
Kanata, Ontario
K2T 0C6

Tree Conservation Report
Proposed Commercial Development
2885 Carp Road
Geographic Township of Huntley
Ottawa, Ontario

January 12, 2023
Project: 101688.002 - V02

experience • knowledge • integrity

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1.0 INTRODUCTION

GEMTEC Consulting Engineers and Scientists Limited (GEMTEC) was retained by Bekim Holding Inc. to carry out a Tree Conservation Report (TCR) for the property located at 2885 Carp Road, Geographic Township of Huntley, in Ottawa, Ontario, hereafter referred to as the "subject property". The site location is provided in Figure A.1 in Appendix A.

1.1 Purpose

The proponent is seeking to develop a commercial facility on an approximately 1.23 ha existing property. In accordance with the City of Ottawa's Urban Tree Conservation By-Law (No. 2009-200), a Tree Conservation Report (TCR) is required to identify trees to be retained and protected under future development scenarios and, where feasible, identify opportunities to offset the loss of trees that cannot be retained or contribute to the City's forest cover targets.

The proposed development concept includes the creation of a 0.75 ha commercial building. The existing site layout and proposed development plan is provided in Figure A.2 in Appendix A.

1.2 Definitions

Terms and abbreviations used throughout the remainder of this report are summarized below.

Diameter at Breast Height (DBH), is defined as the diameter of the tree trunk measured at a height of 1.2 metres above ground surface for trees of 10 centimeters in diameter and greater.

Critical Root Zone (CRZ), is defined as the ground area within a circumference around the tree trunk calculated as 10 centimeters from the trunk of the tree for every one centimeter of tree truck diameter at breast height.

Distinctive Tree, a distinctive tree within the City of Ottawa is defined as any tree with a DBH of 30 cm or greater within the inner urban area and with a DBH of 50 cm or greater within the suburban area and rural area. For the purposes of this report, a distinctive tree is considered to be a tree with a DBH of 50 cm or greater, as the subject property is located within the suburban boundary.

2.0 METHODOLOGY

2.1 Desktop Review

To complete the TCR, digital colour air photos of the site available from GeoOttawa were reviewed from 1976 to 2021 to identify natural features, including historical trees, present on-site and in the vicinity of the site.

2.2 Field Investigations

In addition to the completion of a desktop review of historical air photos, a site visit was conducted on August 11, 2022, from 9:10 to 9:55, to document and identify all trees on-site with a DBH greater than 10 cm. The site investigation utilized transects bisecting the property to document the health of each tree greater than 10 cm in DBH, the trees location and the tree species.

Site conditions during the site investigation were as follows: 19°C, 0% cloud cover, Beaufort wind 3 and no precipitation.

Site photographs taken during the field investigations are provided in Appendix B.

3.0 RESULTS

3.1 Existing Conditions

The subject site is currently occucpied by a single story commercial building and a storage structure in the eastern portion of site. The subject site consists of cultural meadow habitat and a business sector. Other existing features on the property include road access to Carp Road. The structures and paved surfaces identified on the subject site contribute to an approximate area of 2.6 ha identified as an impermeable surface.

The proposed development is to take place within the vacant soutwestern portion of the subject site. Numerous trees are present on the property, a summary of all trees on-site is provided in Section 3.2 below.

The land use in the vicinity of the site is characterized by commercial, light industrial, mineral extraction, residential and agricultural land uses. The City of Ottawa zoning by-law is rural commercial zone (RC9). There are no other natural environmental features in the vicinity of the project, as summarized in Table 3.1 below.

Table 1.1 Summary of Natural Features Present On-site or Adjacent to Site

Natural Feature	Present On-site or Adjacent
Surface water or wetlands present	Yes
Steep slopes, valleys or escarpments	None
Urban Natural Features or Natural Environment Areas	None
Significant Woodlands	None
Greenspace Linkages	None
High Quality Specimen Trees	None
Rare plant communities or unique environmental features	None
Presence of Species at Risk	Yes
Significant Wildlife Habitat	None

Based on a review of historical air photos, the subject site appears to have been used as a tree plantation since at least 1976 until 2021. The surrounding area has been developed industrially as a quarry since at least 1991 and later residentially since at least 2011. The following alterations were noted during review:

- 1976: The subject site was in a regenerative state from past agricultural uses. The northeastern portion of the subject property appears to be abandoned tilled field. Surrounding areas included predominantly agricultural, some rural-residential and

industrial. The industrial development appears to be a quarry operation adjacent northwest of the subject site.

- 2002: On-site regeneration had led to treed vegetative cover. Tree coverage appears to be a plantation and not natural recovery. Based on the survey data, this was likely to have been a coarse mineral coniferous plantation of red pine. Industrial development and lake northwest of site increased in size, appears to longer be in operation due to vegetative recovery around the lake.
- 2008: Subject site unchanged since 2002 photograph. The northwestern land and former quarry operation has been residentially developed. Further residential development south of the subject site.
- 2021: Subject site has been clear cut on the southwestern portion of the site. Tree coverage lost on the adjacent southern property. The surrounding area has been heavily residentially developed. Some agricultural land remains east of the subject site.

3.2 Tree Inventory Summary

A tree inventory was conducted on Aug 11, 2022. Trees on-site were identified, enumerated and assessed for visual signs of distress and disease. Table C.1 in Appendix C provides a summary of all tree specimens on-site whose DBH was greater than 10 cm. CRZ values for trees with DBH greater than 10 cm are also present in Table C.1 in Appendix C. Critical Root Zones were not calculated for dead trees. The square root of the sum of squares method was used to calculate the DBH of trees with multiple stems All trees with a DBH greater than 10 cm and their CRZ are illustrated on Figure A.3, in Appendix A. In general, the tree community assemblage can be described as containing a few semi-mature and immature opportunistic trees.

Per the City of Ottawa By-law No. 2009-200, one tree on the subject site, tree #1 – an American basswood with a DBH of 70 cm, was identified as a distinctive tree (DBH > 50 cm).

None of the trees identified on-site are listed under the provincial Endangered Species Act.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Based on a review of the information summarized in Section 3.2, Table C.1 in Appendix C and the proposed development concept illustrated on Figure A.2, the following conclusions are provided:

- Out of 32 trees identified on-site with a DBH greater or equal to 10 cm, five trees were identified as retainable and 27 trees as non-retainable;
- Out of the 27 non-retainable trees, one tree is dead, dying or in poor condition;
- One tree on the subject site met the City of Ottawa By-Law No. 2009-200 requirements, were identified on-site;
- No wildlife trees were identified within the development area;
- Trees on-site are mostly red pine with some opportunistic or early successional species;
- 30 trees are in good/healthy condition and 2 trees are dead, dying or poor condition; and
- None of the 32 trees present on-site are protected under the Endangered Species Act, Ontario 2007, represent exceptional native tree specimens, or provide any significant conservation value.

4.1 Tree Conservation Recommendations

Opportunities exist along the perimeter of the proposed development, along the northeast property boundary to conserve healthy trees that are retainable under the proposed development. Furthermore, in effort to offset the effect of vegetation clearing and clearing of trees that are on retainable under the proposed development, consideration should be given to landscape planting with native tree species indicative of the Great Lakes – St. Lawrence Forest Region, such as white cedar, white spruce, red maple and red oak.

