UPDATED PLANNING RATIONALE
PLAYVALUE TOYS PHASE 2 EXPANSION
130 DAVID MANCHESTER ROAD, OTTAWA, ONTARIO
FEBRUARY 26, 2021

Aerial View 130 David Manchester Road

Rickson Outhet Architect
319 Daly Ave Ottawa Ontario K1N6G6 T 613 728 1637 F 613 728 8501E roarch@rogers.com

Introduction

We are pleased to provide an updated planning rationale in support of the Site Plan Control Application for a revised Site Plan Agreement for the proposed Phase 2 Expansion of the Playvalue retail store and warehouse located at 130 David Manchester Road, Ottawa.

This report is predicated on the previous Planning Rationale Report, McIntosh & Perry November 2010, in support of the rezoning of the subject property to allow the current and proposed retail and warehouse use as a site specific zoning amendment.

The proposed site specific zoning amendment was recommended by the Agricultural and Rural Affairs Committee, Report No. 10, June 23, 2011 and subsequently approved by Ottawa City Council Motion No. 19/1 September 14, 2011, permitting site specific warehouse and retail use, 130 David Manchester Road, By-Law 2011-330, currently in effect.

The report is also predicated on the previous Addendum to the McIntosh Perry Consulting Engineers, November 2010 Planning Rationale, prepared by Rickson Outhet Architect, July 24, 2012, submitted with the original Site Plan Control Application in 2012.

The following updated environmental reports, among other reports, have also been prepared in support of this application.

Updated Environmental Impact Statement prepared by McIntosh Perry Consulting Engineers Ltd.

Updated Tree Preservation Plan commentary prepared by E & S Tree Experts

Site Context

The site has a frontage of 181.27m and an area of 1.64ha, and is located in the rural area. It has a municipal address of 130 David Manchester Road. The land has frontage on David Manchester Road, and backs onto the Highway 7 ROW.
The 4 acre site is the small tip of a triangular piece of land, which is bounded on the south and east by the ROW for Highway 7; a four lane divided provincial freeway, and the David Manchester ROW to the west.
A Hydro corridor is located to the north.

Figure 1 Aerial view showing the site outlined in red and the current surrounding land uses

Update to the Built Phase 1 Planning Rationale - Surrounding Land Uses

An industrial sales and service use building, Brandt Tractor, located at 190 David Manchester, has been built immediately adjacent to the north of the subject property.

All other surrounding land uses remain unchanged, as shown in the 2010 McIntosh Perry Planning Rational Report, abstracted as follows.
The Karson Quarry is located approximately 350m east of the subject site on the opposite side of the Highway 7 ROW.
Metro Towing (a salvage yard) is immediately across Highway 7.

Background Playvalue Toys

Playvalue Toys owns and operates the retail and warehouse commercial use building located at 130 David Manchester Road and has done so since the completion of construction in 2013.

The owner proposes to expand the existing building by adding 1,480 sq. m of warehouse space to the south-east side of the building.

The proposed expansion is critical for the viability and continued commercial success of the business.

The proposed Phase 2 expansion is consistent with and was clearly indicated during the site plan approval process in 2012.

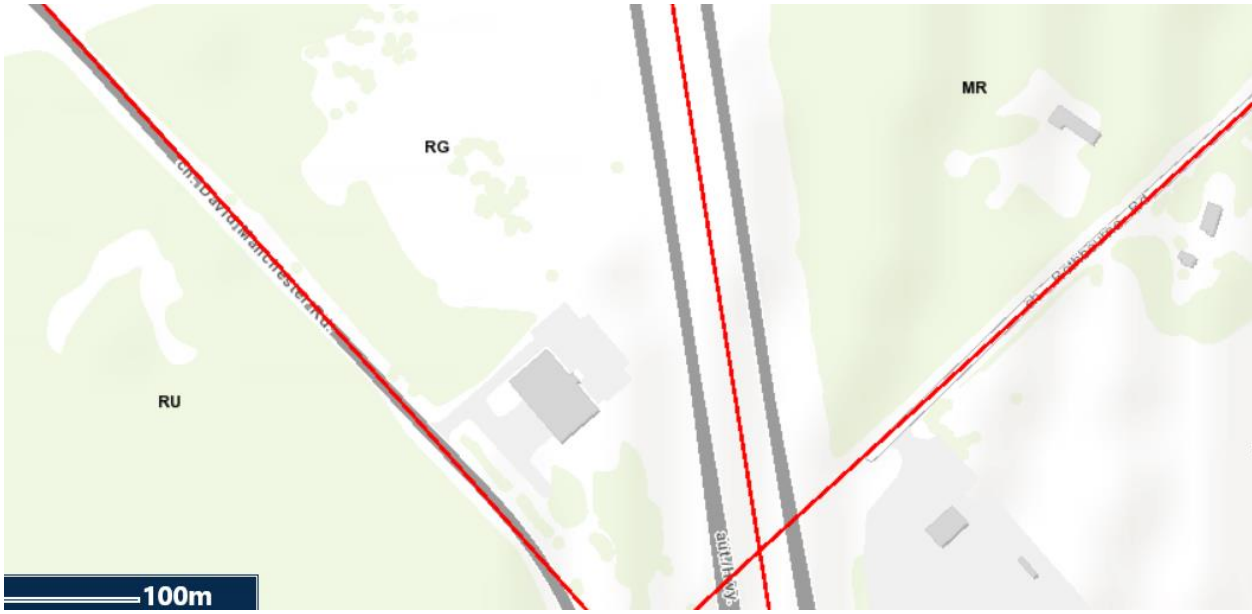
Conformance with the City of Ottawa Official Plan - Phase 2 Expansion

The subject property is designated Rural Natural Feature in the City of Ottawa Official Plan.
A Rural Natural Feature designation does not prohibit development, but rather requires that an Environmental Impact Statement (EIS) demonstrate that there will be no negative impacts on the features and functions of the area in context with the policies of 4.7.8. An updated EIS was conducted in accordance with the requirements of city staff and it has been submitted in support of this application. It is the professional opinion of the biologist that the site can be developed as proposed, in such a manner that does not have negative impacts, as defined in section 4.7.8.
Specific mitigation measures have been proposed in the updated E.I.S. report.
The proposed Phase 2 development continues to conform to the intent of the City of Ottawa Official Plan Policies. It is our understanding that these policies have not changed significantly since 2003 and the relevant references to the Official Plan made in the 2010 Planning Rational written by McIntosh Perry, appear to be still valid today.

The adjacent new development, an industrial sales and service use building, Brandt Tractor, located at 190 David Manchester, built immediately to the north of the subject property, is compatible with and supports the Phase 2 Expansion proposed for 130 David Manchester Road, in conformance with the intent of the Official Plan.

Conformance with City of Ottawa Zoning By-Law – Phase 2 Expansion

The site is zoned RG Rural General Industrial.



geoOttawa -130 David Manchester Existing Playvalue Toys Building mid image

The proposed Phase 2 warehouse addition to the existing building is fully compliant with all current RG zoning regulations and the site specific zoning bylaw 2011-330. No changes are being made to the current retail space and no additional parking spaces are anticipated to be required.

The Architectural Site Plan demonstrates general conformance with the RG zoning mechanisms & provisions shown in the table below.

I		II	
ZONING MECHANISMS		**PROVISIONS**	**Proposed**
(a) Minimum lot width (m)		30	181
(b) Minimum lot area (m^2)		4,000	16470
(c) Minimum front yard setback (m)		15	> 15
(d) Minimum rear yard setback (m)		15	15
(e) Minimum interior side yard setback (m)	(i) Abutting a RG, RH or RC zone	3	Not Applicable
	(ii) Other cases	8	23.1

(f) Minimum corner side yard setback (m)	12	Not Applicable
(g) Maximum principal building height (m)	15	9.42
(h) Maximum lot coverage (%)	50	16.8
(i) Outdoor storage	(a) outside storage is not permitted within any required front yard or corner side yard	No Outdoor Storage

Highway 7 - Designated Scenic Entry Route

Highway 7 is designated as a scenic entry route. Particular attention has been given to the concept of the visual experience of the occupants of vehicles travelling on the highway, in both arrival & departure directions, especially regarding building orientation, building façade and landscaping.

The Phase 1 Playvalue structure is a significant building of interest appropriate for a designated scenic entry route.
The Phase 2 Playvalue structure proposes to subtly amplify and provide additional visual interest to the existing façade through building massing and building setback creating shadows and relief.

Highway 7 Elevation Phase 2 Phase 1

Building Façade, Building Orientation & Landscaping

Attention was given to ensure that the design was both attractive and consistent with the current building façade design, approved in 2012. The designer of the original facade was re-engaged for this project. The designer made a point of collapsing the curve of the building back a few feet to provide a visual separation between the original building and the new extension. This affords the opportunity to create a matching (curved) awning. The building block feature will flow through the expansion providing a clean visual highlight.

All of the existing and proposed warehouse activities, including large truck access, loading at the warehouse doors and small truck deliveries occur at the rear of the building and are provided with a landscape screen to visually separate these activities from David Manchester Road and especially remain out of site from the designated scenic entry corridor.

It is proposed to remediate and infill the existing Phase 1 landscaping with similar planting species and to propose that the Phase 2 landscaping extend these landscape planting species & features over the entire site.

A landscaped buffer consisting of storm water retention ponds planted with tall indigenous grasses and the retention of the existing trees in Zone 1 is proposed at the East area of the site, an extension of the existing landscaping schema along the scenic entry corridor.

Site Services

Gemtec Consulting Engineers have analyzed the water and septic demands and have concluded that no expansion to these services is required. JRP Engineering has analyzed the current electrical service and concluded that no changes to the current buried hydro service are needed. The site already has Bell Fiber service to the building and this line will maintain its current location.

Consultation Process

In the planning of this project, the City of Ottawa planning department was contacted, and a virtual Pre-Application Consultation Meeting was held on June 16, 2020. On July 13, 2020, the City Planner, Sarah McCormick, provided both the minutes of the meeting and the required plans and studies list, necessary for the project. These plans and studies have since been completed.

Public Consultation Process

The ward Councillor, Eli El-Chantiry, was also consulted regarding the expansion. Mr. El-Chantiry promised his support of the project and said that this expansion, at this point in time, was "music to my ears".

Our neighbors within a 300m driving distance have been contacted regarding the expansion plans. The General Manager of Brandt Tractor Ltd at 190 David Manchester Road, Chris Taylor, was informed of the proposed expansion by telephone. He was very supportive of the proposal and said that it would be "no problem". Dave and Sue White at 173 David Manchester Road were contacted by mail. They responded by email, completely supporting the expansion. A copy of the email is available upon request.

Conclusion

In conclusion, the Phase 2 Expansion is consistent with the City of Ottawa official plan and zoning by-laws.

It is therefore requested that permission be granted to allow the proposed Phase 2 Expansion of the warehouse located at 130 David Manchester Road.

Rickson Outhet B. Arch OAA MRAIC
RICKSON OUTHET ARCHITECT
Cc. Doug Jones Playvalue Toys

Enclosures;

Planning Rationale	McIntosh Perry Consulting Engineers, November 2010
Addendum to Planning Rationale	Rickson Outhet Architect, July 24, 2012
Updated Tree Conservation Report	Erik von Luczenbacher, E & S Tree Experts August 20, 2020
Updated Environmental Impact Statement	McIntosh Perry Consulting Engineers, EIS, October 23, 2020

Playvalue Toys – 130 David Manchester Drive

Planning Rationale, November 2010

McINTOSH PERRY
Consulting Engineers Ltd.

Helping shape better communities

Introduction

McIntosh Perry has prepared this planning rationale in support of an application for a site-specific rezoning to permit a warehouse/retail use for Playvalue Toys, at 130 David Manchester Drive. The following reports have also been prepared in support of the application:

- Phase I Environmental Site Assessment prepared by Mark Priddle McIntosh Perry Consulting Engineers Ltd. (MPCE)
- Environmental Impact Statement and Tree Preservation Plan prepared by Jeff King, Biologist, McIntosh Perry Consulting Engineers Ltd.
- Professional Traffic Opinion prepared by Denton Byers P. Eng. McIntosh Perry Consulting Engineers Ltd. (See Appendix C)

CFC Enterprises (CFC) is the owner of the subject property and they are the applicant for the requested rezoning. Playvalue Toys (Playvalue) is the contract purchaser who intends to develop the property for their new corporate headquarters warehouse and retail store. It is important to remember that CFC is applying to rezone the subject property to allow warehouse and retail store on the subject property. Once approved, Playvalue will be subject to the complete site plan approval process including all the technical studies and analysis required.

The mandatory pre-application consultation was held on June 08, 2010. The pre-application meeting was attended by Danny Page, Cheryl McWilliams, Kevin Hall, and Mathew Haley from the City. Mike Boucher and the owners of Playvalue were in attendance for the applicant. A subsequent meeting was held with Councillor El-Chantiry and Chris Cope from the economic development portfolio within the Planning Department. Derrick Moodie also attended this meeting.

The Site Context

The site has a frontage of 181.27m and an area of 1.64ha, and is located in the rural area. It has a municipal address of 130 David Manchester Dr. The land has frontage on David Manchester Drive, and backs onto the Highway 7 ROW. The 4 acre site is the small tip of a triangular piece of land, which is bounded on the south and east by the ROW for Highway 7; a four lane divided provincial freeway, and the David Manchester ROW to the west. A Hydro corridor and undeveloped land (owned by CFC) is located to the north. Figure 1 below shows the site context and surrounding land uses.

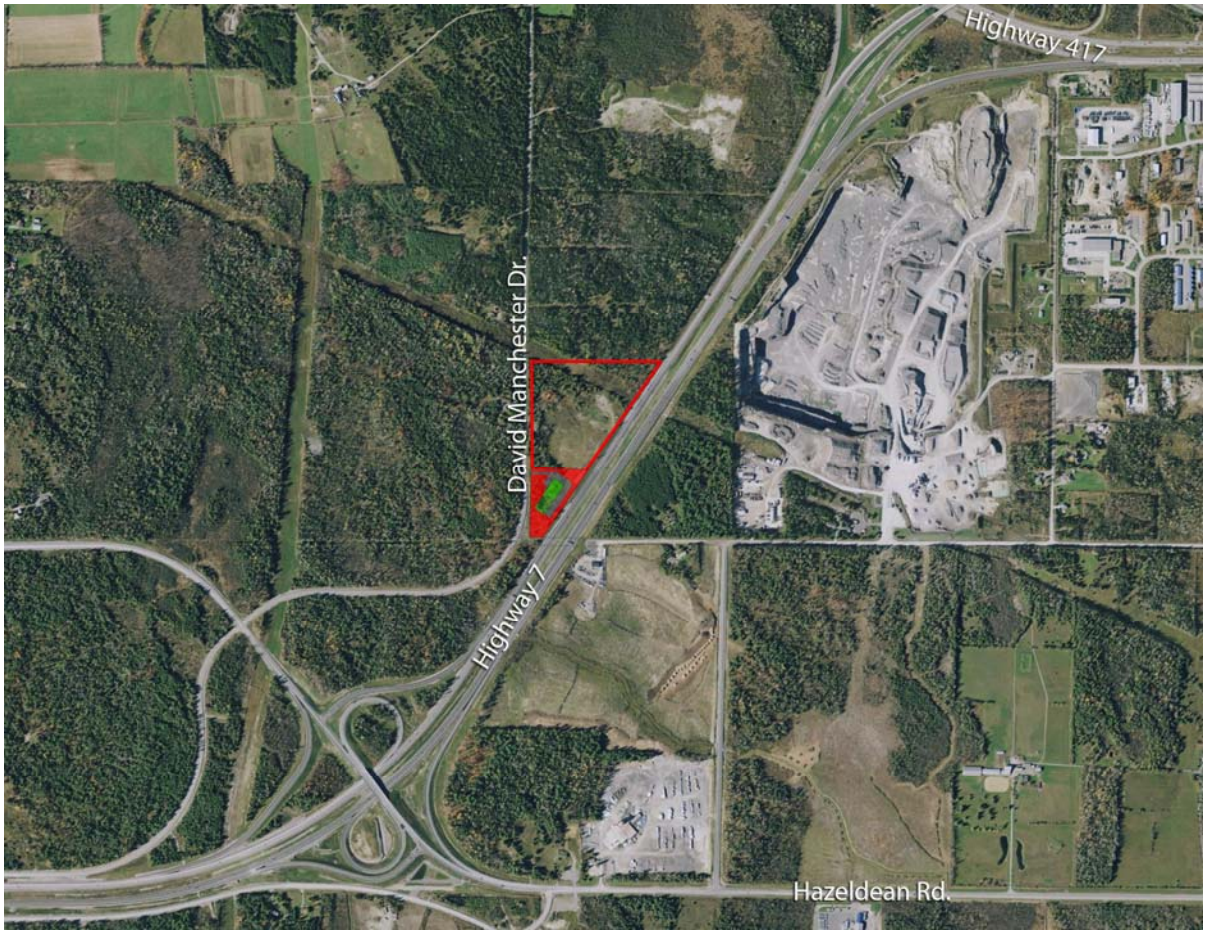


Figure 1.

Appendix A is a full size aerial image which shows the distances from the subject site to the surrounding land uses. The Capital City Speedway racetrack is located approximately 2000m away on the north side of Highway 7; the Karson Quarry is located approximately 350m east of the subject site on the opposite side of the Highway 7 ROW; and the subject property is physically within 750m of the Highway interchange – about a 1000m driving distance. Metro Towing (a salvage yard) is immediately across Highway 7. The nearest residential or farm property is approximately 1500m away. In the broader context, Highway 417 is located approximately 2.5km from the Highway 7 interchange and Highway 416 is just 13km further east.

The property is currently designated Rural Natural Feature and Highway 7 is proposed to be designated a scenic corridor in the Official Plan (OP) under OPA 76. See Figure 2.

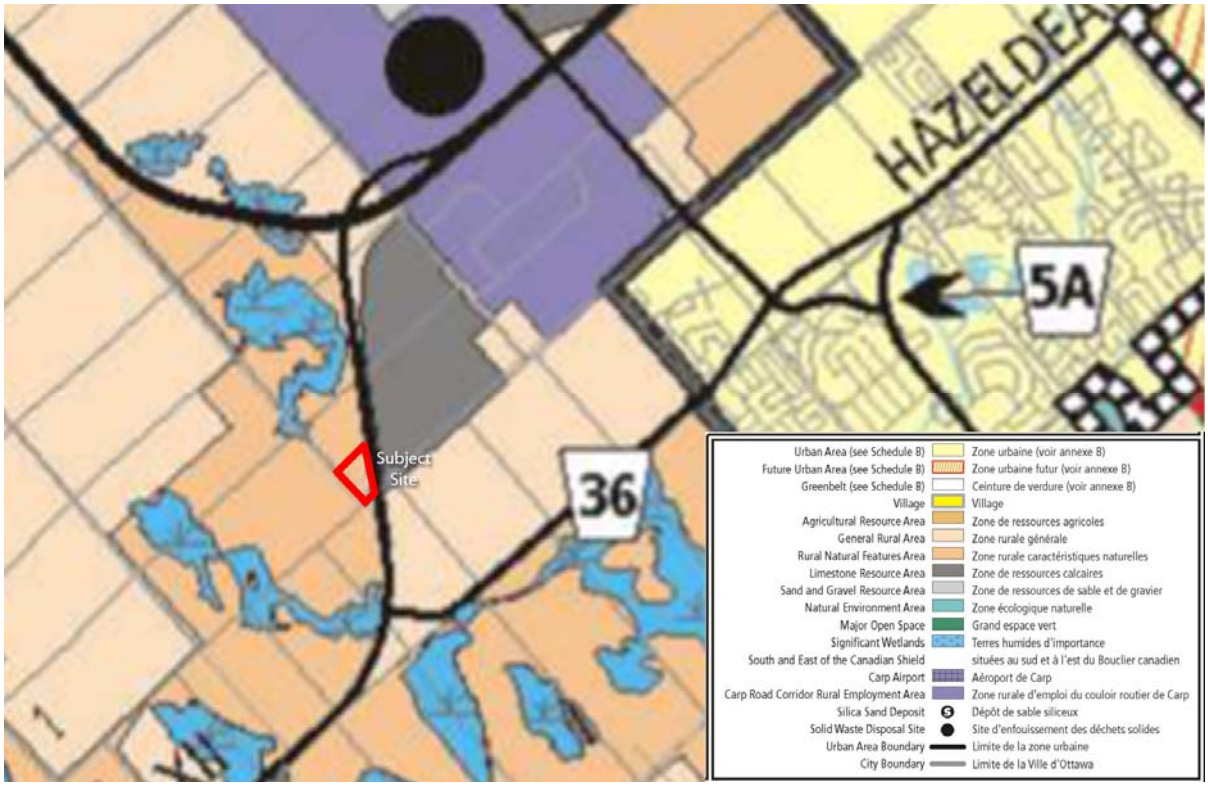


Figure 2.