4.2 Recommended Mitigation Measures

The following mitigation measures and best practice recommendations are provided by GEMTEC in order to minimize and eliminate negative impacts to trees identified in Appendix C as retainable. Construction contractors shall apply the following measures outlined below to prevent damage to trees identified to be retained in the redevelopment plan for the site;

- All trees identified to be retained should be clearly marked with signage attached that identifies the purpose of the fence and not to move it until construction is complete.
- Tree protection should follow the tree protection specification provided by the City of Ottawa (2019). The Specification is provided in Appendix D.
- If trees to be removed overlap with the CRZ of trees to be retained, cut roots at the edge of the retained CRZ and grind down stumps after tree removal, do not pull out stumps. If roots must be cut, roots 20 cm or larger should be cut at right angles with clean, sharp, horticultural tools, without tearing, crushing, or pulling;
- Do not place any material or equipment within the CRZ of any tree identified to be retained;

- Do not attach any signs, notices or posters to any tree identified to be retained;
- Do not damage the root system, trunk, or branches or any tree identified to be retained;
- Ensure that exhaust fumes from all equipment are directed away from tree canopy;
- To protect Significant Wildlife Habitat and Habitats of Species at Risk identified on-site, vegetation removal should occur outside of April 1 to September 30 to avoid the key breeding bird period and bat summer active season. The timing window provides protection of migratory birds, roosting bats and avoids contravention of the Migratory Bird Convention Act and Endangered Species Act. If vegetation clearing activities must take place during the aforementioned timing window than a nest and roost survey shall be conducted by a qualified professional

5.0 CLOSURE

This letter and the work referred to within it have been undertaken by GEMTEC Consulting Engineers and Scientists Ltd. (GEMTEC), and was prepared for Bekim Holding Inc. and is intended for the exclusive use of Bekim Holding Inc. This report may not be relied upon by any other person or entity without the express written consent of GEMTEC and Bekim Holding Inc. Nothing in this report is intended to provide a legal opinion.

The investigation undertaken by GEMTEC with respect to this report and any conclusions or recommendations made in this report reflect the best judgements of GEMTEC based on the site conditions observed during the investigations undertaken at the date(s) identified in the report and on the information available at the time the report was prepared.

This letter has been prepared for the application notes and it is based in part, on visual observations made at the site, all as described in the report. Unless otherwise states, the findings contained in this report cannot be extrapolates or extended to previous or future site conditions or for portions of the site that were unavailable for direct investigation.

Should new information become available during future work, or other studies, GEMTEC should be requested to review the information and, if necessary, re-assess the conclusions present herein.

We trust this report provides sufficient information for your present purposes. If you have any questions concerning this report, please do not hesitate to contact our office.

Sincerely,

Luca Fiorindi, B.A., Dip.
Junior Biologist

Drew Paulusse, B.Sc.
Senior Biologist

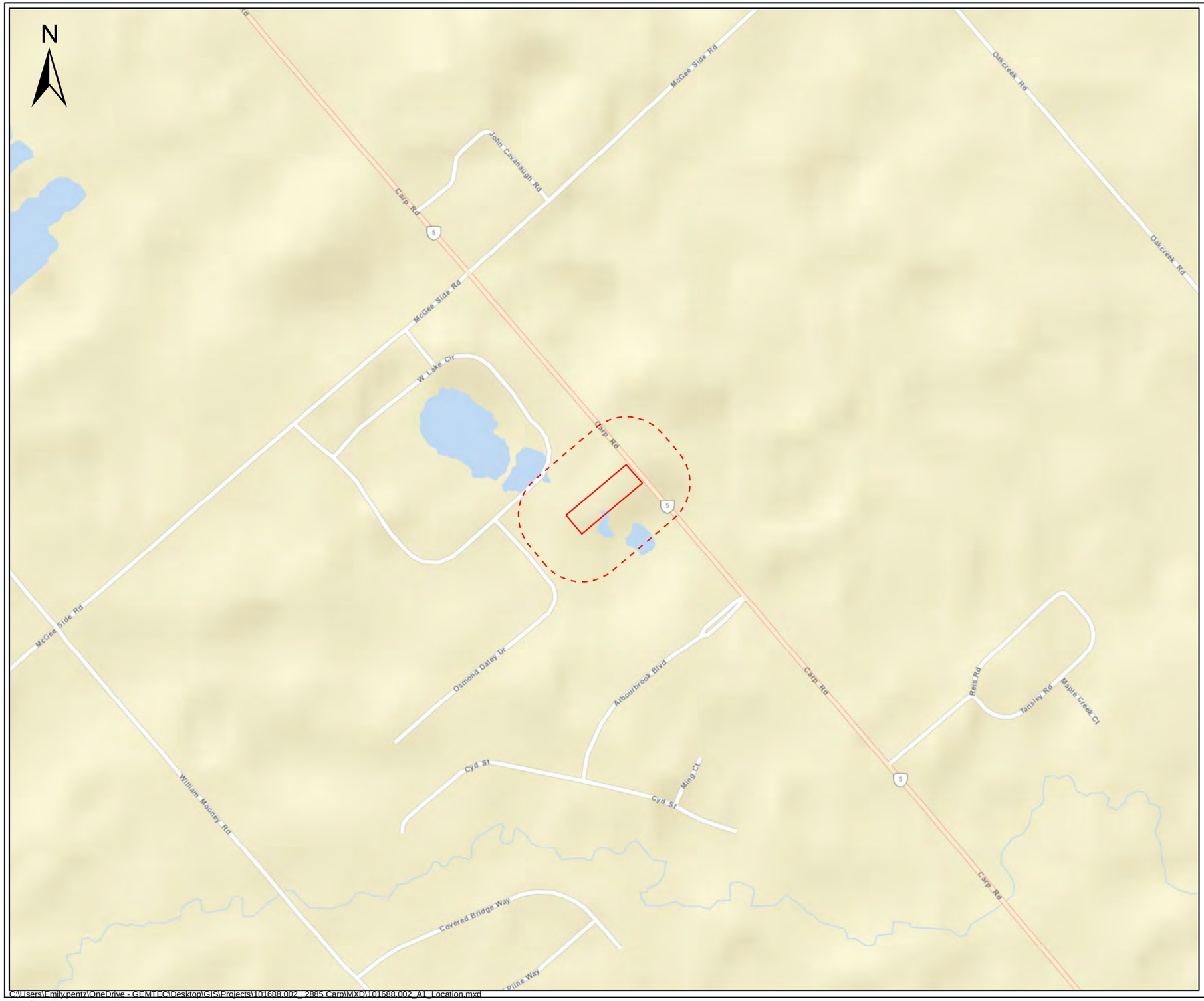
6.0 REFERENCES

Ottawa, City of (Ottawa). 2003. City of Ottawa Official Plan. May

Ottawa, City of (Ottawa), By-law No. 2009-200, *Tree Conservation – Urban* (Updated June 2018).