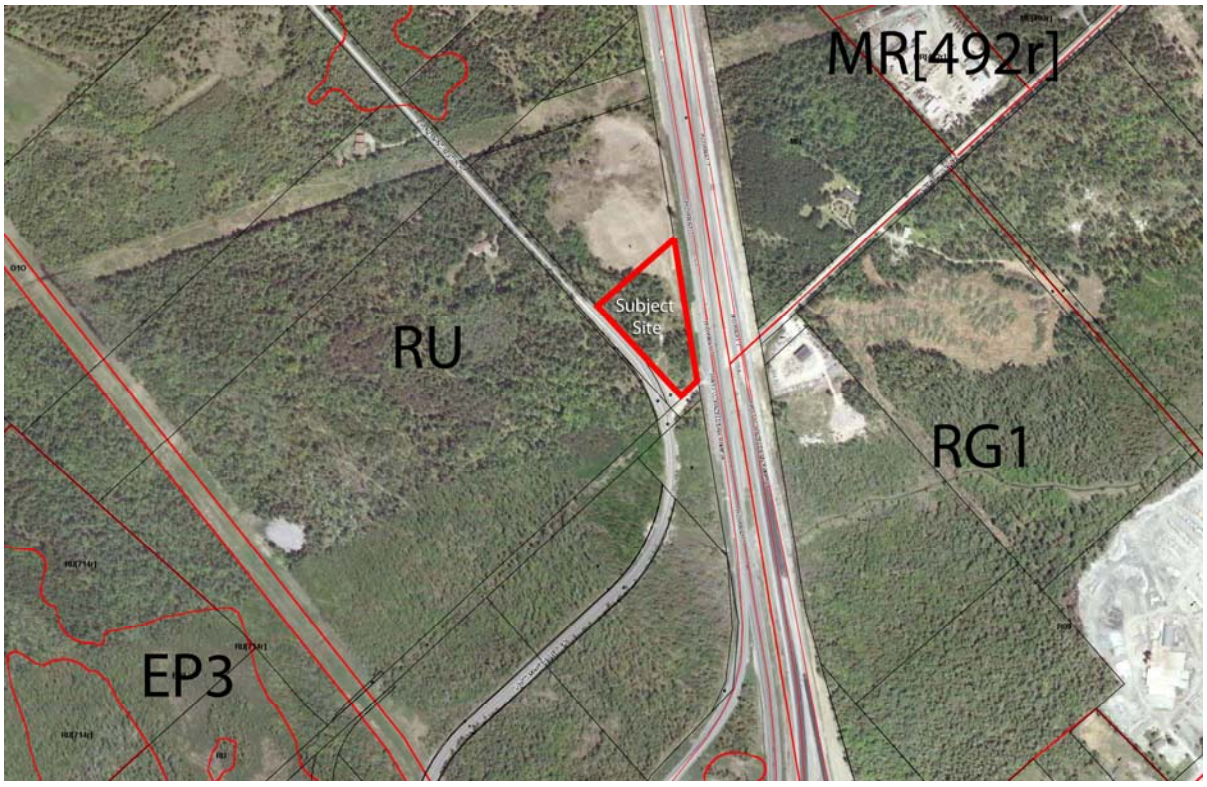


Figure 3.

It is zoned Rural Countryside – RU in the Comprehensive Zoning By-law (See Figure 3). The intended warehouse/retail use does not comply with the current zoning, accordingly a site specific zoning amendment is being requested to allow the warehouse and retail uses as additional permitted uses on the subject lands only.

Although the property is currently zoned rural, it is not suitable to be developed for any of the uses permitted in the rural zone. The property is relatively flat and featureless and it is fragmented from the balance of the rural properties on the opposite side of David Manchester Drive.

It is clear that the property is not suitable for agricultural uses given the relatively small and awkward shape of the parcel, the poor soil, and that it is fragmented from any meaningful larger parcel. The tree cover on the subject property is very limited and the land cannot be used for forestry or other such purposes. Further, given the proximity of the Highway, the adjacent quarry, industrial uses, and the racetrack 1.9 km away the subject site is clearly not suitable for any form of residential or Motel use. Given the stated site constraints and its situation relative to adjacent uses, it is clear that the property is not suitable for any practical development for the uses currently permitted. Save the property remaining undeveloped, any practical use of the subject lands is going to require a rezoning. Some form of industrial/commercial use of the property is likely given the proximity to the interchange and the requirement for the use to be compatible with adjacent land uses.

The most redeeming feature of this property from a site context and land use perspective is its proximity to an interchange providing direct access to the provincial highway system. The interchange provides convenient unfettered vehicular access to major transportation routes required by a warehouse distribution operation. As noted in the supporting traffic opinion in Appendix C, “the type of interchange at Hwy 7 and Hazeldean Road is a Parclo A-4, which will easily provide access to the highway for all new developments in the subject area from both sides of Hwy 7.” The clear purpose of using such an interchange is to provide efficient access to both sides of the provincial highway. This is a significant point because planning staff have suggested that the property could be considered more appropriate for the proposed use if it were on the opposite side of the highway.

The planning department has also chosen to point out several other locations where this development may be more appropriate. Playvalue has examined numerous other locations, including on Carp Road, as suggested by staff. None of the properties met their business needs and the property at 130 David Manchester was chosen even in light of planning staff’s negative reaction to the proposed rezoning. It is our position that the required land use test (zoning) is not whether the subject site is the best location for this given development, but rather whether the intended warehouse/retail development is an appropriate use for the subject property. The decision regarding whether this site is the best location is not relevant to the application and is more appropriately a business decision for Playvalue to make.

Background – Playvalue Toys

Playvalue Toys is a locally-owned and operated company which currently has its corporate headquarters located on Carling Avenue. This location consists of a retail showroom, office and warehouse space. The successful growth of Internet sales has required them to lease a significant amount of warehouse space at a separate storage facility several kilometres away on Laperriere Drive.

Their business model requires them to be more efficient with respect to warehouse and distribution to keep up with quickly growing Internet based sales. They need an efficient consolidated site for their business to grow. It is very important to note that they are not a traditional retail operation that relies upon passerby traffic and convenient location to retail consumers. They are a destination use as opposed to an opportunity or convenience use. A specific urban location is not mandatory for their business to be successful, rather it is more important for them to find a site which provides the ability to consolidate their current operation into one location and which provides for better access to major haul routes for their distribution component of their business. They are a hybrid warehouse/retail use and it is the warehouse distribution function that is more important.

The fact that Playvalue deals in large packages weighing in excess 800 kg and bulky items such as outdoor play structures further highlights the need for a larger than normal warehouse and display component to their operation. Their business is not unlike other uses seen further west along Highway 7 such as Shed FX, and Lanark Cedar. Like Playvalue, these users require large warehouse space and outdoor storage display. They are predominantly involved in distribution and delivery of products as opposed to cash and carry retail traffic. Again they require convenient access to an efficient transportation network and are perfectly suited to be located within the Highway 7 corridor.

The company has completed an exhaustive search of suitable sites across the City, and this site is the only one that meets all of their requirements. The main requirements were a site that was large enough for the building they need, and a site that had sufficient access to major arterial roads or highways. Given the site's proximity to Highways 7 , 416, and 417, this site is ideal.

The Development

The concept plans submitted in support of the rezoning is just intended to show how the subject site could be developed. It is submitted to support the requested change in land use, not in support of a specific development proposal. Consistent with Playvalue's business model it shows a two-phase development which is designed to accommodate the long-term expansion of warehouse space and distribution facilities. The majority of space will be for warehouse, with an associated retail showroom, office and washroom facilities.

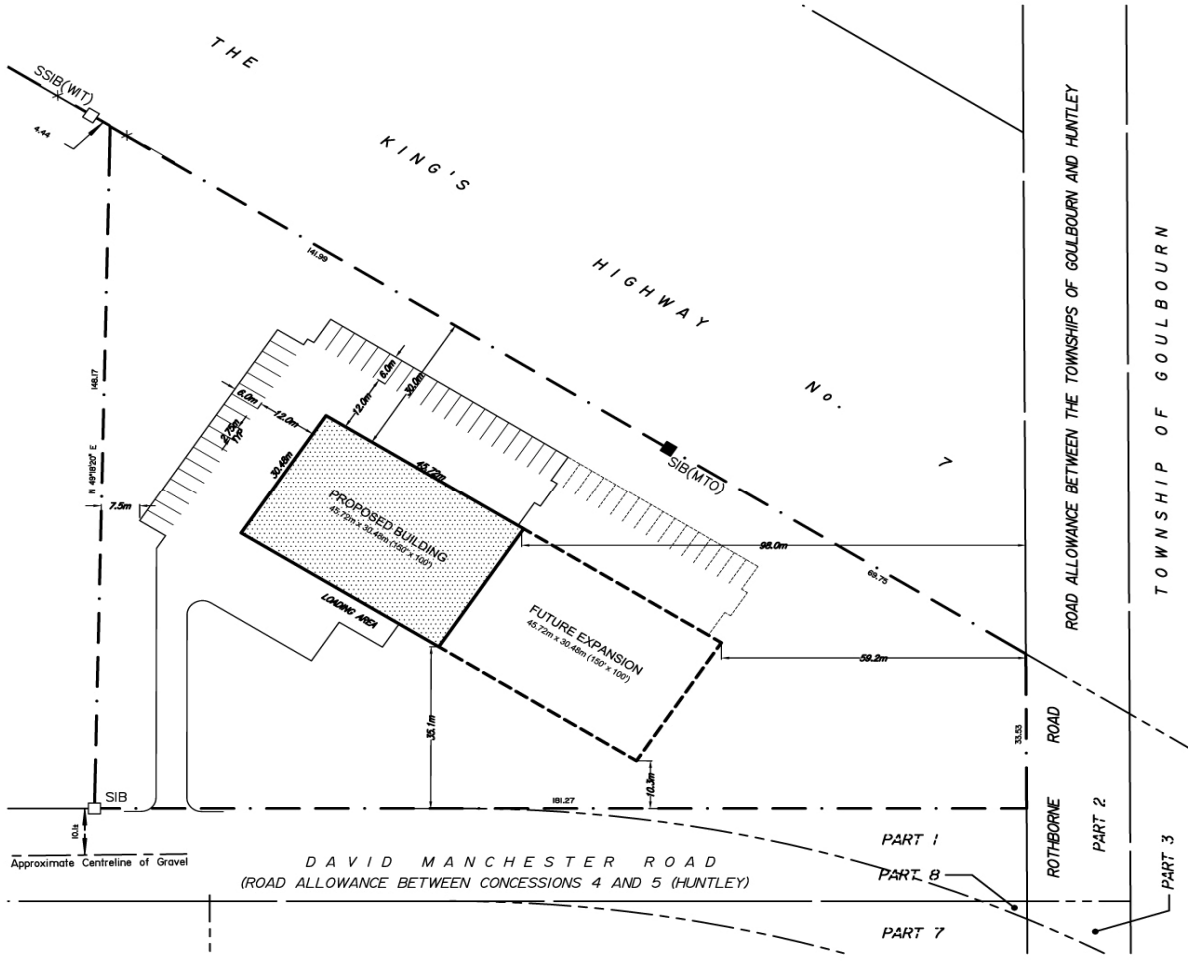


Figure 4.

The intent is to construct a building with an initial phase of 1393sq. m. – 1858sq. m. (15,000 to 20,000 ft.²) with the potential to expand to a development between 2787sq. m. - 3716sq. m. (30,000 and 40,000 ft.²) in the longer term.

The development concept is that the building will have its “good face” toward Highway 7 and will in effect, have the appearance of fronting on to Highway 7. Conversely the overhead doors which provide warehouse access to loading and garbage facilities will be hidden at the rear of the building but they will be appropriately screened from David Manchester Drive. This is a complete recognition of the importance of Highway 7 as a scenic corridor and the specific intent to enhance the vista from Highway 7. These are all considerations to be dealt with under site plan approval. It is important to note that MTO approval for the proposed development will be required as the building is located within 45m of the Highway 7 ROW.

The site is 1.64ha in size and there is ample room to retain and plant new vegetation, and to layout a septic system and if necessary a storm water retention area. Even at full build-out of 3716m2 (40,000ft2) the site coverage will only be 22-23%.

Given its location, the property will have to be developed on the basis of private services. It is anticipated that the requirement for sanitary service will be minimal (approximately equivalent to a single detached home). It is expected that the building will only require one washroom. The majority of the space is warehouse with a small component for office and a retail showroom. Based on MPCE experience with similar developments in this area it is fully expected on the 1.64ha (4 acre) site that both a well and septic system can be located and sized to accommodate the limited service needs of this operation. The final septic design will be determined by the building layout and fixture count. It will be dictated by the final approved site plan, but it is the opinion of our engineers that the 4 acre parcel size is sufficient to accommodate the required septic system. It is further expected that the system will be small enough that it can be approved locally by the Ottawa Septic Systems Approval Office.

The city has requested that a Site Servicing Brief and Hydrogeologic and Terrain Analysis be submitted support of the rezoning application. It is our position that these studies along with the necessary geotechnical soils analysis are typically required in support of a specific site plan approval at the time of development of the property. They are typically very specific to the design and may need to be revised depending upon the final plan approved. These studies are expensive and time-consuming and it is our opinion that they are not required simply to establish an additional permitted use within a zone.

Provincial Policy Statement PPS

The PPS provides general direction on matters of provincial interest related to planning and land use. Part III of the PPS reads that the PPS is more than a set of individual policies and that it must be read in its entirety with the relevant policies being applied to each individual situation. The Planning Act requires that planning matters "be consistent with" the PPS. The following are the relevant sections of the PPS as they relate to the proposed development:

In general the PPS and specifically *Section 1.1.3.1* state that settlement areas are to be the focus of growth.

This is a general statement intended to guide overall community development. In general, growth is to be focused in a settlement area, but it is important to remember that this however is not intended to prohibit appropriate development in the rural area.

Section 1.1.4.1b: Development shall be appropriate to the infrastructure which is planned or available, and avoid the need for the unjustified and/or uneconomical expansion of this infrastructure;

The interchange of Hazeldean Road and Highway 7 is an important piece of existing provincial infrastructure. The traffic opinion provided in support of this application has demonstrated that the proposed development can easily be accommodated by the existing interchange and road system and there will be no negative impact on traffic on Highway 7 – Hazeldean Rd interchange. Policy 1.6.2 further supports the idea that the use of existing infrastructure should be optimized (this includes both sides of the highway).

Given its location the subject property will have to be developed on the basis of private services. These services must be provided at the sole expense of the property owner and as such will not require an expansion of municipal infrastructure.

Policy g) further elaborates that in the rural areas "recreation, tourism and other economic opportunities should be promoted."

The PPS also speaks to the importance of ensuring environmentally appropriate development takes place. The EIS submitted in support of the requested zoning amendment demonstrates that the subject site can be developed with no significant adverse impact to the environmental features or functions of the site.

City of Ottawa Official Plan (OP)

It is important to note Section 5.4 Interpretation 1."The plan should be read as a whole understand its comprehensive and integrated intent is a policy framework for priority setting and decision-making." This is significant in that it dictates that the overall policy framework must be reviewed and a balanced assessment of the applicable ability of all the policies must be undertaken.

The OP was approved in 2003 and consolidated in 2007. A major revision to the OP was undertaken in 2009 but many parts of OPA 76 are subject to as yet unresolved appeals. Our review of the OP is based on the most restrictive of the policies. The relevant sections are noted below and in some cases the actual text is provided for ease of reference.

Section 2 "Strategic Directions" – It is clear that the OP contemplates projected growth in rural jobs. An extract from Figure 2.2 below shows that it is anticipated that there will be growth of jobs in the rural area and that 30,000 jobs will be in the Rural area by 2021. This includes villages, but it explicitly acknowledges that jobs will be provided in the rural area of the city.

OP Text:

	Employment			
	2006	**2011**	**2021**	**2031**
Inside Greenbelt	432,000	457,000	482,000	506,000
Outside Greenbelt, urban	72,000	95,000	128,000	162,000
Rural	25,000	26,000	30,000	35,000
Total	**530,000**	**578,000**	**640,000**	**703,000**
Notes:	1. Totals may not add due to rounding.			

2.2 Managing Growth - These policies recognize that development in the rural area and villages is expected to be in the order of 10% of total growth. It recognizes both the importance of villages and importance of rural employment that specifically provides for rural uses that may not belong in the village.

3.2.4 Rural Natural Feature - this designation does not prohibit development but rather requires that a EIS be submitted in support of development applications and demonstrates that there will be no negative impacts on the features and functions of the area in the context of the policies of 4.7.8. An EIS was conducted in accordance with the requirements of city staff and it has been submitted in support of this application. It is the professional opinion of the biologist that the site can be developed substantially as proposed in the concept plan in such a manner that does not have negative impacts as defined in section 4.7.8. Specific mitigation and planting measures are proposed in the report.

OP Text:
5. Development and site alteration will not be permitted for:
a. any development permitted under the policies of this Plan within the feature.
b. any development permitted under the policies of this Plan within 120 metres of the boundary of a natural heritage feature.
unless an Environmental Impact Statement demonstrates that there will be no negative impacts as defined in Section 4.7.8 on the natural features within the area or their ecological functions. The requirements of the Environmental Impact Statement may vary, as described in Section 4.7.8. [Mod 32.]

3.7.1 Villages - 9. Indicates that industrial uses (such as a warehouse/distribution use) with characteristics that are not compatible with village character will be directed to an appropriate urban **or** general rural area. This is significant in that it automatically recognizes that not all warehouse and commercial uses (deemed inappropriate for villages) are required to be located in the urban area. It is also important to note that none of the village locations have direct access to provincial highways and that any warehouse/distribution operation will have to be assessed in terms of its impact on local roads.

OP Text:
[Former policy 7] Industrial uses with characteristics that are likely to impact negatively on adjacent residential uses by virtue of matters such as noise, fumes, heavy equipment movement or external storage of large amounts of materials will not be permitted in a Village, but will be directed to an appropriate urban location **or** General Rural Area.

Section 3.7.2.6 - iv. Explicitly acknowledges the importance of existing or planned interchanges on Highways 7, 416, and 417. It dictates that residential subdivisions in the rural area should avoid "locations at existing or planned interchanges with Highways 7, 416 ,and 417 which will be better suited to non-residential uses in the long term."

OP Text:
Subdivisions
6. When creating more than three lots for rural industrial or highway commercial purposes, development will be by plan of subdivision in accordance with the following criteria:
…
iv. **Avoiding locations at existing or planned interchanges with Highways 7, 416 and 417 which will be better suited to non-residential uses in the long term;**

3.7.4 Mineral Resources - The important consideration under this policy is that the type of development within 500m of a quarry is restricted (see Figure 5). Residential uses and Motels (serving the travelling public) are considered examples of "conflicting land uses that will not be considered." They are likely not appropriate within 500m of a quarry because of concerns that the quiet enjoyment of the property may be infringed upon and it may result in complaints regarding the extraction activities. The presence of the quarry further limits the type of use near this interchange to industrial or commercial uses that are more compatible with the extraction operations.

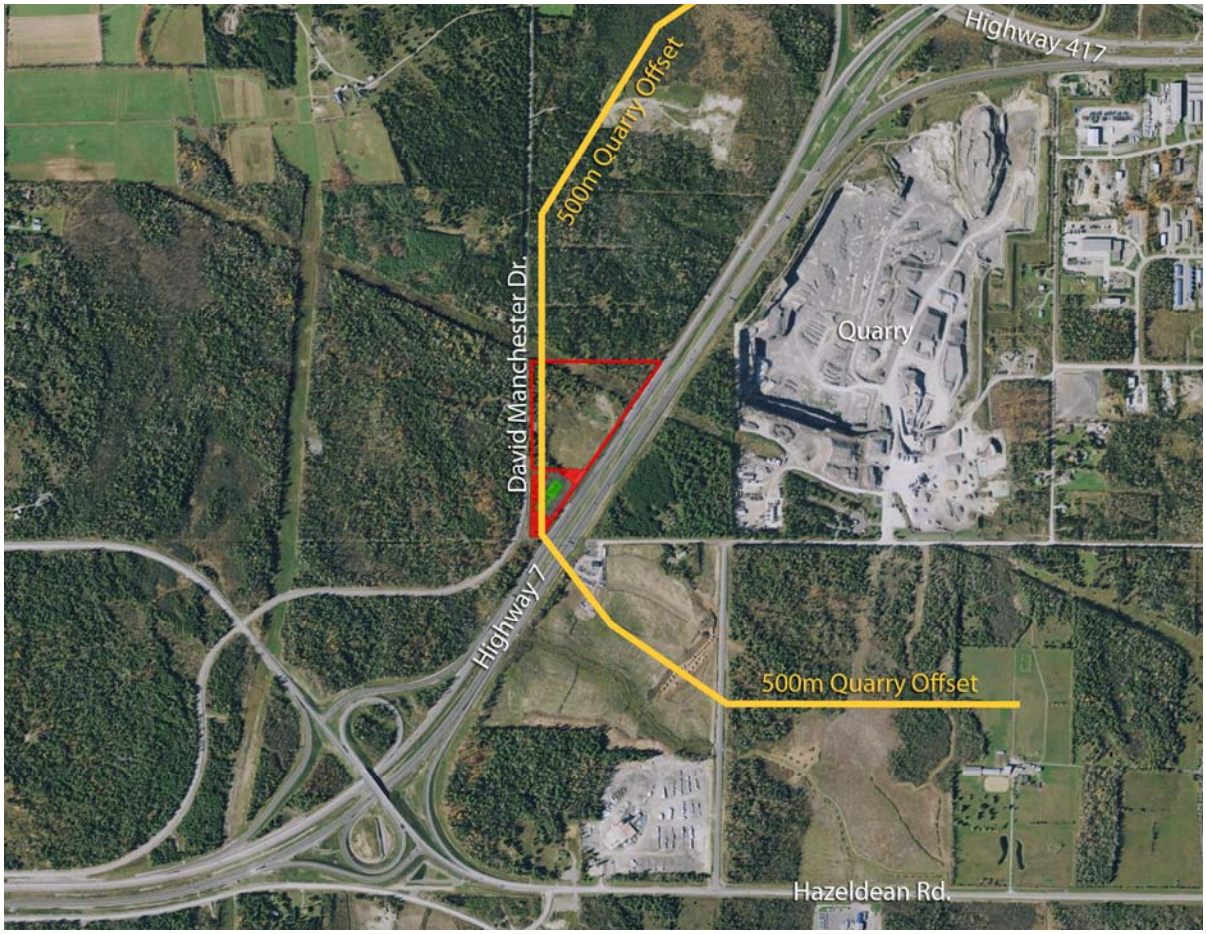


Figure 5

4.6.4 – Scenic-Entry Routes - OPA 76 has designated the Highway 7 corridor as a 'Scenic-Entry Route'. The City intends to develop guidelines with specific "attention to such matters as building orientation, outside storage, access and egress, landscaping, fencing, lighting and signage to create an aesthetically pleasing streetscape". These matters need to be evaluated in terms of a specific site design and development application for site plan approval.

The difficulty with achieving the goals of the Scenic-Entry Route designation for Highway 7 will not be in dealing new developments that are subject to detailed site plan review, but with existing parcels that front directly onto the Highway ROW. Appendix B shows the uses located along the corridor coming into Ottawa from the west. Many have outside storage, vehicle storage, stockpiles and others have been clear-cut. None of these sites would be permitted to develop in this manner under the new scenic-entry route designation.

4.7.8 Environmental Impact Statement - An EIS was prepared in accordance with the direction received from planning staff. The report demonstrates that the site can

be developed as proposed in the concept plan without impact to the features or function of the site. The following recommendations were made.

In order to minimize or eliminate environmental impacts from the proposed construction of the subject property, the following mitigation measures are recommended:

Retention of as much natural woody vegetation as possible within development constraints should be a priority. Removal of woody vegetation, particularly in edge habitats, should be kept to the minimum required in order to develop the site. Potential windfall damage from clearing activity should be kept in mind and remediation of such damage be conducted when necessary.

Maintain natural woody vegetation along property boundaries whenever possible keeping construction constraints and wind damage in mind (Figure 6 – Retained Tree Buffer).

No removal of vegetation should take place between May 15th and July 10th to protect breeding birds.

Should any species at risk be observed during construction the MNR should be contacted immediately for advice.

Revegetate with native species after construction (Figure 6 – Recommended Coniferous Planting Area).

Figure 6

ZONING BY-LAW

The primary purpose of zoning is to ensure the compatibility of adjacent land uses. Zoning needs to be consistent with the OP policies. The existing zoning permits residential uses, agricultural uses, and forestry uses. These uses are either not compatible with the adjacent quarry and Highway or they are not feasible given site constraints and limitations. Motel and other similar uses which can take advantage of the proximity to the interchange are also not compatible and are deemed conflicting uses in the Mineral Aggregate policies of the OP. The use of the subject property for a warehouse distribution or similar commercial use is a more compatible and appropriate use of the subject lands.

Further, staff have characterized the area north of Highway 7 as being primarily developed for rural residential purposes and have suggested that the proposed warehouse/retail use would not be compatible. At the same time however, the city is not allowing the final approval of the last phase of the Pinery subdivision and other residential development citing the proximity to the race track and noise issues as reasons why residential development cannot occur. The nearest residential property is approximately 1250 m away from the subject site. It is difficult to imagine a

circumstance under which the proposed warehouse/retail use would be incompatible with residential properties over a kilometre away.

The proposed use for a warehouse and retail store is not a noise sensitive use, and it will be operated primarily during the day when racing is not taking place. It is not incompatible with the race track facility. Similarly it is not impacted by Highway 7 road noise or by the proximity to local aggregate extraction operations.

Below is the list of permitted uses in the RU zone. With the exception of cemetery none of the uses listed below are would be permitted on or would be a practical use of the subject property.

agricultural use, *see Part 2, Section 62*
animal care establishment
animal hospital
artist studio
bed and breakfast, *see Part 5, Section 121*
cemetery
detached **dwelling**
equestrian establishment
environmental preserve and educational area
forestry operation
group home, *see Part 5, Section 125*
home-based business, *see Part 5, Sections 127 and 128*
home-based day care, *see Part 5, Section 129*
kennel, *see Part 3, Section 84*
retirement home, converted, *see Part 5, Section 122*
secondary **dwelling** unit, *see Part 5, Section 133*

Planning staff have noted that it is their opinion that the requested amendment to permit the proposed use is premature. Use of holding bylaws or interim control bylaws must be for a specific policy purpose. In many cases a specific study may be required, the provision of appropriate infrastructure may be required, or some other specific purpose must be stated in order to deem an application for an intended use of property premature. We are not aware of any specific land-use study or reason to deem this property and the intended use is premature.

CONCLUSION

When viewed comprehensively, as it must be, the proposed zoning amendment is consistent with the general purpose and intent of the PPS. The PPS attempts to focus growth in two settlement areas. However, it also recognizes that there are cases where development in the rural area is appropriate. Specifically, the PPS requires that developments maximize the use of existing infrastructure and do not create a situation requiring the costly extension of urban services. The provincial highway interchange is an important piece of infrastructure and it has been

demonstrated that this proposal can easily be accommodated at the location chosen. It is also clear that the proposed development will have to occur on the basis of private services which are to be provided solely at the cost of the applicant. It therefore passes the test of not obligating public expenditures for services.

The OP takes direction from the PPS and provides more specific policies that guide decisions on land use within the city. Like the PPS, the OP must be read and interpreted in a holistic context. It is clear from the OP that commercial and industrial development is permitted in the rural area. It is further clarified that residential development in the rural area must avoid the interchanges with highways seven, 416, and 417 as these areas are more suitable for commercial and industrial use.

The subject property is designated Rural Natural Feature in the OP. This designation does not prohibit development but rather requires that it be supported by an appropriate EIS. A professional biologist has conducted the EIS as directed by city staff. It is his professional opinion that the site can be developed in such a way that it does not negatively affect environmental features or functions on the site. Further, in his report he recommends specific measures which should be taken to help mitigate potential negative impacts from the development of the subject site.

The OP also contains policies which protect mineral extraction activities from the encroachment of “conflicting” uses, such as residential, motel or other noise sensitive uses. The subject site is within 500 m of an active quarry. As such it cannot be developed for any of these conflicting uses. Conversely, the proposed warehouse/retail use of the property is not a noise sensitive or conflicting use and is much more appropriate given the context.

It is important to note that staff has not indicated that an Official Plan Amendment is required in support of the proposed rezoning.

Finally, the proposed amendment to the zoning will result in the use that is more compatible, given a site context and site constraints, than any currently permitted. The fundamental purpose of zoning is to ensure compatibility between adjacent land uses. There are no specific issues regarding compatibility with the proposed use of this property and any of the adjacent land uses. There are concerns with respect to the scenic corridor and other design considerations but those are more appropriately addressed through the site plan approval process. In fact the OP notes that staff are to develop specific guidelines to address issues of screening landscaping and the visual appearance of scenic corridors.

The specific technical review of a development proposal is also undertaken at time of site plan approval. Storm water management, servicing, and building architecture and design are all matters for site plan approval. The applicant has provided conceptual plans would show how the site could be developed. They are not final site plans. Playvalue, the ultimate developer of these lands, is equally concerned about the appearance of the property as this will be their headquarters.

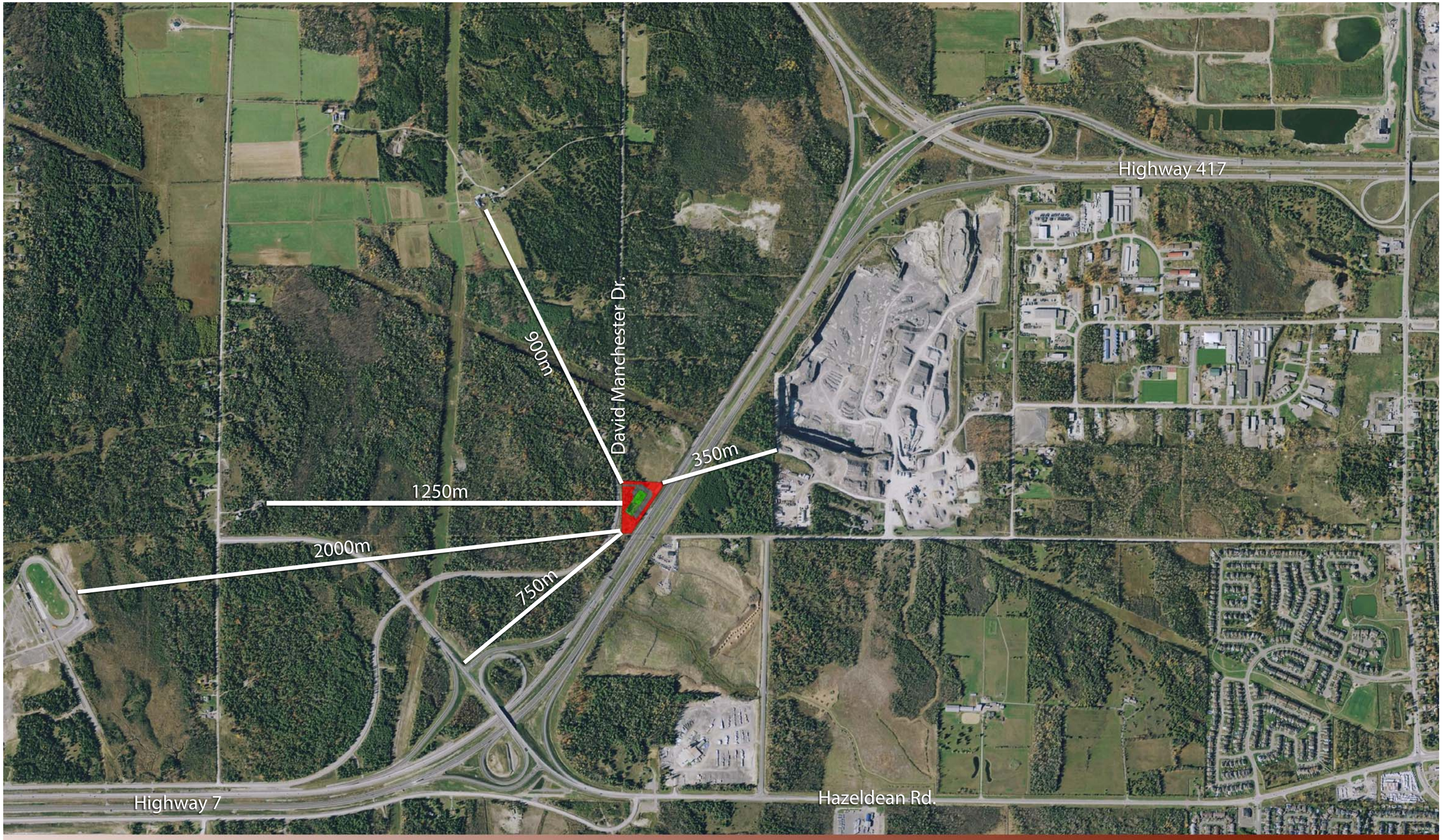
It is my opinion that the proposed amendment is consistent with the general purpose and intent of the PPS, the OP, and represents a more compatible and appropriate development of a subject property than any of the current existing permitted uses. It is my professional opinion that the proposal represents an appropriate use of the subject property, is in the public interest, and represents good planning.

It is therefore requested that the proposed amendment to permit a warehouse/retail use as a site-specific permitted use on this property be approved.

Respectfully submitted,

Michael Boucher, MCIP, RPP
Senior Planner
613-836-2184 ext. 41
m.boucher@mcintoshperry.com

Appendix A



McINTOSH PERRY Consulting Engineers Ltd.

Helping shape better communities

Appendix A: Distances

Appendix B

McINTOSH PERRY Consulting Engineers Ltd.

Helping shape better communities

Appendix B: Surroundings

Appendix C

McINTOSH PERRY Consulting Engineers Ltd.

Helping shape better communities

VIA EMAIL
(2 Pages)

Wednesday, October 13, 2010

McIntosh Perry Consulting Engineers Ltd.
115 Walgreen Road
Ottawa, Ontario
K0A 1L0

Attention: **Mr. Mike Boucher**
Senior Planner

Dear Sir:

RE: 130 David Manchester Drive
Warehouse/Retail Facility
Traffic Statement

As requested, we have reviewed the preliminary site plan for a proposed warehouse and retail facility to be located at 130 David Manchester Drive in west Ottawa and offer the following comments with respect to the potential impacts the development will have on the adjacent road network.

From available plans, it appears the developer wishes to construct a warehouse type structure on a vacant lot on the east side David Manchester Drive, and that the site will be serviced by a single all-directional access. The proposed building will provide approximately 40,000 ft^2 of usable floor area, with an approximate split of 30,000 ft^2 for warehousing, and 10,000 ft^2 for specialty retail sales (children's play structures). The property is large enough to provide all required parking on-site.

Using the ITE Trip Generation Manuals, 7th Edition, we estimate the new traffic generated for the site to be **70 vehicle trip ends** (Chart 150 – Warehousing, Chart 814 – Specialty Retail Center). Using the City's *Transportation Impact Assessment Guidelines, October 2006*, Table 4 indicates that a Transportation Impact Study or Transportation Brief will not be warranted for this site as the anticipated generated traffic is less than 75 vehicles per hour during the PM peak hour. However it is our understanding that a Traffic Statement will be needed in support of the re-zoning application.

Therefore, by copy of this letter, the following comments will act as a Traffic Statement to provide an overview of the anticipated impacts the proposed development will have on the adjacent road network.

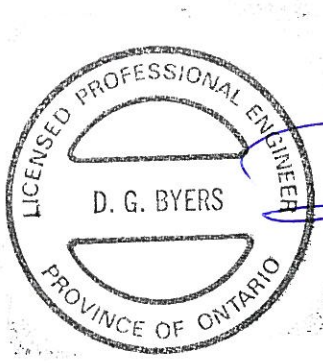
The proposed development site is situated at 130 David Manchester Drive, just west of Stittsville. The site is approximately 700 metres from the new Highway 7 – Hazeldean Road interchange. The land fronts onto David Manchester Drive, and backs onto Highway 7. For convenience, a key plan of the site has been appended to this letter report.

Both Hazeldean Road and David Manchester Drive have recently been reconstructed to accommodate the new Hwy 7 – Hazeldean Road interchange and as such have been constructed to current Ministry of Transportation standards. Therefore the adjacent road network between the site and Hwy 7 will have adequate sightlines and turning radii at all intersections for the new site traffic.

The type of interchange at Hwy 7 and Hazeldean Road is a Parclo A-4, which will easily provide access to the highway for all new developments in the subject area from both sides of Hwy 7.

From our site visits, it is apparent that both David Manchester Drive and Hazeldean Road have excess capacity to accommodate the new traffic. The existing two-way stop controlled intersection of Hazeldean Road and David Manchester Drive is currently operating at a very good level of service and will continue to operate at an acceptable level of service after the proposed site has been completed.

At the site, the entrance onto David Manchester will also operate at a good level of service given the low background volumes of traffic. As most of the new traffic will be accessing the site from the interchange, and that site traffic during the PM peak will be relatively low, a left turn lane or right turn taper will not be warranted on David Manchester Drive.



Regards,

Denton Byers, P.Eng.
836-2184 Ext. 22

CP-10-124
DGB:db

RICKSON
OUTHET
ARCHITECT

July 10, 2012, Revised July 24, 2012

Cheryl McWilliams MCIP, RPP
Planner, Development Review Rural
Infrastructure Services and Community Sustainability/
Services d'infrastructure et viabilite des collectives
City of Ottawa
110 Laurier Avenue
Ottawa, Ontario
K1P 1J1

Re: Addendum to Planning Rationale
McIntosh Perry Consulting Engineers, November 2010
PlayValue Toys
130 David Manchester Road Drive, Ottawa, Ontario

Dear Cheryl:
The proposed building and site development located at 130 Manchester Road is understood to be in compliance with the recently approved re-zoning and the Planning Rationale, prepared by McIntosh Perry Consulting Engineers, November 2010 with the following addendum changes.

Addendum to the Planning Rationale, McIntosh Perry Consulting Engineers, November 2010
The re-zoning for the property was approved by Ottawa City Council on 14 September, 2012, amendment by-law 2011-330, abstracted as follows.