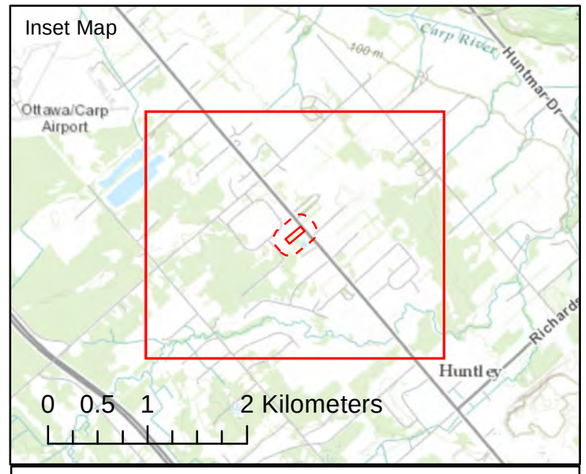
APPENDIX A

Report Figures



Legend

- Property Boundary
- Study Area



Scale
1:10,000
0 70 140 280 420 560 Meters

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Client: Bell & Associates Architecture

Project: 101688.002

Location: 2885 Carp Road
City of Ottawa, Ontario

Drwn By:	Chkd By:	
EP	TW	Site Location

Date: August 2022

Rev. 0

Figure A.1

C:\Users\Emily.pentz\OneDrive - GEMTEC\Desktop\GIS\Projects\101688.002_ 2885 Carp\MXD\101688.002_A1_Location.mxd
Coordinate System: NAD 1983 UTM Zone 18N
Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Legend

- Property Boundary
- Study Area
- Waterbody
- Local Wetland

Scale
1:1,850
0 12.5 25 50 75 100 Meters

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Client: Bell & Associates Architecture

Project: 101688.002

Location: 2885 Carp Road
City of Ottawa, Ontario

Drwn By: EP | Chkd By: TW | Site Layout

Date: August 2022

Rev. 0

Figure A.2

Coordinate System: NAD 1983 UTM Zone 18N
Service Layer Credits: MVC DRAPE 2019 Imagery: Rideau Valley Conservation Authority (RVCA)
World Street Map: Esri, HERE, Garmin, GeoTechnologies, Inc., NGA, USGS, NRCan

Legend

- Property Boundary
- Study Area
- Waterbody
- Development Concept

Tree Number (Critical Root Zone [cm])

- Dead (30)
- Non-Retainable
- Retainable

Scale 1:750

0 5 10 20 30 40 Meters

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Client:	Project:
Bell & Associates Architecture	101688.002

Location
2885 Carp Road
City of Ottawa, Ontario

Drwn By:	Chkd By:	
EP	TW	Tree Inventory

Date: November 2022	Rev.	
	0	Figure A.3

Coordinate System: NAD 1983 UTM Zone 18N
Service Layer Credits: MVC DRAPE 2019 Imagery: Rideau Valley Conservation Authority (RVCA)
World Street Map: Esri, HERE, Garmin, GeoTechnologies, Inc., NGA, USGS, NRCan

APPENDIX B

Site Photographs

Site Photograph 1 – Cultural Meadow (CUM)

Site Photograph 2 – Cultural Meadow (CUM)

Site Photograph 3 – Cultural Meadow (CUM)

Site Photograph 4 - Cultural Meadow (CUM)

GEMTEC Consulting Engineers and Scientists	Project Environmental Impact Statement Proposed Commercial Development 2885 Carp Road Ottawa, Ontario	**APPENDIX B** File No. 101688.002	**Site Photographs**

Site Photograph 5 – Business Sector (CVC_1)

Site Photograph 6 – Business Sector (CVC_1)

Site Photograph 7 – Business Sector (CVC_1)

Site Photograph 8 – Business Sector (CVC_1)