Agriculture and Rural Affairs Committee Report 10
1. Zoning – Part of 130 David Manchester Road
" That Council approve an amendment to zoning By-law 2008-250 to change the zoning of part of 130 David Manchester Road to permit warehouse and retail uses". (CARRIED)

The subject part of 130 David Manchester is currently implemented as a site specific RG zone. Please refer to the attached City of Ottawa zoning plan for the subject part of 130 David Manchester.

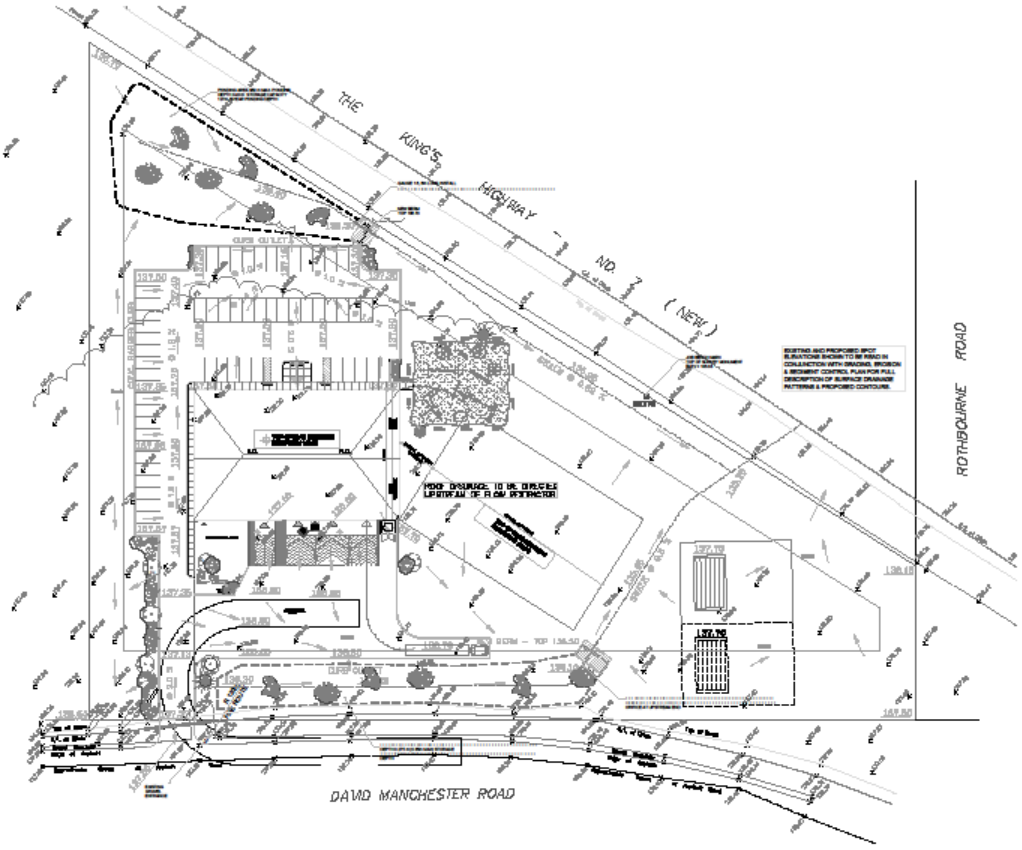
Zoning Compliance – The Proposed Development
The proposed site development, building footprint area and the proposed warehouse and retail uses are understood to be in compliance with the RG zoning requirements for this property.
Please refer to Drawing A-1 Site Plan, Building and Site Statistics tables.

319 Daly Ave Ottawa Ontario K1N6G6 T 613 728 1637 F 613 728 8501 E roarch@rogers.com

Proposed re-orientation of the Building
The proposed site development respects the intent of the original Planning Rationale Report, McIntosh Perry Consulting Engineers, November 2010, see Figure 4, pp 7, with the following addendum changes.

As Highway 7 is a designated scenic corridor, it is proposed to pull back the building footprint away from the highway corridor and orient the first phase of the building development parallel to David Manchester Road,
This re-orientation allows for a reduced impact on the Highway 7 corridor.
A landscaped buffer consisting of storm water retention ponds planted with tall grasses and additional tree planting are proposed at the North- West corner of the site.

Landscaped Features and Tree Conservation
The requirement to maintain 30 % of the existing trees post construction has been respected by maintaining the significant stand of trees located adjacent to the Highway 7 corridor at the South-East corner of the site.
Please refer to the tree conservation report for confirmation of the tree survey.
In addition, the stand of existing trees and vegetation at the West site boundary has been maintained to provide visual screening to the adjacent property.



PROPOSED SITE PLAN - PLAYVALUE TOYS
N.T.S JULY 10 2012

Please do not hesitate to contact us if further information is required.

Yours truly,

Rickson Outhet B. Arch OAA MRAIC
RICKSON OUTHET ARCHITECT
cc. Mr. Doug Jones, PlayValue Toys
Enclosures:
Re-zoning approvals attachments, Memo to Planner;
130 David Manchester RG Site Zoning Plan
City of Ottawa Rural Zones RG Zoning requirements
Site Plan Submission:
Planning Rationale - McIntosh Perry Consulting Engineers, November 2010

M E M O / N O T E D E S E R V I C E

To / Destinataire	Melissa Jort-Conway	File/N° de fichier: D02-02-10-0096
From / Expéditeur	Lorna Dagg Legislative and Technical Services Planning and Growth Management Department	
Subject / Object	By-law No. 2011-330 Part of 130 David Manchester Road	Date: October 11, 2011

This is to advise that no appeals have been received in respect of By-law No. 2011-330. Accordingly, the amendment is in full force and effect as of its date of enactment September 14, 2011.

Lorna Dagg
Legislation Clerk

cc: Eric Cooper, Program Manager, Legislative and Technical Services
Sue Spooner, Legislative and Technical Services
Maria Campagna, Legislative and Technical Services
Dan Garvey, By-law Writer, Legislative and Technical Services
Rob Maclachlan, By-law Writer, Legislative and Technical Services
Danny Page, Rural West, Program Manager, Development Review
Glenn Duncan, Zoning Plan Examiner
Jim Denyer, Zoning Plan Examiner
Mike Levasseur, Zoning Plan Examiner
Charles Sarazin, Zoning Plan Examiner
Mark Hawley-Savage, Plan Examiner, Building Code Services
Cairine Thomas, Zoning Plan Examiner
Al Montgomery, Zoning Plan Examiner
Linda Anderson, Manager, Enforcement and Inspection
Ken Thomas, Business Analyst, GIS
Mapping Corporate
Christina Gauvreau, GIS Technician
Melody Andrews, GIS Technician
Viviane Montgomery, Technical Clerk, Committee of Adjustment
Lindsay Thomas, Development Information Officer, City Hall
Elizabeth Brown, Development Information Officer, Centrepointe
Robert Sandercott, Development Information Officer, Centrepointe
Mitchell LeSage, Development Information Officer, City Hall
Colleen Lavallée, Development Information Officer, Cumberland
Justyna Garbos, Development Information Officer, Cumberland
Judi Muntean, Development Information Officer, Kanata
Amanda Marsh, Development Information Officer, Kanata

Ottawa

Roads

Transportation

Property

- **Property Parcels**

600 metre radius around selected transit stations (Sections ...

Zoning By-law (Consolidated)

- **Zoning Boundary**
- **Flood Plain (Section 58)**
- **Flood Plain - Area Specific Provisions (Section 58)**
- **Heritage (Section 60)**

MNR Provincially Significant Wetlands Nov 2008

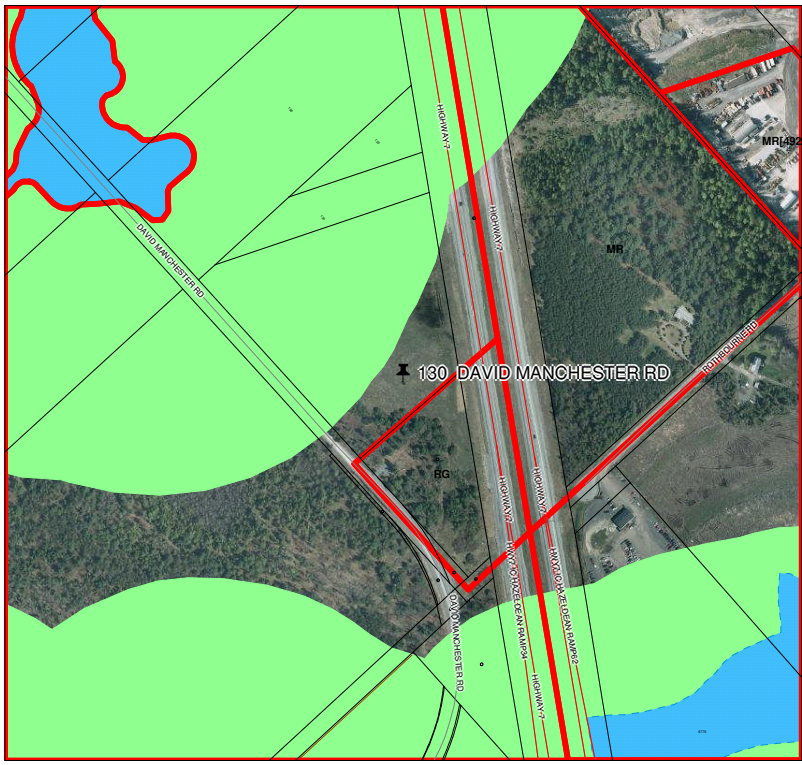
- **MNR Provincially Significant Wetlands Nov 2008**

Surface Water

- **Major Waterways**

Archaeological Potential

- **Archaeological Potential**



SCALE 1 : 8,564

200 0 200 400 600

METERS

N

Related Links

All bolded words referring to uses can be found in the Definitions section.

Zoning By-law Amendments

PDF Version

By-law Site Map

RG – Rural General Industrial Zone (Sections 219-220)

Purpose of the Zone

The purpose of the RG – Rural General Industrial Zone is to:

*(1) permit the development of light industrial uses in areas mainly designated as **General Rural Area**, **Village** and **Carp Road Corridor Rural Employment** in the Official Plan;*

(2) accommodate a range of light industrial uses and limited service commercial uses for the travelling public; and,

(3) regulate development in a manner that respects adjacent land uses and will have a minimal impact on the surrounding rural area.

219. In the RG Zone:

Permitted Uses

(1) The following uses are permitted subject to:

(a) the provisions of subsection 219(3) to (5);

(b) the **dwelling** unit is limited to a caretaker;

(c) the **retail store** is limited to the sale of agricultural, construction, gardening or landscape-related products, equipment or supplies;

animal hospital
automobile body shop
automobile dealership
automobile service station
drive-through facility (OMB Order #PL080959 issued March 18, 2010)
dwelling unit
gas bar
heavy equipment and vehicle sales, rental and servicing
kennel, *see Part 3,Section 84*
leaf and yard waste composting facility
light industrial uses
parking lot
printing plant
retail store
service and repair shop
storage yard
truck transport terminal
warehouse
waste processing and transfer facility (non-putrescible)

Conditional Permitted Uses

(2) The following conditional uses are permitted subject to the following:

(a) the provisions of subsection 219(3) to (5);

(b) the use is located on the same lot as the use listed in Section 219(1);

(c) the **retail store** is limited to the sale of goods, service or materials provided by a use permitted in Section 219(1);

animal care establishment
bank machine
car wash
convenience store
personal service business
restaurant
retail store (OMB Order #PL080959 issued March 18, 2010)

Zone Provisions

(3) Zone provisions are set out in Table 219 below.

TABLE 219 - RG ZONE PROVISIONS

I ZONING MECHANISMS		II PROVISIONS
(a) Minimum lot width (m)		30
(b) Minimum lot area (m^2)		4,000
(c) Minimum front yard setback (m)		15
(d) Minimum rear yard setback (m)		15
(e) Minimum interior side yard setback (m)	(i) Abutting a RG, RH or RC zone	3
	(ii) Other cases	8
(f) Minimum corner side yard setback (m)		12
(g) Maximum principal building height (m)		15
(h) Maximum lot coverage (%)		50
(i) Outdoor storage		(a) outside storage is not permitted within any required front yard or corner side yard (b) outside storage must be screened from abutting residential uses or zones and public streets by an opaque screen at least 1.8 m in height from finished grade

(4) For other applicable provisions, see Part 2- General Provisions, Part 3- Specific Use Provisions and Part 4- Parking, Queuing and Loading Provisions.

(5) It should be noted that lots serviced by private services may require lot sizes larger than that necessary to meet zone provisions in order to accommodate the servicing systems capable of handling the increased levels of water consumption and sewage generation that may be associated with these uses.

Tree Conservation Report

PROPERTY STUDIED:
130 David Manchester Rd.
Ottawa, Ontario
PC2020 - 0133

AUGUST 20, 2020

Prepared for:

Doug Jones
Playvalue Toys
130 David Manchester Rd.
Ottawa, Ontario
K0A 1L0
Tel. : 613-722-0175

Prepared by:

Erik von Luczenbacher
E&S Tree Experts
81 Auriga Drive, unit 12
Ottawa, Ontario
K2E 7Y5
Tel.: 613-978-4372
estreeexperts@gmail.com

Table of Contents

REPORT OBJECTIVE

This Tree Conservation Report examines the proposed expansion of the Playvalue toy store located at 130 David Manchester Road (PC2020-0133) and the ways in which the trees on the property could be affected because of this expansion. The expansion is planned for spring of 2021.

The objective of this report is to provide an accurate inventory of the current distinctive tree cover on the site, as well as to locate areas that will be affected by construction and to suggest mitigating measures.

SITE OVERVIEW

This four-acre commercial property is a flat, semi-wooded lot. The lot appears to stay relatively dry, largely due to a drainage swale that runs through the western part of the property.

The tree cover consists of three main groupings of trees, and two buffer zones: one between the neighbouring commercial property and one along David Manchester Rd.

The predominant species on this site are white cedar, white spruce, white pine, and trembling aspen. Ground cover in the wooded areas consists mostly of poison ivy and wild grape.

There were no endangered species, species at risk, or species of significance found on the site; however, there is a substantial amount of common buckthorn that appears to be encroaching into the open areas of the lot.

TREE INVENTORY

TOTAL NUMBER OF TREES INVENTORIED (10+ CM DIAMETRE AT BREAST HEIGHT): 250

To provide a thorough account of the distinctive trees on this site, the tree groupings or “zones” have been defined on an aerial photo, see Figure 1 (next page).

There are four main groupings of trees on the site and each group has been inventoried separately to give a clear representation of the species and their locations on the site. Zones 1 through 3 inclusively were thoroughly inventoried, but no tags were installed due to the upcoming construction. The trees in Zone 4 have been physically tagged with aluminum nails and number tags to facilitate future maintenance procedures. A distinctive tree for this type of site is classified as a tree with a diameter at breast height (DBH) of 10 centimetres or greater. There are multitudes of trees within these zones that fall below this DBH.

Tree Inventory Zones

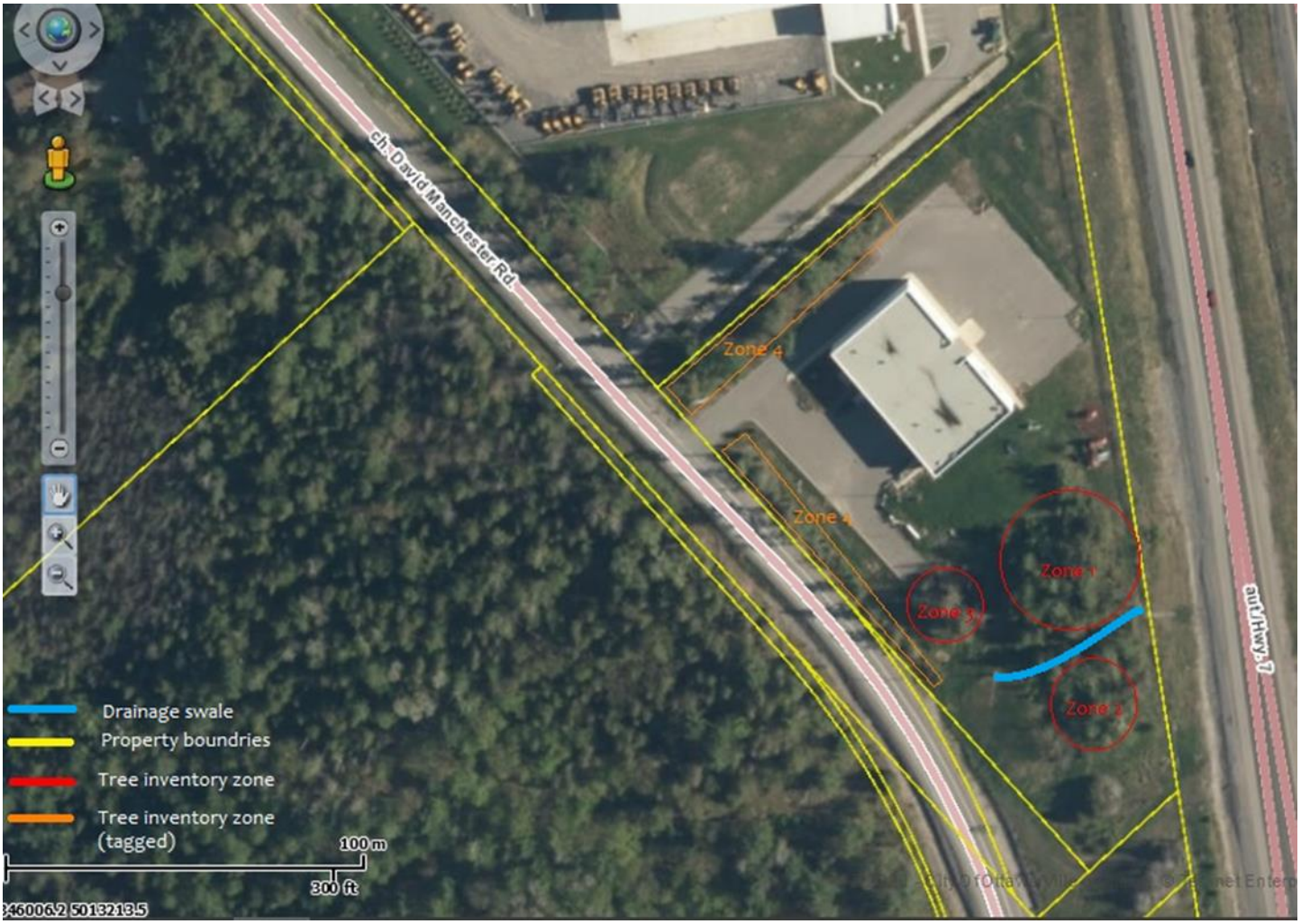


Fig. 1: Tree inventory zones on the property at 130 David Manchester Rd.