APPENDIX C

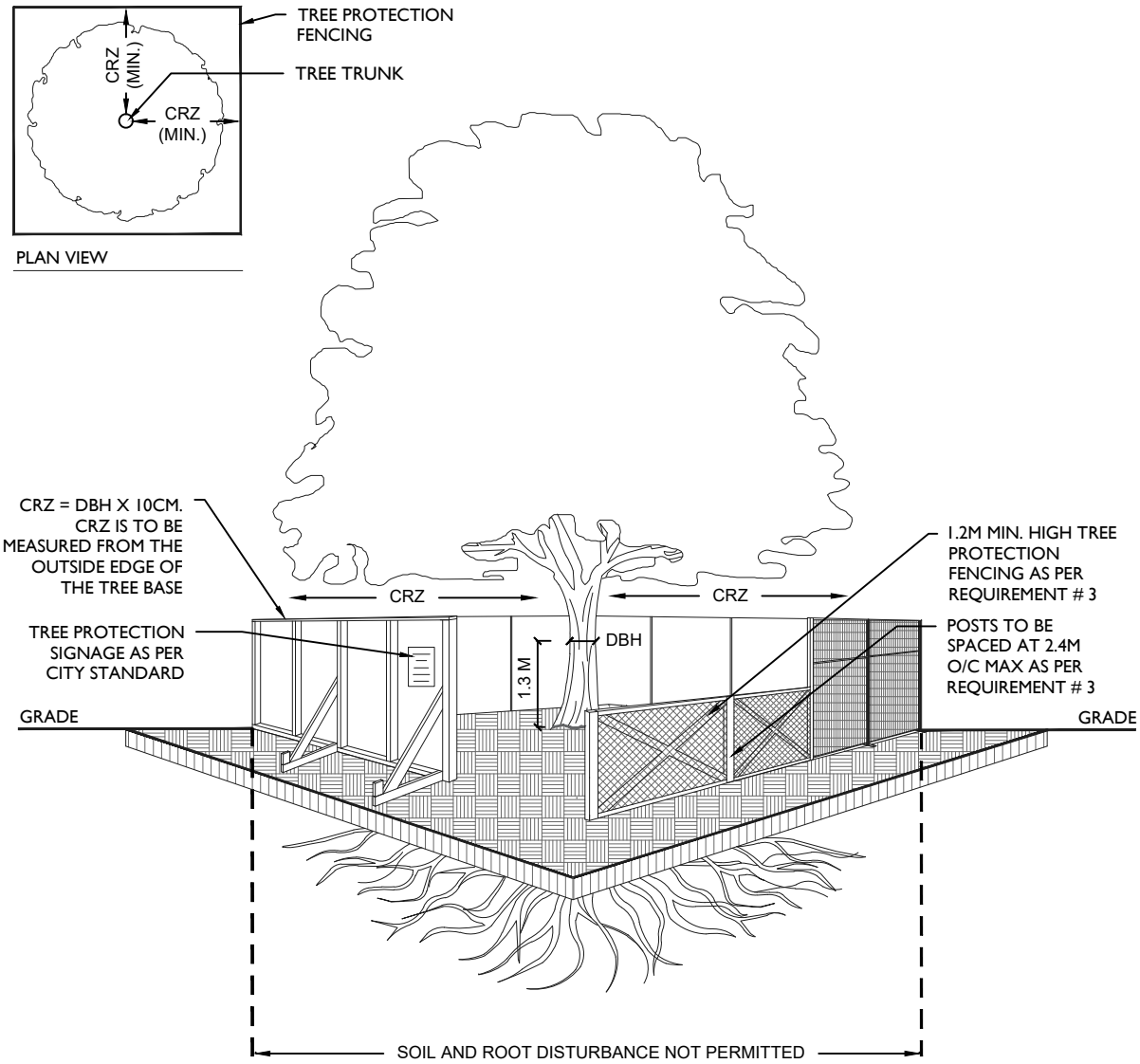
Tree Inventory Summary Table

Table C.1
Summary of Tree Inventory Results

Tree Number	Common Name	Scientific Name	Diameter (cm DBH)	Critical Root Zone (cm)	Condition	Retainable or Conflict	Dinstinctive Tree (> 50 cm)	Wildlife Tree	Notes
1	American Basswood	*Tilia americana*	70	700	Healthy	Non-Retainable	Yes	No	
2	Red Pine	*Pinus resinosa*	27.4	274	Healthy	Retainable	No	No	
3	Red Pine	*Pinus resinosa*	28.7	287	Healthy	Retainable	No	No	
4	Red Pine	*Pinus resinosa*	29.1	291	Healthy	Retainable	No	No	
5	Red Pine	*Pinus resinosa*	31.6	316	Healthy	Retainable	No	No	
6	Red Pine	*Pinus resinosa*	30	300	Healthy	Non-Retainable	No	No	
7	Red Pine	*Pinus resinosa*	28.8	288	Healthy	Non-Retainable	No	No	
8	Red Pine	*Pinus resinosa*	29.8	298	Healthy	Non-Retainable	No	No	
9	Red Pine	*Pinus resinosa*	17.1	171	Healthy	Non-Retainable	No	No	
10	Red Pine	*Pinus resinosa*	25	250	Healthy	Non-Retainable	No	No	
11	Red Pine	*Pinus resinosa*	31.1	311	Healthy	Non-Retainable	No	No	
12	Red Pine	*Pinus resinosa*	24.4	244	Healthy	Non-Retainable	No	No	
13	Red Pine	*Pinus resinosa*	26.2	262	Healthy	Non-Retainable	No	No	
14	Red Pine	*Pinus resinosa*	26.6	266	Healthy	Non-Retainable	No	No	
15	Red Pine	*Pinus resinosa*	20.1	201	Healthy	Non-Retainable	No	No	
16	Red Pine	*Pinus resinosa*	31.3	313	Healthy	Non-Retainable	No	No	
17	Red Pine	*Pinus resinosa*	19.5	195	Healthy	Non-Retainable	No	No	
18	Red Pine	*Pinus resinosa*	18	180	Healthy	Non-Retainable	No	No	
19	Red Pine	*Pinus resinosa*	28.4	284	Healthy	Non-Retainable	No	No	
20	Red Pine	*Pinus resinosa*	33.7	337	Healthy	Non-Retainable	No	No	
21	Manitoba Maple	*Acer negundo*	21	210	Healthy	Non-Retainable	No	No	DBHs; stem one - 14 cm, stem two - 15.6 cm
22	Manitoba Maple	*Acer negundo*	15.9	159	Healthy	Non-Retainable	No	No	
23	Manitoba Maple	*Acer negundo*	22.9	229	Healthy	Non-Retainable	No	No	
24	Manitoba Maple	*Acer negundo*	22.3	223	Healthy	Non-Retainable	No	No	
25	Manitoba Maple	*Acer negundo*	20.2	202	Healthy	Non-Retainable	No	No	
26	Manitoba Maple	*Acer negundo*	20	200	Healthy	Non-Retainable	No	No	DBHs; stem one - 14 cm, stem two - 13.6 cm
27	Manitoba Maple	*Acer negundo*	28.1	281	Healthy	Non-Retainable	No	No	
28	American Elm	*Ulmus americana*	28.1	281	Healthy	Non-Retainable	No	No	
29	American Basswood	*Tilia americana*	18	180	Healthy	Non-Retainable	No	No	DBHs; stem one - 13.5 cm, stem two - 11.6 cm
30	Elm sp.	*Ulmus spp.*	14.9	149	Dead	Non-Retainable	No	No	
31	Bur Oak	*Quercus macrocarpa*	21.5	215	Healthy	Non-Retainable	No	No	
32	Ash sp.	*Fraxinus spp.*	10.9	109	Poor	Retainable	No	No	

APPENDIX D

City of Ottawa Tree Protection Specification



TREE PROTECTION REQUIREMENTS:

1. PRIOR TO ANY WORK ACTIVITY WITHIN THE CRITICAL ROOT ZONE (CRZ = 10 X DIAMETER) OF A TREE, TREE PROTECTION FENCING MUST BE INSTALLED SURROUNDING THE CRITICAL ROOT ZONE, AND REMAIN IN PLACE UNTIL THE WORK IS COMPLETE.
2. UNLESS PLANS ARE APPROVED BY CITY FORESTRY STAFF, FOR WORK WITHIN THE CRZ:
   - DO NOT PLACE ANY MATERIAL OR EQUIPMENT - INCLUDING OUTHOUSES;
   - DO NOT ATTACH ANY SIGNS, NOTICES OR POSTERS TO ANY TREE;
   - DO NOT RAISE OR LOWER THE EXISTING GRADE;
   - TUNNEL OR BORE WHEN DIGGING;
   - DO NOT DAMAGE THE ROOT SYSTEM, TRUNK, OR BRANCHES OR ANY TREE;
   - ENSURE THAT EXHAUST FUMES FROM ALL EQUIPMENT ARE NOT DIRECTED TOWARD ANY TREE CANOPY.
   - DO NOT EXTEND HARD SURFACE OR SIGNIFICANTLY CHANGE LANDSCAPING
3. TREE PROTECTION FENCING MUST BE AT LEAST 1.2M IN HEIGHT, AND CONSTRUCTED OF RIGID OR FRAMED MATERIALS (E.G. MODULOC - STEEL, PLYWOOD HOARDING, OR SNOW FENCE ON A 2"X4" WOOD FRAME) WITH POSTS 2.4M APART, SUCH THAT THE FENCE LOCATION CANNOT BE ALTERED. ALL SUPPORTS AND BRACING MUST BE PLACED OUTSIDE OF THE CRZ, AND INSTALLATION MUST MINIMISE DAMAGE TO EXISTING ROOTS. (SEE DETAIL)
4. THE LOCATION OF THE TREE PROTECTION FENCING MUST BE DETERMINED BY AN ARBORIST AND DETAILED ON ANY ASSOCIATED PLANS FOR THE SITE (E.G. TREE CONSERVATION REPORT, TREE INFORMATION REPORT, ETC). THE PLAN AND CONSTRUCTED FENCING MUST BE APPROVED BY CITY FORESTRY STAFF PRIOR TO THE COMMENCEMENT OF WORK.
5. IF THE FENCED TREE PROTECTION AREA MUST BE REDUCED TO FACILITATE CONSTRUCTION, MITIGATION MEASURES MUST BE PRESCRIBED BY AN ARBORIST AND APPROVED BY CITY FORESTRY STAFF. THESE MAY INCLUDE THE PLACEMENT OF PLYWOOD, WOOD CHIPS, OR STEEL PLATING OVER THE ROOTS FOR PROTECTION OR THE PROPER PRUNING AND CARE OF ROOTS WHERE ENCOUNTERED.

THE CITY'S TREE PROTECTION BY-LAW, 2020-340 PROTECTS BOTH CITY-OWNED TREES, CITY-WIDE, AND PRIVATELY-OWNED TREES WITHIN THE URBAN AREA. PLEASE REFER TO WWW.OTTAWA.CA/TREEBYLAW FOR MORE INFORMATION ON HOW THE TREE BY-LAW APPLIES.