Tree Inventory Sheets for Zones 1,2 & 3

Note: 173 Total Trees

ZONE 1 (118 TREES)						
Tree No.	**Species**	**Condition (P, F, G)**	**DBH (cm)**	**Required Maintenance / Notes**	**Priority (1,2,3)**	**Work Done (yr.)**
2	trembling aspen	F	12			
3	balsam fir	F	13.8			
4	trembling aspen	F	24.4	Leaning		
5	trembling aspen	P	23	Dead top		
6	balsam fir	P	20	Dead		
7	trembling aspen	p	19.2	Poor growth form		
8	white cedar	F	13			
9	white spruce	F	17			
10	white cedar	G	14.6			
11	trembling aspen	F	19.2			
12	white cedar	P	17	Leaning		
13	white cedar	F	21.3			
14	white pine	G	21			
15	white cedar	F	25.1			
16	white spruce	G	35.1			
17	white cedar	P	22	Leaning		
18	white cedar	P	19	Leaning		
19	trembling aspen	G	24.9			
20	trembling aspen	G	21.7			
21	american elm	F	12.6			
22	trembling aspen	F	17			
23	white cedar	G	27			
24	white cedar	F	39			
25	white cedar	F	37.5			
26	white cedar	F	21.4			
27	white spruce	F	18.5			
28	white cedar	F	16.4			
29	white birch	G	23			
30	trembling aspen	F	18.5			
31	white spruce	G	21.3			

32	white pine	G	13.2				
33	american elm	P	12		Infected: elm yellows		
34	white cedar	F	14.1				
35	white cedar	G	19.8				
36	white cedar	F	10.1				
37	white cedar	F	19.9				
38	white cedar	F	18				
39	trembling aspen	P	30		90 % dead		
40	white cedar	F	16				
41	white cedar	F	18.8				
42	white cedar	F	28.6				
43	white spruce	G	28.5				
44	white spruce	G	23.2				
45	white spruce	G	11.5				
46	white spruce	F	10.2				
47	white spruce	F	11				
48	white spruce	F	13.6				
49	white spruce	F	13				
50	white spruce	F	11.3				
51	white pine	G	24		Near playground structure Hwy7		
52	white spruce	F	12		Edge of Zone 1, near playground structure		
53	trembling aspen	P	14.1		Poor growth form		
54	trembling aspen	F	20.6				
55	white pine	G	18				
56	trembling aspen	P	10		Damage to main stem		
57	white spruce	F	10				
58	trembling aspen	F	12.3				
59	white spruce	F	12.6				
60	white cedar	F	13.2				
61	white cedar	F	15.6				
62	white cedar	F	13.2				
63	white spruce	G	32		Christmas lights installed along Hwy 7		
64	white spruce	F	21.6				
65	white spruce	F	21.6				
66	white spruce	P	17.6		Main stem has horizontal crack		
67	white spruce	G	17.3				
68	white spruce	F	13.3				

69	white spruce	F	14				
70	white spruce	F	18.5				
71	trembling aspen	G	11.1				
72	white cedar	F	12				
73	white pine	G	31				
74	white cedar	G	18.3				
75	white cedar	F	14				
76	white spruce	F	14.1				
77	white cedar	F	16.1				
78	white pine	F	35.6		Leaning stem, heavy crown		
79	white cedar	G	16.6				
80	white spruce	F	32				
81	trembling aspen	P	44		80 % Dead		
82	white cedar	F	30.3		Cavity in main stem		
83	white spruce	G	32				
84	trembling aspen	G	12				
85	white cedar	F	32.5		Edge of swale		
86	white cedar	P	22.3		Heavy lean		
87	white cedar	F	16.1,16.4		Multi-stemmed		
88	white spruce	F	16.7		Edge of swale, west side		
89	white cedar	F	13.4				
90	white cedar	F	13				
91	white cedar	F	13.2				
92	white cedar	F	13.6				
93	white cedar	F	14				
94	white cedar	G	14.1				
95	white cedar	G	13				
96	white cedar	F	19				
97	white cedar	F	20.8				
98	white cedar	F	18.1				
99	white cedar	P	36.6		Broken top		
100	white cedar	F	21.2				
101	white cedar	F	22.2				
102	white cedar	F	23.3				
103	white cedar	F	23.6				
104	white cedar	F	22				
105	white cedar	G	17.2				
106	white cedar	G	21.2				
107	white cedar	G	20				
108	white cedar	G	14.6				
109	white cedar	F	29		Double leader, edge of swale, west side		

110	white pine	F	20				
111	white cedar	F	20				
112	white cedar	G	13.6				
113	white cedar	F	13.2				
114	white cedar	F	10.1				
115	white spruce	F	20.6				
116	white cedar	F	32.6		Leaning		
117	white pine	F	17.5		Corner of swale, west side		
118	white pine	F	14.6				

ZONE 2 (36 trees)						
Tree No.	**Species**	**Condition (P, F, G)**	**D.B.H. (cm)**	**Required Maintenance / Notes**	**Priority (1,2,3)**	**Work Done (yr.)**
120	white cedar	F	17.1	Corner of swale		
121	white cedar	F	14.2			
122	trembling aspen	F	24.1			
123	white cedar	F	24.3			
124	white cedar	F	10			
125	trembling aspen	P	22.5	Dead		
126	white cedar	F	10.1			
127	white cedar	F	10			
128	white cedar	F	11.2			
129	white cedar	F	10.5			
130	white cedar	F	10.1			
131	white cedar	G	14.1			
132	white cedar	G	14.5			
133	white cedar	G	13.2			
134	white cedar	F	12			
135	white cedar	F	12.2			
136	white cedar	G	10.2			
137	american elm	P	13	Infected, elm yellows		
138	white cedar	F	19			
139	white cedar	F	19.7			
140	white cedar	F	17.3			
141	white cedar	G	16			
142	white cedar	F	16.8			
143	white cedar	F	14.2			
144	american elm	F	16.1			
145	white spruce	F	24	Edge of swale		
146	white spruce	P	29	Poor growth form		
147	tamarack	G	11.5	Newer planting		
148	tamarack	G	10.3	Newer planting		
149	tamarack	G	9.6	Newer planting		
150	tamarack	G	8.8	Newer planting		
151	tamarack	G	7.5	Newer planting		
152	tamarack	G	8.8	Newer planting		
153	tamarack	G	9	Newer planting		
154	tamarack	G	8.2	Newer planting		

ZONE 3 (19 trees)						
Tree No.	**Species**	**Condition (P, F, G)**	**DBH (cm)**	**Required Maintenance / Notes**	**Priority (1,2,3)**	**Work Done (yr.)**
156	white spruce	F	14.2			
157	white cedar	F	19.7			
158	white cedar	F	34			
159	white cedar	F	12			
160	white cedar	F	11.6			
161	ironwood	G	24.2			
162	balsam fir	F	27.2			
163	white cedar	G	17.8			
164	white cedar	F	20			
165	white cedar	F	17.6			
166	white cedar	F	19.2			
167	white spruce	F	19			
168	white spruce	F	31,27,26.2	Multi-stemmed		
169	white pine	P	40.4	Dead		
170	white cedar	F	14.8			
171	white cedar	F	14			
172	white cedar	P	16.3	Dead		
173	white cedar	P	18.4	Broken top		

Inventory List Generated on August 17, 2020

Tree Inventory Sheets for Zone 4

Note: 77 Total Trees

ZONE 4						
Tree No.	**Species**	**Condition (P, F, G)**	**D.B.H. (cm)**	**Required Maintenance / Notes**	**Priority (1,2,3)**	**Work Done (yr.)**
600	balsam poplar	P	17.9	Damage to main stem		
601	balsam fir	F	12.5			
602	white birch	F	15.5			
603	white birch	F	13			
604	white spruce	F	12.2			
605	white birch	F	11.7			
606	white pine	F	24.8			
607	balsam fir	F	12			
608	balsam fir	F	14.6			
609	white pine	F	23			
610	balsam fir	F	11.1			
611	balsam fir	F	14.6			
612	white spruce	F	19.3			
613	white birch	G	39	Slight lean towards neighbouring property		
614	white spruce	P	27.4	Significant deadwood present		
615	balsam fir	G	23.4			
616	white spruce	F	22.7	Very close to property fence		
617	white spruce	G	39.5			
618	white pine	F	15.8	Close competition with neighbouring oak		
619	red oak	G	34.4	Close competition with neighbouring white pine		
699	white pine	F	40.5	Edge tree, Christmas lights installed		
620	balsam fir	F	14.6			
621	white pine	P	15.6	Damage to main stem		
622	balsam fir	G	22.5			
623	white pine	F	15.2			
624	balsam fir	F	16.7			
625	white pine	F	20.2	Curved stem growth		
626	white pine	G	12.4			
627	black ash	F	10.5			
628	black ash	F	15.5			
629	black ash	F	11.7			

630	white pine	G	35.8	Slight lean towards neighbouring property		
631	trembling aspen	G	13.1			
632	trembling aspen	F	11.5			
633	trembling aspen	F	14.9			
634	trembling aspen	P	12			
635	trembling aspen	F	17.5			
636	trembling aspen	F	14			
637	trembling aspen	F	13.2			
638	trembling aspen	F	12.2			
639	trembling aspen	F	12.6			
640	trembling aspen	F	13.6			
641	trembling aspen	F	13			
642	trembling aspen	F	14.1			
643	trembling aspen	F	13			
644	trembling aspen	F	12.2			
645	trembling aspen	F	12.6			
646	trembling aspen	F	15			
647	trembling aspen	F	14.8			
648	trembling aspen	F	14.8			
649	white cedar	F	26.5			
650	white cedar	34.4	P	Significant crown dieback, location beside John Deere dealership, at David Manchester		
651	white spruce	34	P	Significant crown dieback		
652	trembling aspen	G	15.5			
653	balsam fir	G	11.3			
654	white pine	P	11.3			
655	white cedar	P	30	Significant crown dieback		
656	white pine	G	11.5	New planting, beside entrance drive		

657	white cedar	F	17.3			
658	white spruce	F	32.5			
659	white cedar	F	11.2			
660	white pine	F	32.6			
661	white pine	F	11.2			
662	white pine	F	24.5			
663	white pine	F	10.4			
664	white spruce	F	19.2			
665	white spruce	F	19			
666	white pine	G	11.3			
667	white cedar	G	28.5			
668	white pine	G	10.2			
669	white spruce	F	25.5	Significant deadwood present		
670	white cedar	G	11.2			
671	white spruce	F	17.4			
672	white cedar	F	25.5	Red ribbon attached		
673	white cedar	F	28.2	Red ribbon attached		
674	white cedar	P	32.7	Dead top, significant deadwood throughout		
675	white cedar	F	16.5	Damage to main stem		

Inventory List Generated on August 17, 2020

Building Site and Disturbance Limits

The proposed project involves an expansion to the southeast of the current building. The expansion will require the removal of all trees in tree inventory Zone 3 as well as many of the trees in tree inventory Zone 1 (fig. 2). Several trees will need to be removed from Zone 5, where the entrance driveway will be modified. The remaining tree inventory zones are at a safe distance from the proposed construction site and are further protected by barriers such as the drainage swale and the parking lot and driveways.

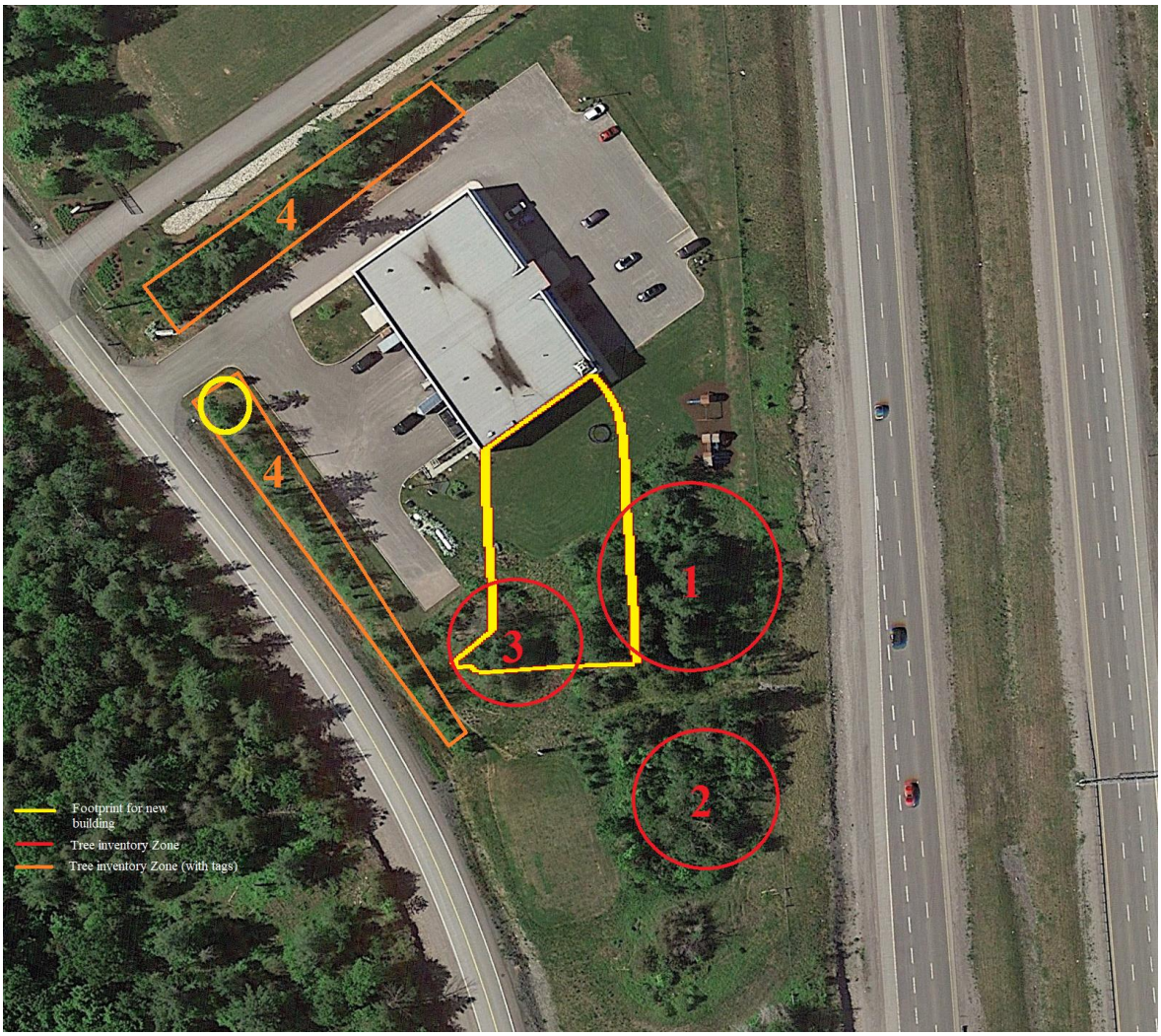


Fig. 2: Estimated limits of disturbance from construction

Site-Specific Tree Protection Measures

Care should be taken to preserve Zones 2 and 4 during construction. Temporary fencing should be installed around these zones at the limits of the critical root zone (CRZ), and access to these zones should be forbidden during construction. This site does not have any free-standing distinctive trees, so a focus on preserving the wooded plots is important both to preserve the tree cover and for the benefit of the local wildlife.

Tree Planting Recommendations

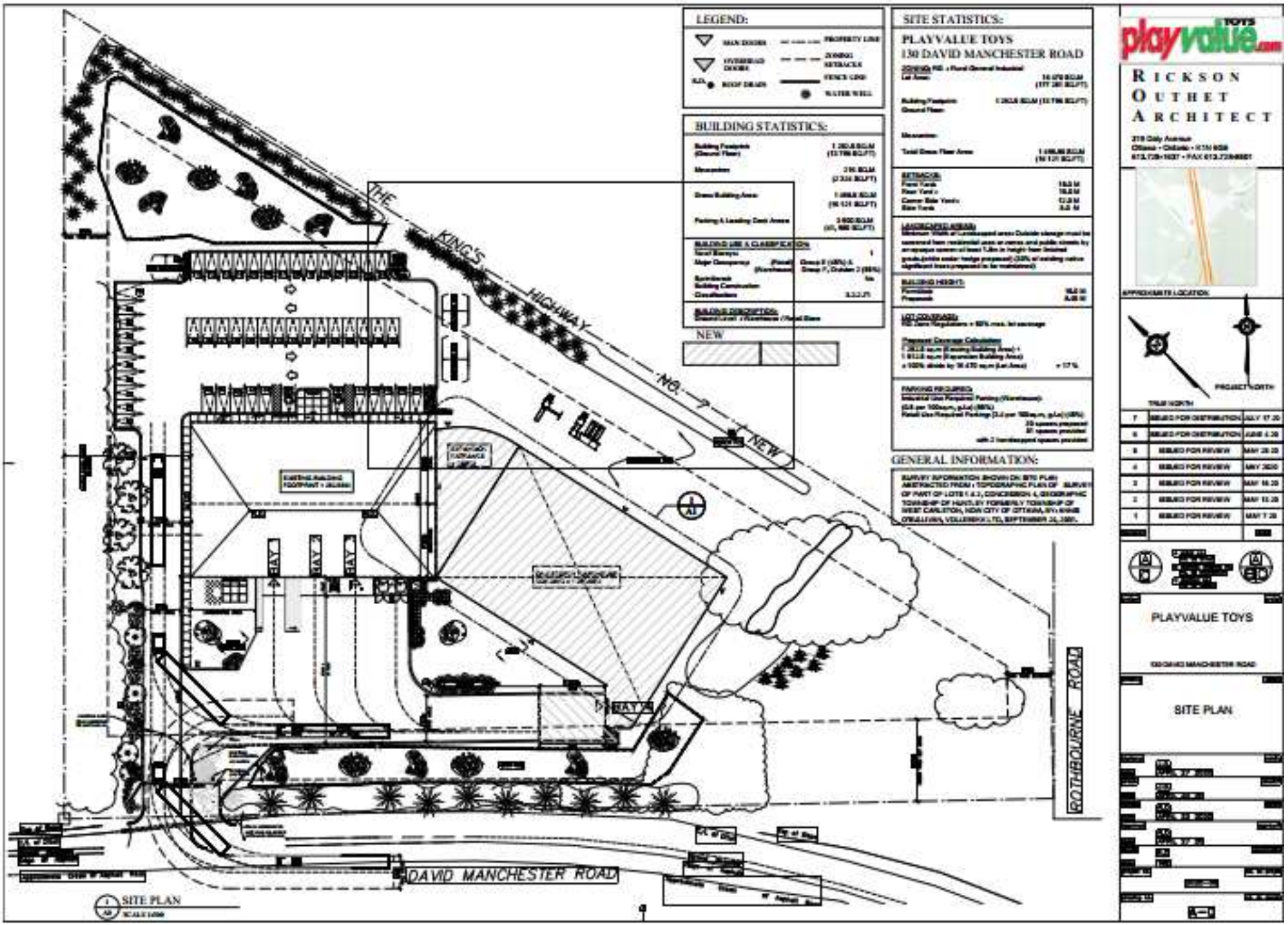
When compared to neighbouring commercial properties, this site shows a significant amount of tree cover presently. Post-construction, there will be little room for new plantings on the property.

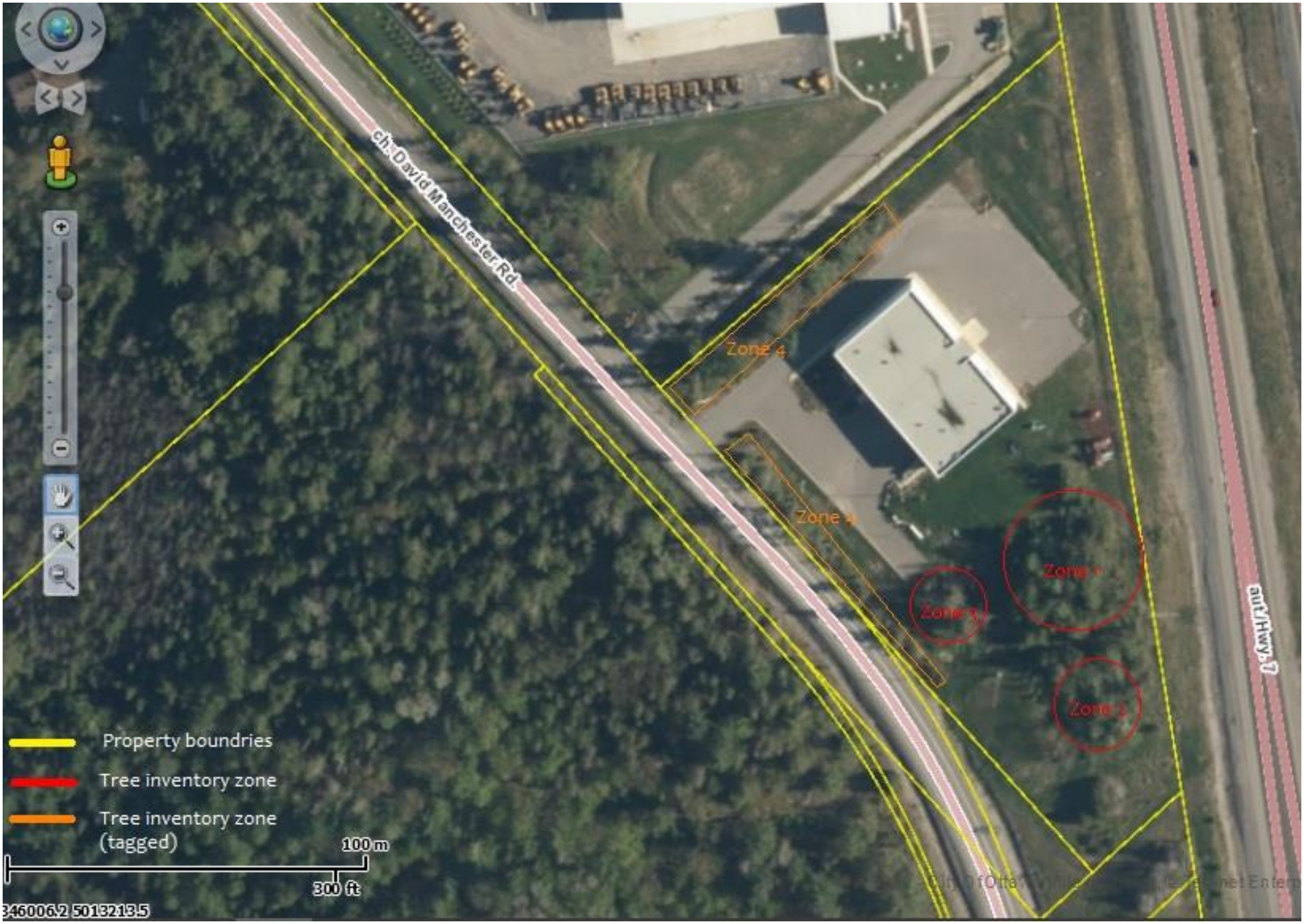
My recommendation is to carefully preserve the unaffected tree inventory zones. Should there be sufficient space for any new plantings post construction, I would recommend selecting native species of more value that are suited to the site conditions.

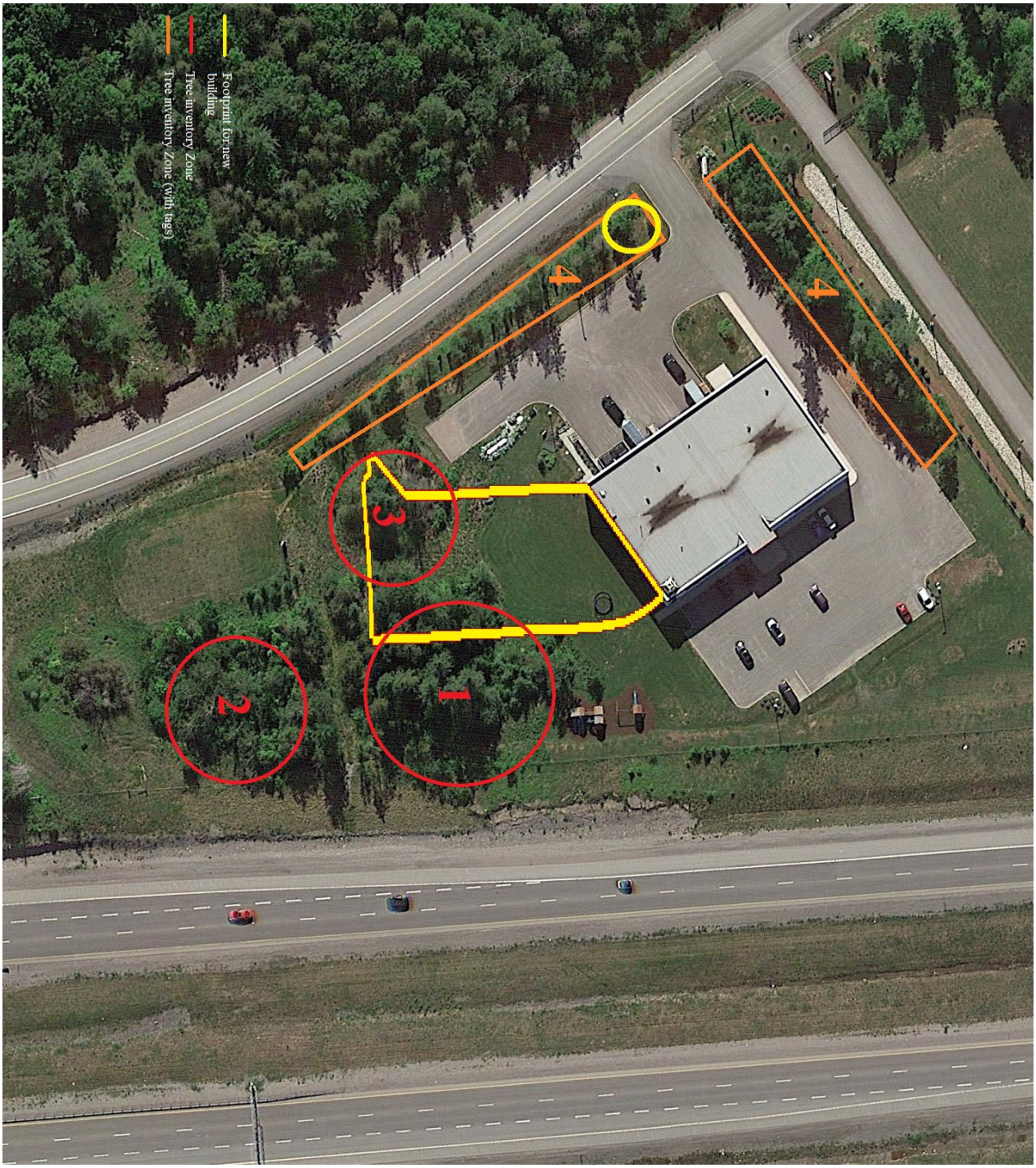
Erik von Luczenbacher

ISA Certified Arborist # ON-0920A
Ontario Ministry Trade Certificate # 401157769

Appendix


LEGEND:
PROPERTY LINE
ZONING SETBACKS
FENCE LINE
WATER WELL
BUILDING STATISTICS:
NEW
SITE STATISTICS:
PLAYVALUE TOYS
130 DAVID MANCHESTER ROAD
SETBACKS:
LANDSCAPED AREAS:
BUILDING HEIGHT:
LOT COVERAGE:
PARKING REQUIRED:
GENERAL INFORMATION:
THE KING'S HIGHWAY NO. 7
DAVID MANCHESTER ROAD
SOUTHBOURNE ROAD
SITE PLAN
SCALE 1:200
playvalue.com
RICKSON OUTHET ARCHITECT
PLAYVALUE TOYS
SITE PLAN


ch. David Manchester Rd
Zone 4
Zone 3
Zone 1
Zone 2
Zone 5
Property boundries
Tree inventory zone
Tree inventory zone (tagged)
100 m
300 ft
346006.2 5013213.5


Footprint for new building
Tree inventory Zone
Trees inventory Zone (with tags)
4
4
3
2
1

Guidelines to Ensure Maximum Preservation of Trees Near Construction:

Fence off area around the CRZ of tree or grouping of trees to minimize soil compaction and preserve majority of root system. No one should enter fenced area, nor should any building materials be left within fence

When digging within the CRZ of a tree, hand digging is preferable, but at the very least, any roots that must be cut are to be cut cleanly with a saw and not torn off.

Any cut roots must have cut ends wrapped in burlap or another absorbent material and kept damp while exposed to the air so that the cut ends do not dry out.

Under no circumstance should a tree be used as an anchor point for equipment and care should be taken not to damage the bark by hitting it with machinery or by other mechanical means.

If grade changes are to occur around any given tree, the entire critical root zone, from the stem to the drip line of the canopy should be preserved by means of a tree well, to ensure no grade change occurs within this area.

Explanation of Table Headings:

Tree Species:
For ease of use, tree species are listed by common names
Tree Condition:
P – poor condition, F- fair condition, G- good condition
D.B.H. :
Diameter at breast height (1.2M from ground level)

Glossary of Arboriculture terms:

Canopy – the upper branches of a tree that hold majority of leaves and buds, also called the Crown
Cavity – hole caused by wood decay fungus occurring on the main stem or limbs of tree
Competition – a struggle to obtain sunlight between two or more trees
CRZ – the critical root zone of a tree
Dead wood – dead branches and or limbs that occur in the canopy
Decline – used to describe a tree that is failing in health
EAB – acronym for the “Emerald ash borer” beetle
Leader – the main stem or main stems of a tree
Mechanical wound – wound caused by striking the tree with a foreign object, usually tearing off the bark layer

Glossary of scientific tree names:

Common Name	**Scientific name**
American Elm	*Ulmus americana*
Balsam Fir	*Abies balsamia*
Balsam Poplar	*Populus balsamifera*
Black Ash	*Fraxinus nigra*
Ironwood	*Carpinus caroliniana*
Red Oak	*Quercus rubra*
Trembling Aspen	*Populus tremloides*
White Cedar	*Thuja occidentalis*
White Pine	*Pinus strobus*
White Spruce	*Picea glauca*
Common Buckthorn	*Rhamnus cathartica*
Poison Ivy	*Toxicodendron radicans*
Wild Grape	*Vitis spp.*

ENVIRONMENTAL IMPACT STATEMENT ADDENDUM

Playvalue Toys, 130 David Manchester Road, Carp, ON

Project No.: CCO-21-0619

Prepared for:

Doug Jones
Playvalue Toys
130 David Manchester Road,
Carp, ON
K0A 1L0

Prepared by:

McIntosh Perry Consulting Engineers Ltd.
115 Walgreen Road, R.R.3
Carp, Ontario
K0A 1L0

McINTOSH PERRY

ENVIRONMENTAL IMPACT STATEMENT ADDENDUM
PLAYVALUE TOYS, 130 DAVID MANCHESTER ROAD, CARP, ON

Prepared for:

Doug Jones
Playvalue Toys
130 David Manchester Road,
Carp, ON
K0A 1L0

Prepared by:

McINTOSH PERRY

McIntosh Perry Consulting Engineers Ltd.
115 Walgreen Road, R.R.3
Carp, Ontario
K0A 1L0

Version 002
October 23, 2020

Written by: Erik Pohanka, B. Sc.
Biologist
McIntosh Perry Consulting Engineers Ltd.

Reviewed by: Christian Lyon, B. Sc.
Project Manager, Environmental
McIntosh Perry Consulting Engineers Ltd.

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Appendices

1.0 PROPERTY INFORMATION AND INTRODUCTION

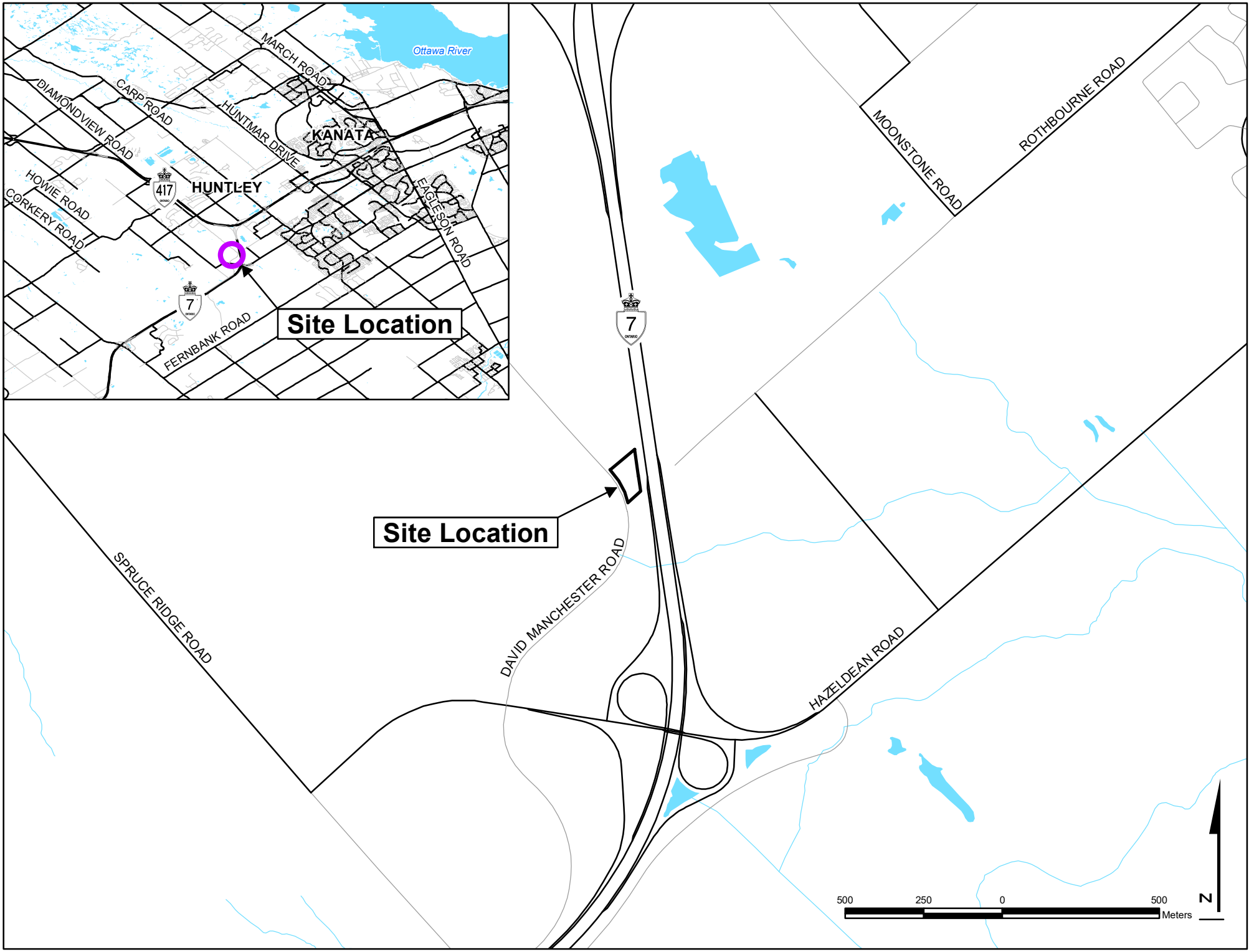
The subject property for this *Environmental Impact Statement (EIS) Addendum* is a 1.64 ha parcel of land located at 130 David Manchester Road, Property Identification Number 045361345, 045360744, 045360742, and is legally known as Part Lot 1, Concession 4, Huntley Township, City of Ottawa. The subject property is located within the west end of the City of Ottawa near the town of Stittsville owned by Playvalue Toys (**Figure 1**).

The current planning designation of the property in the *City of Ottawa Official Plan* (City of Ottawa, 2003) is 'Rural Natural Features Area' and the zoning is Rural General Industrial (RG). The north end of the subject property is currently developed as a commercial space and the south end is undeveloped.

The subject property is located within the jurisdiction of the Ministry of Natural Resources and Forestry's (MNRF) - Kemptville District and the Ministry of Environment, Conservation and Park's (MECP) – Ottawa District. This EIS focuses on the undeveloped parcel of land south of the existing commercial space within the subject property. The existing commercial space will not be included as part of the study area and will be considered adjacent lands. Information on the development of the north end of the subject property can be found in the *Environmental Impact Statement* prepared by McIntosh Perry Consulting Engineers Ltd. (McIntosh Perry) in 2012. This addendum will supplement the 2012 report and focus on the remaining undeveloped land in the south end of the subject property.

Due to the subject property's designation as 'Rural Natural Features Area', the City of Ottawa requires an addendum to the 2012 EIS for the proposed development of the south end of the subject property, as outlined in the *Environmental Impact Statement Guidelines* (City of Ottawa, 2015a). This EIS addendum report assesses the potential impacts that the development of a new warehouse may have upon the existing woodlands, including Significant Woodlands, species at risk (SAR), and their habitat.

McIntosh Perry was retained by Playvalue Toys to carry out an EIS addendum to assess the existing natural features. This EIS addendum summarizes the findings of the field investigation, outlines potential impacts as a result of the proposed development, and provides recommendations in order to mitigate anticipated impacts on natural features. The information contained in this report represents a field investigation undertaken in the summer of 2020 and does not represent year-round data.


Ottawa River
MARCH ROAD
CARP ROAD
DIAMONDVIEW ROAD
HUNTMAR DRIVE
KANATA
HOWIE ROAD
CORKERY ROAD
417
HUNTLEY
EAGLESON ROAD
7
FERNBANK ROAD
Site Location
MOONSTONE ROAD
ROTHBOURNE ROAD
7
Site Location
SPRUCE RIDGE ROAD
DAVID MANCHESTER ROAD
HAZELDEAN ROAD
500
250
0
500
Meters
N

2.0 METHODOLOGY

In order to acquire information on habitat present within and adjacent to the area of the proposed development, a field investigation was carried out on June 25, 2020 by E. Pohanka of McIntosh Perry (**Table 1**). The field investigation was carried out on the subject property (130 David Manchester Road), within the undeveloped area of the subject property. The area surveyed will be hereafter referred to in this report as the "study area." The field investigation was conducted to provide an inventory and assessment of the natural heritage features of the study area. The field investigation included the identification of the following features within the study area:

- Existing vegetation communities;
- Significant woody vegetation;
- Areas of critical or significant habitat (i.e., Significant Valleylands, Significant Woodlands, Significant Wildlife Habitat, Provincially Significant Woodland's (PSWs), etc.);
- Soil types;
- Areas of groundwater recharge and discharge, drainage patterns, watercourses, wetland habitat, other areas of surface water;
- SAR and their habitat, and
- Resident or migratory birds and other wildlife species.

Table 1 outlines activities carried out within the study area during the field investigation.

Table 1: Summary of Field Investigation Activities

Date	Personnel Involved	Weather Conditions	Purpose of Visit
June 25, 2020	E. Pohanka	18 °C, overcast, low wind	Existing environmental conditions survey (including identification of vegetation and wildlife species present and determining vegetation community boundaries) and species at risk habitat screening.

The vegetation communities observed within the study area were characterized using the Ecological Land Classification (ELC) protocol (Lee et al., 1998), and delineated on an aerial photograph. During the field investigation, observations of wildlife species were made through sight, sound, and physical evidence.

Photographs were taken during the field investigation depicting vegetation communities and natural heritage features observed within the study area. This photographic record can be found in **Appendix A** of this report (**Photos 1 – 13**).

Background information on wildlife and plant species, and other significant natural heritage features known to occur within or adjacent to the study area was obtained from the following sources:

- The Natural Heritage Information Centre (NHIC) database accessed via the MNRF's Make a Map: Natural Heritage Areas (MNRF, 2020a). This search tool allows areas to be searched at up to 1 km^2 grid resolution and provides reports concerning rare species tracked by the NHIC. Information for each 1 km^2 square within the study area was reviewed for occurrences of rare species tracked by NHIC;

- The MNRF's Land Information Ontario (LIO) Metadata Management Tool (2020b). This tool contains information (e.g., location of PSW's, SAR element occurrences, etc.) licensed under the Open Government Licence for Ontario;
- Data from the Ontario Breeding Bird Atlas Database (OBBA) (Bird Studies Canada, 2006) was accessed from the data summaries page of the Atlas of the Breeding Birds of Ontario website. Information for each 10 km^2 grid square was reviewed for the study area;
- Ontario Reptile and Amphibian Atlas (Ontario Nature, 2020) was accessed for the data summaries. Information for each 10 km^2 grid square was reviewed for the study area;
- Information from the *Poole Creek: Macro Stream Assessment Report* by Mississippi Valley Conservation Authority (MVCA) (2009);
- Background information for the study area was obtained through the *Environmental Impact Statement* prepared by McIntosh Perry in 2012;
- Habitat in the study area was evaluated by use of aerial photography accessed through Google Earth aerials and StreetView mapping (Maxar Technologies, 2020), and
- Vascular Plants of the City of Ottawa, with the Identification of Significant Species (Brunton, 2005).