ACCESSIBLE FORMATS AND COMMUNICATION SUPPORTS ARE AVAILABLE, UPON REQUEST

Ottawa

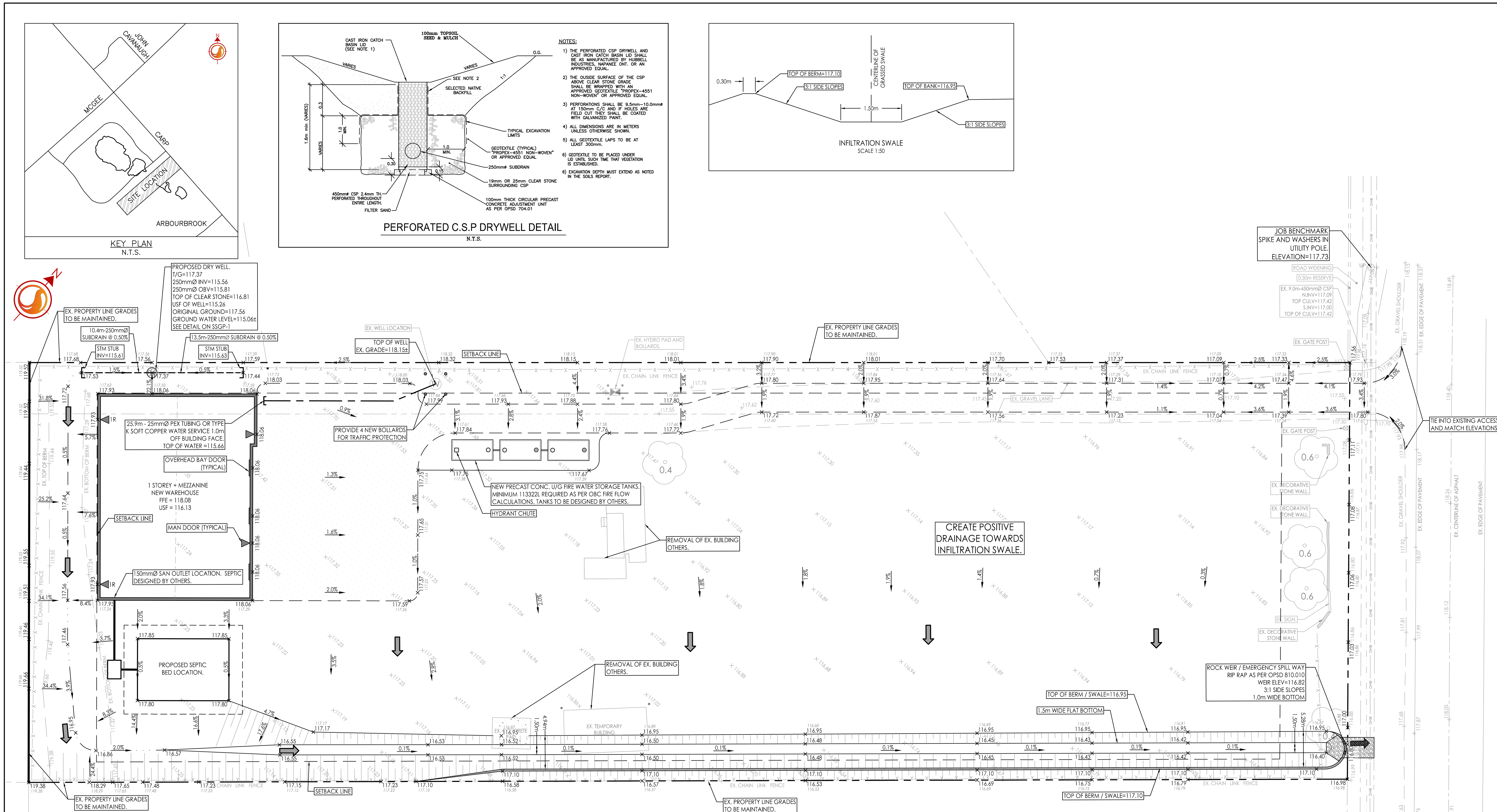
TREE PROTECTION SPECIFICATION

TO BE IMPLEMENTED FOR RETAINED TREES, BOTH ON SITE AND ON ADJACENT SITES, PRIOR TO ANY TREE REMOVAL OR SITE WORKS AND MAINTAINED FOR THE DURATION OF WORK ACTIVITIES ON SITE.

SCALE:	NTS
DATE:	MARCH 2021
DRAWING NO.:	1 of 1

APPENDIX E

CSW Landscape Architects Ltd. Landscape Plan



GENERAL NOTES

1. ALL WORK SHALL BE CARRIED OUT IN COMPLIANCE WITH THE ONTARIO OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS.
2. ALL WORK AND MATERIALS TO CONFORM WITH CURRENT MINISTRY OF THE ENVIRONMENT & ENERGY OF ONTARIO, CITY OF OTTAWA AND ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS. LOCAL UTILITY STANDARDS AND MINISTRY OF TRANSPORTATION STANDARDS WILL APPLY WHERE REQUIRED.
3. THE CONTRACTOR IS ADVISED THAT WORKS BY OTHERS MAY BE ONGOING DURING THE PERIOD OF THIS CONTRACT. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES AND COORDINATION WITH ALL OTHER CONTRACTORS AND PREVENT CONSTRUCTION CONFLICTS.
4. THE INFORMATION SHOWN FOR EXISTING UTILITIES WAS PROVIDED BY OTHERS. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UTILITIES DURING CONSTRUCTION. ALL EXISTING UTILITIES MUST BE LOCATED AND VERIFIED BY EACH UTILITY PRIOR TO COMMENCEMENT OF WORK. ANY VARIANCE IS TO BE IMMEDIATELY REPORTED TO THE ENGINEER. LOST TIME DUE TO FAILURE OF THE CONTRACTOR TO CONFIRM UTILITY LOCATIONS AND NOTIFY THE ENGINEER OF POSSIBLE CONFLICTS PRIOR TO CONSTRUCTION WILL BE AT THE CONTRACTORS EXPENSE.
5. ALL CONSTRUCTION SHALL BE CARRIED OUT IN ACCORDANCE WITH THE RECOMMENDATIONS MADE BY THE GEOTECHNICAL CONSULTANT, OBC, MUNICIPAL AND PROVINCIAL STANDARDS.
6. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED AND TO BEAR THE COST OF SAME INCLUDING WATER PERMIT AND ASSOCIATED COSTS.
7. ALL DISTURBED AREAS SHALL BE REINSTATED TO EQUAL OR BETTER CONDITION TO THE SATISFACTION THE ENGINEER AND THE TOWNSHIP. PAVEMENT REINSTATEMENT FOR SERVICE AND UTILITY CUTS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD R10, OPSD 509.010 AND OPSS 310.
8. BENCHMARKS: IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THAT THE SITE BENCHMARK(S) HAS NOT BEEN ALTERED OR DISTURBED AND THAT ITS RELATIVE ELEVATION AND DESCRIPTION AGREES WITH THE INFORMATION SHOWN ON DRAWING SSGP-1.
9. THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER 1 (ONE) SET OF AS CONSTRUCTED SITE SERVICING, GRADING, AND SITE ELECTRICAL DWGS.
10. CONTRACTOR TO LOCATE EXISTING SERVICE LATERALS PRIOR TO CONSTRUCTION. EXISTING STORM AND SANITARY SERVICE LATERALS TO BE ABANDONED PER S11.4. EXISTING WATER SERVICE TO BE BLANKED AT THE MAIN (TYP.)
11. TOPOGRAPHIC SURVEY SUPPLIED BY FAIRHALL MOFFATT AND WOODLAND LTD. JOB No. Z17300. TOPOGRAPHIC SURVEY OF PART OF LOT 9, CONCESSION 3 GEOGRAPHIC TOWNSHIP OF HUNTLEY, CITY OF OTTAWA.
12. SITE PLAN PREPARED BY JIM BELL ARCHITECTURAL DESIGN INC. DATED OCTOBER 14, 2021 DRAWING A.0.
13. GEOTECHNICAL REPORT PREPARED BY GEMTEC, TITLED PROPOSED COMMERCIAL DEVELOPMENT, 2885 CARP ROAD, OTTAWA, ONTARIO.

WATER SUPPLY SERVICING

1. THE CONTRACTOR SHALL CONSTRUCT WATERMAIN, WATER SERVICES, CONNECTIONS & APPURTENANCES AS PER CITY OF OTTAWA SPECIFICATIONS & SHALL CO-ORDINATE AND PAY ALL RELATED COSTS INCLUDING THE COST OF CONNECTION, INSPECTION & DISINFECTION.
2. WATER SERVICE TO BE INSTALLED 1.0m OFF BUILDING FACE.
3. DRILLED POTABLE WATER WELL IS TO BE DESIGNED AND INSTALLED BY LICENSED WELL CONTRACTOR THAT USES LICENSED TECHNICIANS. INSTALLATION OF ON-SITE WELL SHALL BE AS PER ONTARIO BUILDING CODE AND ONTARIO REGULATION 903 UNDER THE WATER RESOURCES ACT.
4. WATERMAIN TRENCH AND BEDDING SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. W17 UNLESS OTHERWISE SPECIFIED. BEDDING AND COVER MATERIAL TO BE SPECIFIED BY PROJECT GEOTECHNICAL CONSULTANT.
5. CATHODIC PROTECTION TO BE SUPPLIED ON METALIC FITTINGS AS PER CITY OF OTTAWA STD. W40 AND W42.
6. ALL WATERMAIN BENDS, JOINTS, TEES AND PLUGS SHALL BE MECHANICALLY RESTRAINED IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS.
7. ALL WATERMAINS SHALL HAVE MIN. COVER OF 2.4m. WATERMAINS ARE TO BE INSTALLED TO THE ELEVATIONS SHOWN ON THE APPROVED SITE SERVICING DRAWING. WHERE SPECIFIC WATERMAIN ELEVATIONS ARE NOT SHOWN ON SERVICING DRAWING, A MINIMUM COVER OF 2.4m FROM PROPOSED GRADES, AS SHOWN ON THE GRADING PLAN, MUST BE MAINTAINED AT ALL TIMES. IN PREGRADE AREAS COVER TO BE FROM PREGRADED ELEVATIONS. WHERE WATERMAIN COVER IS LESS THAN 2.4m, INSULATION TO BE SUPPLIED IN ACCORDANCE WITH CITY OF OTTAWA STD. W22.

SITE GRADING

1. ALL GRANULAR BASE & SUB BASE COURSE MATERIALS SHALL BE COMPACTED AS PER GEOTECHNICAL CONSULTANT RECOMMENDATIONS.
2. ALL DISTURBED GRASSED AREAS SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER, WITH SOD ON MIN.
3. REFER TO ARCHITECTURAL SITE PLAN FOR DIMENSIONS AND SITE DETAILS.
4. CONTRACTOR TO OBTAIN A ROAD OCCUPANCY PERMIT 48 HOURS PRIOR TO COMMENCING ANY WORK WITHIN THE MUNICIPAL ROAD ALLOWANCE IF REQUIRED BY THE MUNICIPALITY.
5. EMBANKMENTS TO BE SLOPED AT MAX. 3:1, UNLESS OTHERWISE SPECIFIED.
6. ALL NECESSARY CLEARING AND GRUBBING SHALL BE COMPLETED BY THE CONTRACTOR. REVIEW WITH ARCHITECT AND THE TOENSHIP PRIOR TO TREE CUTTING.
7. SUB-EXCAVATE SOFT AREAS & FILL WITH GRANULAR 'B' COMPACTED IN 0.15m LAYERS.
8. NO ALTERATION TO EXISTING GRADES OR DRAINAGE PATTERN ON PROPERTY LINE MAY BE MADE WHERE NO PERMISSION TO ENTER ADJACENT PROPERTY EXISTS.
9. NO EXCESS DRAINAGE, DURING AND AFTER CONSTRUCTION, IS TO BE DIRECTED TOWARDS NEIGHBOURING PROPERTIES.
10. UNDERSIDE-OF-FOOTING TO HAVE MINIMUM COVER OF 1.5m. WHERE SUFFICIENT COVER IS NOT PROVIDED, FOOTINGS ARE TO BE INSULATED TO PROVIDED EQUIVALENT INSULATION.
11. PAVEMENT CONSTRUCTION SHALL BE AS PER GEOTECHNICAL CONSULTANT RECOMMENDATIONS.

ORIGINAL SHEET - ARCH D

Stantec Consulting Ltd.
400 - 1331 Clyde Avenue
Ottawa ON
Tel. 613.722.4420
www.stantec.com

Legend

- PROPERTY LINE
- EXISTING GROUND ELEVATION
- EXISTING ROAD SIDE DITCH
- EXISTING OVERHEAD WIRES
- EXISTING UTILITY POLE
- EXISTING CHAIN LINK FENCE
- EXISTING CONCRETE GATE POST
- EXISTING ROAD CENTERLINE
- EXISTING TREE
- EXISTING WELL LOCATION
- EXISTING TRANSFORMER AND BOLLARDS
- EXISTING CULVERT
- PROPOSED WATER SERVICE
- PROPOSED ELEVATION
- PROPOSED LOT CORNER ELEVATION / EXISTING ELEVATION AT LOT CORNER
- FLOW DIRECTION AND GRADE
- FINISHED FIRST FLOOR ELEVATION
- UNDERSIDE OF FOOTING ELEVATION
- ENGINEERED FILL REQUIRED
- TERRACING 3:1 SLOPE MAXIMUM (UNLESS OTHERWISE SHOWN)
- DIRECTION OF OVERLAND FLOW
- PROPOSED GRAVEL ACCESS

		By	Appd.	YY.MM.DD
0	ISSUED FOR SPA	MJS	NC	22.12.02

Revision

File Name: 160401724 DB	MJS	NC	MJS	22.11.09
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