3.0 DESCRIPTION OF THE SITE AND THE NATURAL ENVIRONMENT

3.1 Existing Land Use

At the time of the field investigation, the study area was undeveloped (**Photos 1 - 13**). The study area consists of a vegetated area in successional stages.

Schedule L3 Natural Heritage System Overlay, of the *City of Ottawa Official Plan* (2003), does not identify 'Natural Heritage System Features' within the study area as defined under the *Provincial Policy Statement*, 2014 (PPS). However, the study area is designated as 'Rural Natural Features Area'. Land uses adjacent to the subject property include the existing commercial property to the north (i.e. retail store), transportation infrastructure directly to the east and west, and natural areas to the south and further west.

3.2 Natural Heritage System Components

The following background information was collected from various sources (refer to Section 2.0 of this report):

- According to the NHIC mapping reviewed, the following natural features have been identified within the vicinity of the study area:
  - Goulbourn Wetland Complex, a PSW;
  - Rothbourne Road natural area;
  - West Queensway Wetland Complex (now part of the Goulbourn Wetland Complex);
- LIO data from the MNRF identified the following natural features have been identified within 2 km of the study area:
  - Goulbourn Wetland Complex (PSW);
  - Unevaluated wetlands in natural areas west of David Manchester Road, east of Highway 7, and approximately 160 m south of the study area.

The PPS defines Significant Wetlands as "…an area identified as provincially significant by the Ontario Ministry of Natural Resources using evaluation procedures established by the Province…" (PPS, 2014). The *City of Ottawa's Official Plan* (2003), identifies wetlands as "…essential components of ecosystems that contribute to the high quality of the environment in Ottawa. Wetlands control and store surface water to assist in flood control, act as sediment traps to improve water quality, and provide habitat for a wide variety of plant and animal species and may serve as recharge areas for groundwater resources". The Goulbourn Wetland Complex was identified within approximately 225 m southeast of the study area based on NHIC and LIO data.

The PPS defines a Significant Woodland 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…". Section 2.4.2 (Natural Features and Functions in the *City of Ottawa's Official Plan* (2003), defines Significant Woodlands "…as woodlands that combine all three features listed below in a contiguous (canopy appears unbroken on an aerial photograph), forested area:

- Mature stands of trees 80 years of age or older;

- Interior forest habitat located more than 100 m inside the edge of a forest patch, and
- Woodland adjacent to a surface water feature such as a river, stream, drain, pond, or wetland, or any groundwater feature including springs, seepage areas, or areas of groundwater upwelling".

All wooded vegetation communities within the study area (refer to Section 3.5 of this report for information on vegetation communities present within the study area), were not considered to be Significant Woodland based on the City of Ottawa *Official Plan* (2003).

3.3 Landforms, Soils and Geology

The physiography of the study area is within the glaciomarine deposit. The bedrock geology of the study area consists of limestone, dolostone, sandstone, and shale of the Ottawa Group, Simcoe Group, and Shadow Lake Formation (Ontario Geological Survey, 2010). According to the *Soils of the Regional Municipality of Ottawa-Carleton* (Canada Department of Agriculture, 1987), soils present within the study area included neutral to medium acid fine sand or loamy sand, on nearly level slopes with good to poor drainage.

3.4 Surface Water, Groundwater, and Fish Habitat

The property is located within the Poole Creek Subwatershed of the Mississippi Valley Watershed managed by the MVCA (2009). No water features within 30 m of the study are were identified through background information or field investigation. No fish habitat is present within the or adjacent to the study area.

During the field investigation, the soils were observed to have moderately poor drainage as was evident with the damp soils present in the middle of the study area. A wet swale was present through the wooded area which connected to a drain under Highway 7 at the east boundary and a drain under David Manchester Road at the west boundary. No surface water was observed.

No well records were identified within the study area. A total of five (5) wells are located within 500 m of the study area. The well depths range from 3.6. m to 91.4 m. The well uses range from domestic water supply (3), public water supply (1), and unknown (1).

3.5 Vegetation Cover

A summer vegetation survey was completed on June 25, 2020. Habitat observed during the field investigation included three (3) vegetation communities. The following section outlines the existing vegetation communities identified within the study area. Photographs of the vegetation communities can be found in **Appendix A**. No nationally, provincially or regionally rare or SAR plant species were observed during the June 25, 2020 field investigation. No rare vegetation communities were observed.

3.5.1 Vegetation Community 1: Dry-Fresh Forb Meadow (MEFM1)

Vegetation Community 1 was classified through ELC as a Dry-Fresh Forb Meadow (MEFM1) (**Photos 3 and 8**). This community lacked significant woody vegetation. It was previously cleared and is considered a disturbed area with herbaceous growth regenerating the area. The dominant species included grass (*Poaceae spp.*), common milkweed (*Asclepias syriaca*), and common non-native plants. The northwest end of this community is maintained by mowing

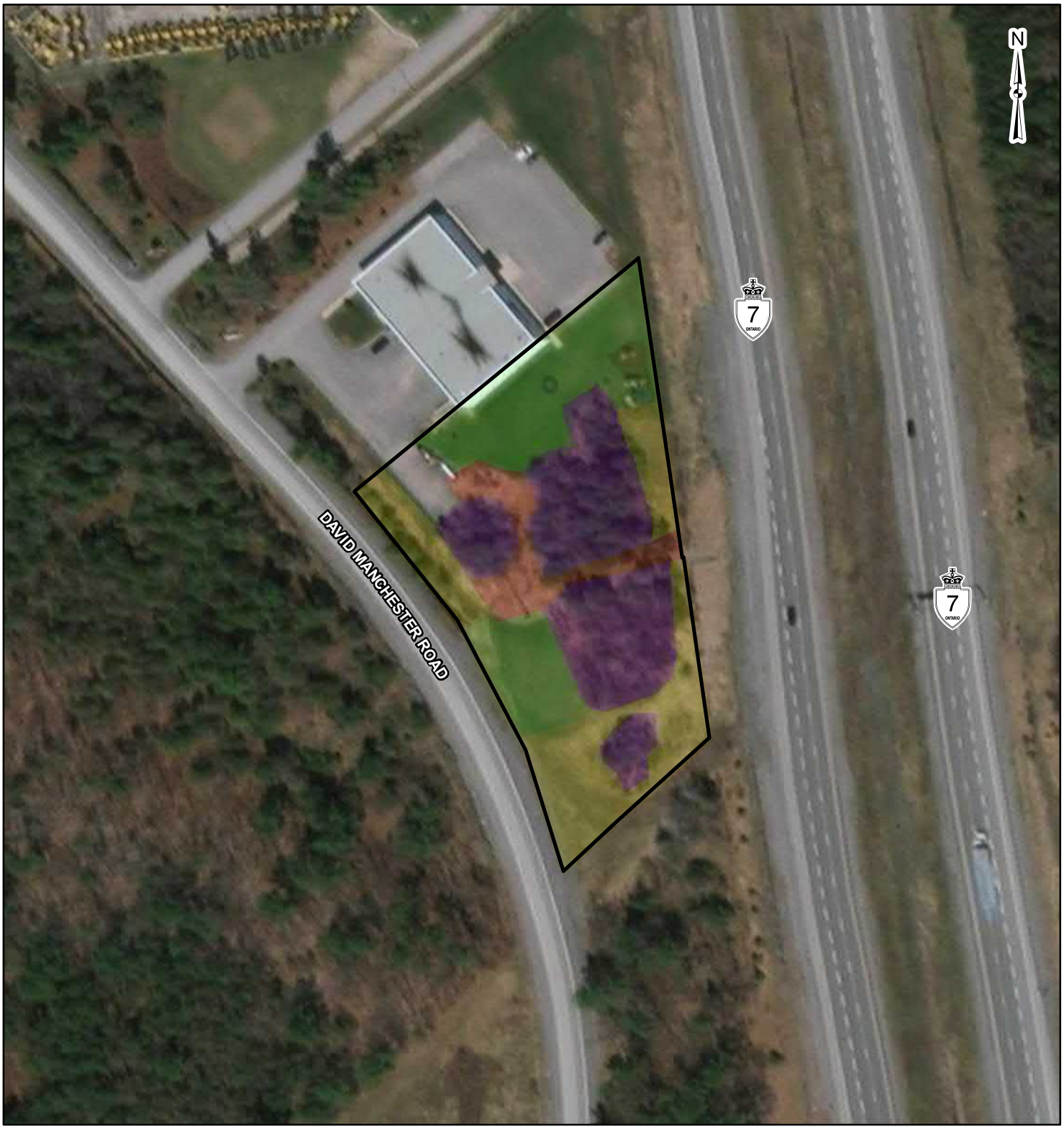
(**Photo 8**). This community was present along the west, south, and east boundaries of the study area.

3.5.2 Vegetation Community 2: Fresh-Moist White Cedar-Hardwood Mixed Woodland (WOMM4-1)

Vegetation Community 2 was classified through ELC as a Fresh-Moist White Cedar-Hardwood Mixed Woodland (WOMM4-1) (**Photos 1, 3, 4, 7, 10**). This community was made up the majority of the study area and is located in the middle of the study area. The canopy of this community consisted of a mix of mature eastern white-cedar (*Thuja occidentalis*), white ash (*Fraxinus americana*), and eastern white pine (*Pinus strobus*). Understory species was dominated by glossy buckthorn (*Frangula alnus*). The narrow stand of mature trees contained in this community most likely represents mature forest that was previously present throughout the surrounding lands prior to clearing. Based on Google Earth (Maxar Technologies, 2020) satellite imagery, this community was intact as early as 2004.

3.5.3 Vegetation Community 3: Fresh-Moist Graminoid Meadow (MEGM4)

Vegetation Community 3 was classified through ELC as a Fresh-Moist Graminoid Meadow (MEGM2) (**Photos 3 - 5**). This community consisted of a swale with damp soils that cut through the Fresh-Moist White Cedar-Hardwood Woodland community in a west-east orientation. This swale linked drains under David Manchester Road and Highway 7. The swale also stretched northwards to the northern boundary of the study area. The swale consisted of vegetation dominated by grasses and broad-leaved cattail (*Typha latifolia*). For a detailed map of vegetation communities present within the study area, refer to **Figure 2**. Refer to **Table 2** for a complete listing of species observed within the study area.



50 25 0 50

Scale 1:1,500 Metres

LEGEND

- Study Area
- Dry-Fresh Forb Meadow (MEFM1)
- Fresh-Moist Graminoid Meadow (MEGM4) - Swale
- Fresh-Moist White Cedar-Hardwood Mixed Woodland (WOMM4-1)
- Mown Lawn

REFERENCE

GIS data provided by the Ontario Ministry of Natural Resources and Forestry, 2020.

CLIENT:	DOUG JONES PLAYVALUE TOYS
PROJECT:	ENVIRONMENTAL IMPACT STATEMENT
TITLE:	NATURAL FEATURES MAP

McINTOSH PERRY
115 Walgreen Road, RR3, Carp, ON K0A1L0
Tel: 613-836-2184 Fax: 613-836-3742
www.mcintoshperry.com

PROJECT NO:	PCO-21-0619
Date	Aug., 17, 2020
GIS	EU
Checked By	EP

FIGURE: 2

C:\Users\e.ungun\McIntosh Perry\GIS Planner - Documents\TEMPORARY U DRIVE PROJECTS\PCO-21-0619 Playvalue Toys EIS Addendum\06 - GIS\mxd\PCO-21-0619_02_NaturalFeatures.mxd

Table 2: Vegetation Species Observed within the Study Area					
Common Name	**Scientific Name**	**Status According to Brunton (2005)**	**Common Name**	**Scientific Name**	**Status According to Brunton (2005)**
Tree Species					
balsam fir	*Abies balsamea*	Common	tamarack	*Larix laricina*	Common
eastern white pine	*Pinus strobus*	Common	trembling aspen	*Populus tremuloides*	Common
eastern white-cedar	*Thuja occidentalis*	Common	white ash	*Fraxinus americana*	Common
paper birch	*Betula papyrifera*	Common	white elm	*Ulmus americana*	Common
red oak	*Quercus rubra*	Common	white spruce	*Picea glauca*	Common
Shrub Species					
black raspberry	*Rubus occidentalis*	Uncommon	riverbank grape	*Vitis riparia*	Common
choke cherry	*Prunus virginiana*	Common	shrub willow	*Salix* spp.	N/A
common blackberry	*Rubus allegheniensis*	Common	silky dogwood	*Cornus amomum*	Uncommon
common buckthorn	*Rhamnus cathartica*	Common (aggressive invasive)	smooth wild rose	*Rosa blanda*	Common
common juniper	*Juniperus communis*	Common	staghorn sumac	*Rhus typhina*	Common
common prickly gooseberry	*Ribes cynosbati*	Common	wester poison-ivy	*Toxicodendron rydbergii*	Common
glossy buckthorn	*Rhamnus frangula*	Common (aggressive invasive)	wild black currant	*Ribes americanum*	Common
honeysuckle	*Lonicera sp.*	N/A	wild red raspberry	*Rubus strigosus*	Common
purple-flowering raspberry	*Rubus odoratus*	Common			
Herbaceous Species					
bedstraw	*Galium sp.*	N/A	goldenrod	*Solidago spp.*	N/A
bird's-foot trefoil	*Lotus corniculatus*	Common	greater burdock	*Arctium minus*	Common
bladder campion	*Silene vulgaris*	Common	narrow-leaved cattail	*Typha angustifolia*	Common
broad-leaved cattail	*Typha latifolia*	Common	ox-eye daisy	*Leucanthemum vulgare*	Common
bull thistle	*Cirsium vulgare*	Common	Philadelphia fleabane	*Erigeron philadelphicus*	Common
Canada thistle	*Cirsium arvense*	Common	phragmites	*Phragmites australis australis*	Uncommon (locally abundant adventive)
coltsfoot	*Tussilago farfara*	Uncommon (spreading common)	Queen Anne's lace	*Daucus carota*	Common
common milkweed	*Asclepias syriaca*	Common	reed canary grass	*Phalaris arundinacea*	Common (locally abundant introduction)
common mugwort	*Artemisia vulgaris*	Common	sedge	*Carex* spp.	N/A
common mullein	*Verbascum thapsus*	Common	smooth brome grass	*Bromus inermis*	Common
common yarrow	*Achillea millefolium*	Common	spikerush	*Eleocharis* spp.	N/A
cow vetch	*Vicia cracca*	Common	spreading dogbane	*Apocynum androsaemifolium*	Common
crown vetch	*Securigera varia*	N/A	tall buttercup	*Ranunculus acris*	Common (invasive)

Table 2: Vegetation Species Observed within the Study Area					
Common Name	**Scientific Name**	**Status According to Brunton (2005)**	**Common Name**	**Scientific Name**	**Status According to Brunton (2005)**
curly dock	*Rumex crispus*	Common	Viper's bugloss	*Echium vulgare*	Common
fern	Polypodiopsida	N/A	white clover	*Trifolium repens*	Common
field horsetail	*Equisetum arvense*	Common	wild columbine	*Aguilegia canadensis*	Common
goat's-beard	*Tragopogon dubius*	Common	wild lettuce	*Lactuca virosa*	N/A

3.6 Habitat for Species at Risk & Significant Wildlife Habitat

Background information obtained from the sources listed in Section 2.0 of this report, indicated that SAR and their habitat were potentially present within and adjacent to the study area. These species have been listed in **Table 3**. Given habitat observed during the field investigation and direct observation of SAR, a determination was made as to whether these species had the potential to be or were present within the study area (**Table 3**).

Table 3: Species at Risk Potentially or Confirmed to be Present within the Study Area

*Common Name	Scientific Name	Provincial Status (ESA, 2007)	Federal Status (SARA Schedule 1)	Potential/Unconfirmed or Confirmed Habitat Present within Property Boundaries
Plants				
Butternut[5]	*Juglans cinerea*	Endangered	Endangered	None observed
Eastern Prairie Fringed Orchid[5]	*Platanthera leucophaea*	Endangered	Endangered	No habitat
Insects				
Gypsy Cuckoo Bumble Bee[5]	*Bombus bohemicus*	Endangered	Endangered	No habitat
Monarch[5]	*Danaus plexippus*	Special Concern	Special Concern	Potential/Unconfirmed
Amphibians				
Jefferson Salamander[5]	*Ambystoma jeffersonianum*	Endangered	Endangered	No habitat
Western Chorus Frog[4, 5]	*Pseudacris triseriata*	No Status	Threatened	No habitat
Turtles				
Blanding's Turtle[1, 2, 4, 5]	*Emydoidea blandingii*	Threatened	Threatened	No habitat
Common Snapping Turtle[1, 4, 5]	*Chelydra serpentina*	Special Concern	Special Concern	No habitat
Snakes and Lizards				
Eastern Milksnake[4, 5]	*Lampropeltis triangulum triangulum*	No Status	Special Concern	Potential/Unconfirmed
Birds				
Bald Eagle[5]	*Haliaeetus leucocephalus*	Special Concern	N/A	No habitat
Bank Swallow[3, 5]	*Riparia riparia*	Threatened	Threatened	No habitat
Barn Swallow[3, 5]	*Hirundo rustica*	Threatened	Threatened	No habitat

Table 3: Species at Risk Potentially or Confirmed to be Present within the Study Area				
***Common Name**	**Scientific Name**	**Provincial Status (ESA, 2007)**	**Federal Status (SARA Schedule 1)**	**Potential/Unconfirmed or Confirmed Habitat Present within Property Boundaries**
Black Tern[6]	*Chlidonias niger*	Special Concern	N/A	No habitat
Bobolink[3, 5]	*Dolichonyx oryzivorus*	Threatened	Threatened	No habitat
Canada Warbler[5]	*Cardellina Canadensis*	Special Concern	Threatened	No habitat
Chimney Swift[5]	*Chaetura pelagica*	Threatened	Threatened	No habitat
Common Nighthawk[5]	*Chordeiles minor*	Special Concern	Threatened	No habitat
Eastern Meadowlark[3, 5]	*Sturnella magna*	Threatened	Threatened	No habitat
Eastern Whip-poor-will[3, 5]	*Antrostomus vociferous*	Threatened	Threatened	No habitat
Eastern Wood-pewee[3, 5]	*Contopus virens*	Special Concern	Special Concern	Potential/Unconfirmed
Evening Grosbeak[3, 5]	*Coccothraustes vespertinus*	Special Concern	No Status	No habitat
Golden-winged Warbler[5]	*Vermivora chrysoptera*	Special Concern	Threatened	No habitat
Grasshopper Sparrow[5]	*Ammodramus savannarum*	Special Concern	Special Concern	No habitat
Least Bittern[5]	*Ixobrychus exilis*	Threatened	Threatened	No habitat
Loggerhead Shrike[5]	*Lanius ludovicianus*	Endangered	No Status	No habitat
Olive-sided Flycatcher[5]	*Contopus cooperi*	Special Concern	Threatened	No habitat
Red-headed Woodpecker[5]	*Melanerpes erythrocephalus*	Special Concern	Threatened	No habitat
Rusty Blackbird[5]	*Euphagus carolinus*	Special Concern	Special Concern	No habitat
Short-eared Owl[5]	*Asio flammeus*	Special Concern	Special Concern	No habitat
Wood Thrush[3, 5]	*Hylocichla mustelina*	Special Concern	Threatened	No habitat
Mammals				
Eastern Small-footed Myotis[5]	*Myotis leibii*	Endangered	N/A	No habitat

Table 3: Species at Risk Potentially or Confirmed to be Present within the Study Area				
*Common Name	Scientific Name	Provincial Status (ESA, 2007)	Federal Status (SARA Schedule 1)	Potential/Unconfirmed or Confirmed Habitat Present within Property Boundaries
Little Brown Myotis[5]	*Myotis lucifugus*	Endangered	Endangered	No habitat
Northern Myotis[5]	*Myotis septentrionalis*	Endangered	Endangered	No habitat
Tri-coloured Bat[5]	*Perimyotis subflavus*	Endangered	Endangered	No habitat

*This table was assembled from various sources of background information. The following information sources were consulted to compile background information: 1 – LIO geodatabase (MNRF, 2020b); 2 – NHIC data (MNRF, 2020a); 3 – Atlas of the Breeding Birds of Ontario (Bird Studies Canada et al., 2008); 4 – Ontario Reptile and Amphibian Atlas (Ontario Nature, 2020); 5 – General range

Of the SAR identified by background information as potentially present within the vicinity of the study area, habitat observed during the field investigation within the study area does not appear to be suitable for the life processes of the following SAR: Bald Eagle, Bank Swallow, Barn Swallow, Black Tern, Blanding's Turtle, Bobolink, Butternut, Canada Warbler, Chimney Swift, Common Snapping Turtle, Eastern Meadowlark, Eastern Prairie Fringed Orchid, Eastern Small-footed Myotis, Eastern Whip-poor-will, Evening Grosbeak, Golden-winged Warbler, Grasshopper Sparrow, Gypsy Cuckoo Bumble Bee, Jefferson Salamander, Least Bittern, Little Brown Myotis, Loggerhead Shrike, Northern Myotis, Olive-sided Flycatcher, Red-headed Woodpecker, Short-eared Owl, Tri-colored Bat, Western Chorus Frog, and Wood Thrush.