Permit-Seal

Client/Project

HQ MANAGEMENT GROUP

2885 CARP ROAD
NEW WAREHOUSE BUILDING
OTTAWA, ON, CANADA

Title

SITE SERVCING AND GRADING PLAN

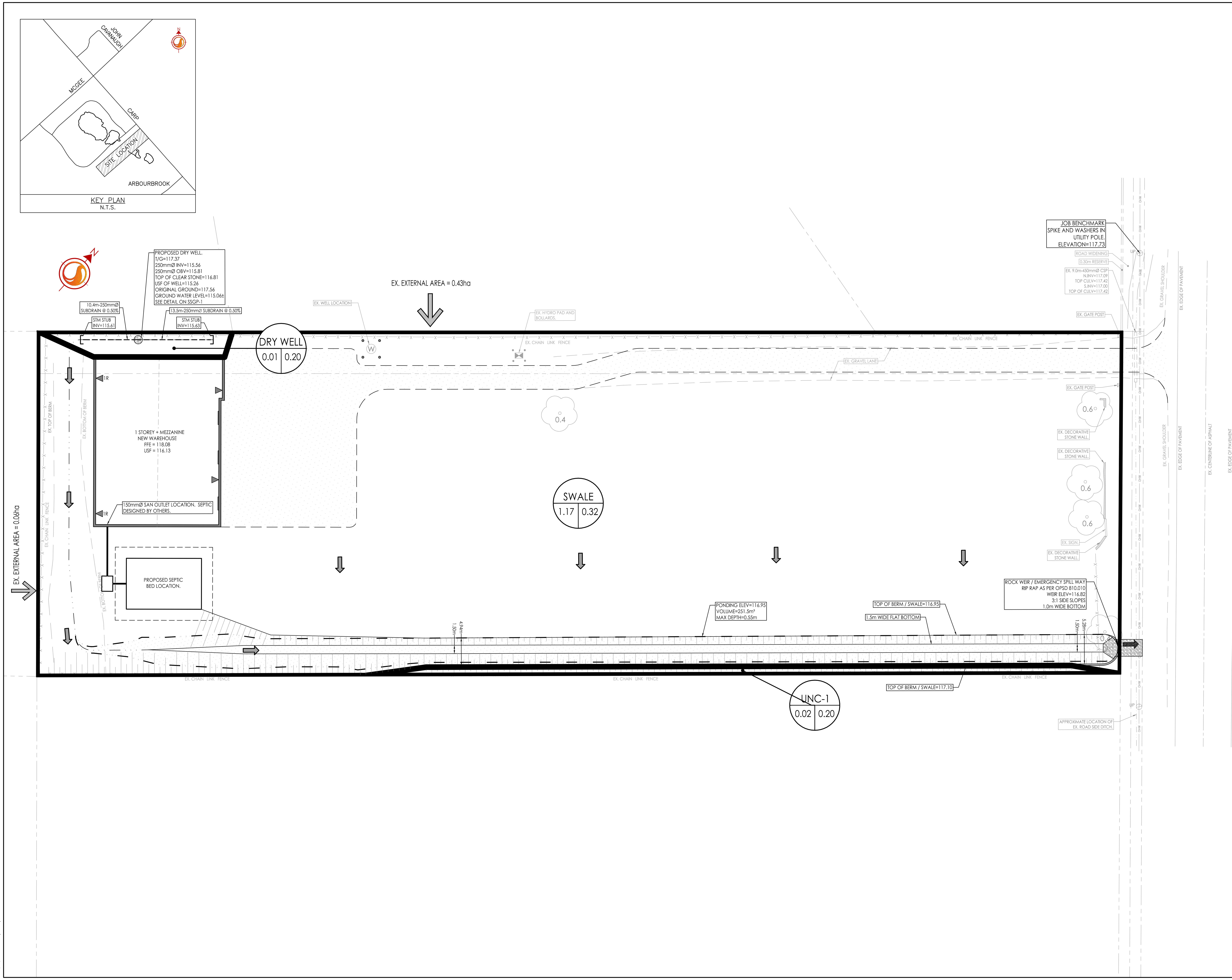
Project No. 160401724

Scale 1:300 (0 3 9 15m)

Drawing No. SSGP-1

Sheet 1 of 3

Revision 0



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Legend

- L101A — AREA ID; 1.00 — RUNOFF COEFFICIENT; 0.85 — STORM DRAINAGE AREA ha.
- STORM DRAINAGE BOUNDARY
- EXT-1 — AREA ID; 1.00 — EXTERNAL RUNOFF COEFFICIENT; 0.50 — EXTERNAL STORM DRAINAGE AREA ha.
- EXTERNAL STORM DRAINAGE BOUNDARY
- DIRECTION OF OVERLAND FLOW
- DIRECTION OF EMERGENCY OVERLAND FLOW
- MAXIMUM STATIC PONDING LIMITS

Notes

Revision		By	Appd.	YY.MM.DD
0	ISSUED FOR SPA	MJS	NC	22.12.02

File Name: 160401724 DB	Dwn.	Chkd.	Dsgn.	YY.MM.DD
	MJS	NC	MJS	22.11.09

Permit-Seal

Client/Project

HQ MANAGEMENT GROUP

2885 CARP ROAD
NEW WAREHOUSE BUILDING
OTTAWA, ON, CANADA

Title

STORM DRAINAGE PLAN

Project No. 160401724

Scale 1:300 (0 3 9 15m)

Drawing No. SD-1

Sheet 2 of 3

Revision 0

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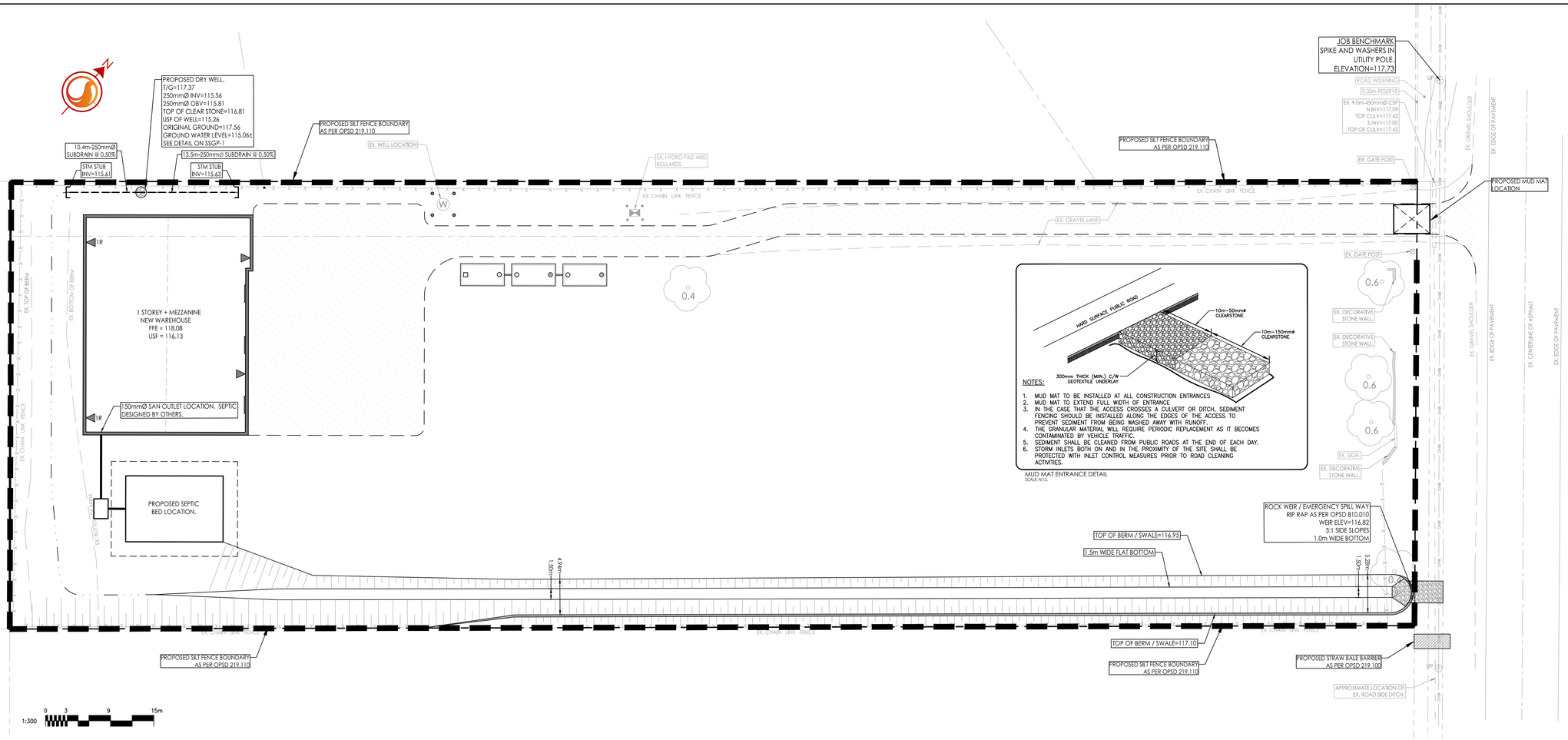

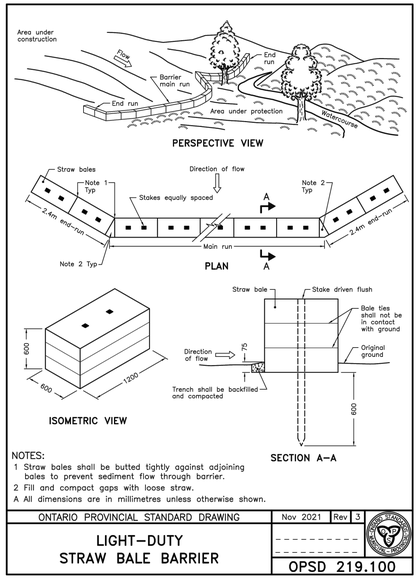

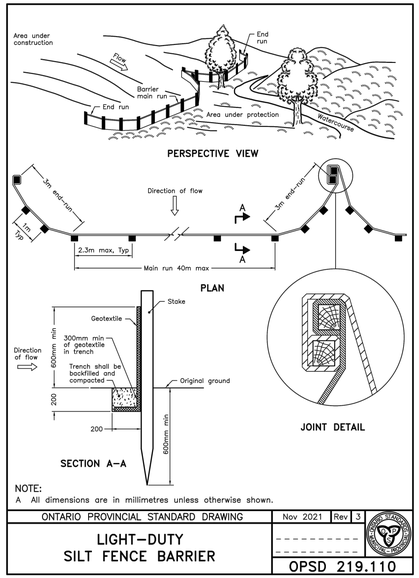

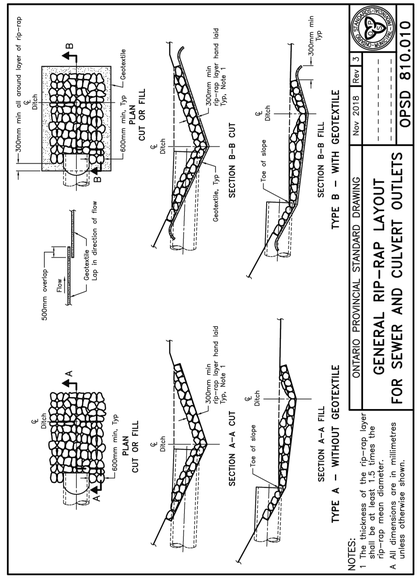

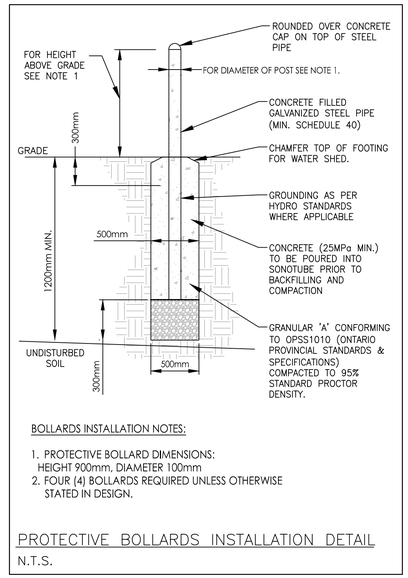

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Legend

- PROPOSED SILT FENCE BOUNDARY AS PER OPSD 219.110
- PROPOSED MUD MAT LOCATION
- PROPOSED STRAW BALE LOCATIONS

Best Management Practices

CONTRACTOR TO PROVIDE EROSION AND SEDIMENT CONTROLS (BEST MANAGEMENT PRACTICES) DURING CONSTRUCTION OF THIS PROJECT.

EROSION MUST BE MINIMIZED AND SEDIMENTS MUST BE REMOVED FROM CONSTRUCTION SITE RUN-OFF IN ORDER TO PROTECT DOWNSTREAM AREAS. DURING ALL CONSTRUCTION, EROSION AND SEDIMENTATION SHOULD BE CONTROLLED BY THE FOLLOWING TECHNIQUES:

1. LIMIT THE EXTENT OF EXPOSED SOILS AT ANY GIVEN TIME.
2. REVEGETATE EXPOSED AREAS AND SLOPES AS SOON AS POSSIBLE.
3. MINIMIZE AREA TO BE CLEARED AND GRUBBED.
4. PROTECT EXPOSED SLOPES WITH PLASTIC OR SYNTHETIC MULCHES.
5. INSTALL CATCH BASIN INSERTS OR EQUIVALENT IN ALL PROPOSED CATCH BASINS AND CATCH BASIN MANHOLES AND IN ALL EXISTING CATCH BASINS THAT WILL RECEIVE RUN-OFF FROM THE SITE.
6. A SILT FENCE SHALL BE INSTALLED AROUND THE PERIMETER OF ALL AND ANY STOCKPILES OF MATERIAL TO BE USED OR REMOVED FROM SITE. (LOCATION TO BE DETERMINED)
7. A VISUAL INSPECTION SHALL BE DONE DAILY ON SEDIMENT CONTROL MEASURES AND CLEANED OF ANY ACCUMULATED SILT AS REQUIRED. THE DEPOSITS WILL BE DISPOSED OFF SITE AS PER THE REQUIREMENTS OF THE CONTRACT.
8. SEDIMENT CONTROL BARRIERS MAY ONLY BE REMOVED TEMPORARILY WITH APPROVAL OF CONTRACT ADMINISTRATOR TO ACCOMMODATE CONSTRUCTION OPERATIONS. ALL AFFECTED BARRIERS MUST BE REINSTATED AT NIGHT WHEN CONSTRUCTION IS COMPLETED. NO REMOVAL WILL OCCUR IF THERE IS A SIGNIFICANT RAINFALL EVENT ANTICIPATED (>10mm) UNLESS A NEW DEVICE HAS BEEN INSTALLED TO PROTECT EXISTING STORM AND SANITARY SEWER SYSTEMS, OR DOWNSTREAM WATERCOURSES.
9. NO REFUELING OR CLEANING OF EQUIPMENT IS PERMITTED NEAR ANY EXISTING WATERWAY.
10. CONTRACTOR SHALL REMOVE SEDIMENT CONTROL MEASURES WHEN, IN THE OPINION OF THE CONTRACT ADMINISTRATOR, THE MEASURE(S) IS NO LONGER REQUIRED. NO CONTROL MEASURES SHALL BE PERMANENTLEY REMOVED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE CONTRACT ADMINISTRATOR.
11. THE CONTRACTOR SHALL PERIODICALLY, OR WHEN REQUESTED BY THE CONTRACT ADMINISTRATOR, CLEAN OUT ACCUMULATED SEDIMENTS AS REQUIRED.
12. THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE ENGINEER ANY ACCIDENTAL DISCHARGES OF SEDIMENT MATERIAL INTO THE WATERCOURSE. APPROPRIATE RESPONSE MEASURES, INCLUDING ANY REPAIRS TO EXISTING CONTROL MEASURES OR THE IMPLEMENTATION OF ADDITIONAL CONTROL MEASURES, SHALL BE CARRIED OUT BY THE CONTRACTOR WITHOUT DELAY.
13. CONTRACTOR SHALL INSTALL MUD MATS AT BOTH ENTRANCES TO THE SITE.
14. STORMWATER SWALES TO BE COVERED WITH HYDRO-SEED AND MULCH.

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Permit-Seal

Client/Project
HQ MANAGEMENT GROUP

2885 CARP ROAD
NEW WAREHOUSE BUILDING
OTTAWA, ON, CANADA

Title
EROSION CONTROL PLAN AND DETAILS SHEET

Project No.	Scale	
160401724		
Drawing No.	Sheet	Revision
EC/DS-1	3 of 3	0

experience • knowledge • integrity

civil	civil
geotechnical	géotechnique
environmental	environnementale
field services	surveillance de chantier
materials testing	service de laboratoire des matériaux

expérience • connaissance • intégrité

experience • knowledge • integrity

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