Butternuts were not identified within or adjacent to the study area. Although this species can utilize a variety of habitats for growing conditions, the study area is small in area and the wooded areas would create too much shade for the preference of Butternuts. It is unlikely that this species will successfully propagate within the study area.

Suitable habitat for the following species was deemed to be potentially present within the study area, during the 2020 field investigation: Eastern Milksnake, Eastern Wood-pewee, and Monarch.

Adult Monarch may utilize cultural meadows, meadow marshes, and cultural thickets within the study area for foraging if there are a variety of wildflowers available. This species relies heavily on milkweed (*Asclepias* spp.) for several life processes. Common milkweed was identified within the study area. This species is listed as 'Special Concern' under the *Endangered Species Act* (2007) (ESA) and *Species at Risk Act* (2002) (SARA) and does not receive habitat protection. No individuals of this species were observed during the field investigations.

The Eastern Milksnake may be present within the study area for foraging, breeding, and/or overwintering. This species is considered a habitat generalist and may utilize a variety of habitats within and adjacent to the study area. This species is listed as 'Special Concern' under the SARA and does not receive habitat protection. No individuals of this species were observed during the field investigations.

The Eastern Wood-pewee is listed as 'Special Concern' under the ESA and SARA. The habitat for this species is not afforded protection under the ESA or SARA. However, individuals of this species, their eggs, nest and fledglings are

protected under the *Migratory Birds Convention Act* (MBCA) (1994). The Eastern Wood-pewee is a habitat generalist which will utilize a variety of habitats for nesting and foraging; however, it prefers forested edge habitat near water. Habitat of this type is available in ephemeral conditions (i.e. swale could be wet depending on precipitation) within the study area. However, it is unlikely that this species relies on the study area for important life processes as no individuals were identified during the field investigation.

3.7 Wildlife & Significant Wildlife Habitat

The study area is located in the Smiths Falls Ecodistrict (6E-11) of the Lake Simcoe-Rideau Ecoregion (6E) within the Mixedwood Plains Ecozone (Ecological Stratification Working Group, 1996). Characteristic wildlife present within this Ecoregion includes: northern raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), white-tailed deer (*Odocoileus virginianus*), groundhog (*Marmota monax*), waterfowl, turtles, snakes, and various bird species (Crins, et al., 2009).

The following section outlines the existing wildlife observations from the field investigation conducted within the study area. **Table 4** lists the species observed during the June 25, 2020 field investigation.

Table 4: Wildlife Species Observed within the Study Area

Common Name	Scientific Name	Resident/Seasonally	Evidence
Birds			
American Goldfinch	*Spinus tristis*	Seasonally	Singing male, within appropriate breeding habitat, during appropriate breeding season
American Robin	*Turdus migratorius*	Seasonally	Singing male, within appropriate breeding habitat, during appropriate breeding season
Black-and-white Warbler	*Mniotilta varia*	Seasonally	Singing male
Blue Jay	*Cyanocitta cristata*	Resident	Singing male
Brown-headed Cowbird	*Molothrus ater*	Seasonally	Visual observation
Chestnut-sided Warbler	*Setophaga pensylvanica*	Seasonally	Singing male, within appropriate breeding habitat, during appropriate breeding season
European Starling	*Sturnus vulgaris*	Resident	Visual observation
Great Crested Flycatcher	*Myiarchus crinitus*	Seasonally	Singing male, within appropriate breeding habitat, during appropriate breeding season
Ovenbird	*Seiurus aurocapilla*	Seasonally	Singing male
Red-eyed Vireo	*Vireo olivaceus*	Seasonally	Singing male
Song Sparrow	*Melospiza melodia*	Seasonally	Singing male, within appropriate breeding habitat, during appropriate

Table 4: Wildlife Species Observed within the Study Area			
Common Name	**Scientific Name**	**Resident/Seasonally**	**Evidence**
			breeding season (singing male)
Mammals			
eastern chipmunk	*Tamias striatus*	Resident	Visual observation
meadow vole	*Microtus pennsylvanicus*	Resident	Visual observation

For those observations of male birds singing, within appropriate breeding habitat, during the appropriate breeding season, this quality of breeding evidence represents "possible breeder," under the Ontario Breeding Bird Atlas' *Breeding Evidence Codes* (Bird Studies Canada, 2020). The American Goldfinch, American Robin, Black-and-white Warbler, Chestnut-sided Warbler, Great Crested Flycatcher, Ovenbird, Red-eyed Vireo, and Song Sparrow, their nests, and eggs are protected under the MBCA. The Blue Jay is afforded protection under the *Fish and Wildlife Conservation Act* (FWCA) (1997). The Brown-headed Cowbird and European Starling are not afforded protection under the MBCA or FWCA.

The study area was examined under the *Natural Heritage Reference Manual* (MNRF, 2010), *Significant Wildlife Habitat Technical Guide* (MNRF, 2000), and its supporting document *Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E* (MNRF 2015) to determine if significant wildlife habitat is present within the existing study area. **Table 5** outlines the various significant wildlife habitat (SWH) categories and rationale on their designation within the study area.

Table 5: Significant Wildlife Habitat within the Study Area		
Specialized Wildlife Habitat Category	**Candidate Significant Wildlife Habitat (Y/N)**	**Confirmed Significant Wildlife Habitat (Y/N)**
Waterfowl Stopover and Staging Areas (Terrestrial)	No	No
Waterfowl Stopover and Staging Areas (Aquatic)	No	No
Shorebird Migratory Stopover Area	No	No
Raptor Wintering Area	No	No
Bat Hibernacula	No	No
Bat Maternity Colonies	No	No
Bat Migratory Stopover Area	No	No
Turtle Wintering Area	No	No
Reptile Hibernaculum	No	No
Colonially-Nesting Bird Breeding Habitat (Bank and Cliff)	No	No
Colonially-Nesting Bird Breeding Habitat (Tree/Shrubs)	No	No
Colonially-Nesting Bird Breeding Habitat (Ground)	No	No
Migratory Butterfly Stopover Area	No	No

Table 5: Significant Wildlife Habitat within the Study Area		
Specialized Wildlife Habitat Category	**Candidate Significant Wildlife Habitat (Y/N)**	**Confirmed Significant Wildlife Habitat (Y/N)**
Landbird Migratory Stopover Areas	No	No
Deer Yarding Areas	No	No
Deer Winter Congregation Areas	No	No
Cliff and Talus Slopes	No	No
Sand Barren	No	No
Alvar	No	No
Old Growth Forest	No	No
Savannah	No	No
Tallgrass Prairie	No	No
Other Rare Vegetation Communities	No	No
Waterfowl Nesting Area	No	No
Bald Eagle and Osprey Nesting, Foraging and Perching Habitat	No	No
Woodland Raptor Nesting Habitat	No	No
Turtle Nesting Areas	No	No
Seeps and Springs	No	No
Amphibian Breeding Habitat (Woodland)	No	No
Amphibian Breeding Habitat (Wetlands)	No	No
Woodland Area-Sensitive Bird Breeding Habitat	No	No
Marsh Bird Breeding Habitat	No	No
Open Country Bird Breeding Habitat	No	No
Shrub/Early Successional Bird Breeding Habitat	No	No
Terrestrial Crayfish	No	No
Special Concern and Rare Wildlife Species	No	No
Amphibian Movement Corridors	No	No
Deer Movement Corridors	No	No
Mast Producing Areas	No	No
Lek	No	No

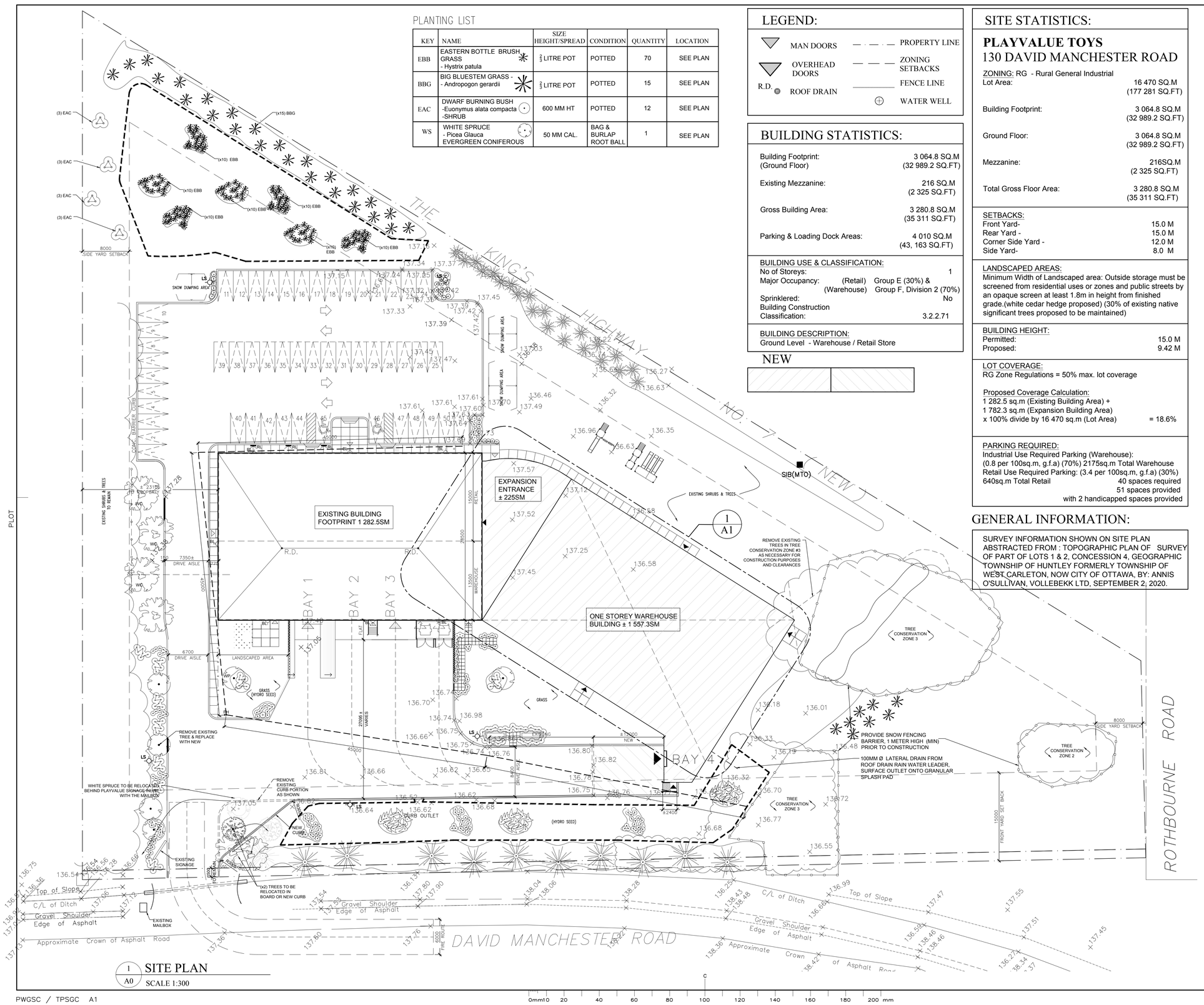
No Candidate or Confirmed Significant Wildlife Habitat were determined to be present within the study area.

4.0 DESCRIPTION OF THE PROPOSED PROJECT

The proposed development within the study area involves the construction of a warehouse extension to the existing commercial building and an expansion entrance in between, on the north end of the study area. The warehouse will consist of a one-storey, 8.45 m high building to be constructed and cover 1282.5 m^2 of the study area. The expansion entrance between the existing and proposed warehouses will cover 230 m^2. An extension to the existing paved driveway will also be constructed to link the southwest corner of the proposed warehouse. This driveway expansion will cover 144 m^2. Refer to **Figure 3** for the site plan for the proposed development. The development will include clearing approximately a total of 1656.5 m^2 of the study area.

PLANTING LIST

KEY	NAME	SIZE HEIGHT/SPREAD	CONDITION	QUANTITY	LOCATION
EBB	EASTERN BOTTLE BRUSH GRASS - Hystrix patula	#3 LITRE POT	POTTED	70	SEE PLAN
BBG	BIG BLUESTEM GRASS - - Andropogon gerardii	#3 LITRE POT	POTTED	15	SEE PLAN
EAC	DWARF BURNING BUSH -Euonymus alata compacta -SHRUB	600 MM HT	POTTED	12	SEE PLAN
WS	WHITE SPRUCE - Picea Glauca EVERGREEN CONIFEROUS	50 MM CAL.	BAG & BURLAP ROOT BALL	1	SEE PLAN



1 / A0 SITE PLAN
SCALE 1:300

LEGEND:

- MAN DOORS
- OVERHEAD DOORS
- R.D. ROOF DRAIN
- PROPERTY LINE
- ZONING SETBACKS
- FENCE LINE
- WATER WELL

BUILDING STATISTICS:

Building Footprint: (Ground Floor)	3 064.8 SQ.M (32 989.2 SQ.FT)
Existing Mezzanine:	216 SQ.M (2 325 SQ.FT)
Gross Building Area:	3 280.8 SQ.M (35 311 SQ.FT)
Parking & Loading Dock Areas:	4 010 SQ.M (43, 163 SQ.FT)

BUILDING USE & CLASSIFICATION:

No of Storeys:	1
Major Occupancy: (Retail) (Warehouse)	Group E (30%) & Group F, Division 2 (70%)
Sprinklered:	No
Building Construction Classification:	3.2.2.71

BUILDING DESCRIPTION:
Ground Level - Warehouse / Retail Store

NEW

SITE STATISTICS:

PLAYVALUE TOYS
130 DAVID MANCHESTER ROAD

ZONING: RG - Rural General Industrial

Lot Area:	16 470 SQ.M (177 281 SQ.FT)
Building Footprint:	3 064.8 SQ.M (32 989.2 SQ.FT)
Ground Floor:	3 064.8 SQ.M (32 989.2 SQ.FT)
Mezzanine:	216SQ.M (2 325 SQ.FT)
Total Gross Floor Area:	3 280.8 SQ.M (35 311 SQ.FT)

SETBACKS:

Front Yard-	15.0 M
Rear Yard -	15.0 M
Corner Side Yard -	12.0 M
Side Yard-	8.0 M

LANDSCAPED AREAS:
Minimum Width of Landscaped area: Outside storage must be screened from residential uses or zones and public streets by an opaque screen at least 1.8m in height from finished grade.(white cedar hedge proposed) (30% of existing native significant trees proposed to be maintained)

BUILDING HEIGHT:

Permitted:	15.0 M
Proposed:	9.42 M

LOT COVERAGE:
RG Zone Regulations = 50% max. lot coverage

Proposed Coverage Calculation:
1 282.5 sq.m (Existing Building Area) +
1 782.3 sq.m (Expansion Building Area)
x 100% divide by 16 470 sq.m (Lot Area) = 18.6%

PARKING REQUIRED:
Industrial Use Required Parking (Warehouse):
(0.8 per 100sq.m, g.f.a) (70%) 2175sq.m Total Warehouse
Retail Use Required Parking: (3.4 per 100sq.m, g.f.a) (30%)
640sq.m Total Retail 40 spaces required
51 spaces provided
with 2 handicapped spaces provided

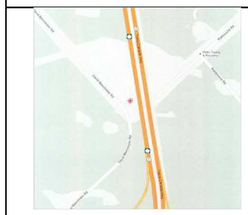
GENERAL INFORMATION:

SURVEY INFORMATION SHOWN ON SITE PLAN ABSTRACTED FROM : TOPOGRAPHIC PLAN OF SURVEY OF PART OF LOTS 1 & 2, CONCESSION 4, GEOGRAPHIC TOWNSHIP OF HUNTLEY FORMERLY TOWNSHIP OF WEST CARLETON, NOW CITY OF OTTAWA, BY: ANNIS O'SULLIVAN, VOLLEBEKK LTD, SEPTEMBER 2, 2020.

playvalue TOYS .com

RICKSON OUTHET ARCHITECT

319 Daly Avenue
Ottawa - Ontario - K1N 6G6
613.728-1637 - FAX 613.728-8501



APPROXIMATE LOCATION

TRUE NORTH PROJECT NORTH

revision		date
3	REVIEW	OCT 10 20
2	REVIEW	SEP 2 20
1	REVIEW / PRINT	AUG 24 20

A detail no. no. du d?tail
B location drawing no. no. de localisation
C drawing no. no. du dessin

project / projet
PLAYVALUE TOYS
130 DAVID MANCHESTER ROAD

drawing / dessin
SITE PLAN

designed / con?u: J.G. APRIL 27 2020
drawn / dessin?: J.G. APRIL 20 20
revised / revis?: R.O APRIL 22 2020
approved / approuv?: R.O APRIL 27 20
tender / soumission: R.O TBD
project no. / no. du projet: 2020–06
drawing no. / no. du dessin: A–0

PWGSC / TPSGC A1

0mm 10 20 40 60 80 100 120 140 160 180 200 mm

5.0 IMPACT ASSESSMENT & RECOMMENDATIONS

The following sections outline and assess any potential impacts that are expected as a result of the proposed development. Recommendations for mitigation measures to avoid these impacts are outlined in Section 6.0 of this report.

5.1 Natural Heritage System Components, Surface Water, Groundwater, and Fish Habitat

No water features within 30 m of the study are were identified through background information or field investigation. No fish habitat is present within or adjacent to the study area. No wetlands are present within 120 m of the study area. It is not anticipated that the proposed project works will have any negative impacts to surface water, fish habitat, or wetlands.

No well records were identified within the study area. No evidence of groundwater was observed during the field investigation. It is not anticipated that the project works will have any negative impact to groundwater.

5.2 Vegetation Cover

Vegetation removal is proposed to occur on approximately 1656.5 m^2 in the north end of the study area. The majority of the vegetation to be impacted by clearing within the study area includes mown lawns. Small portions of the vegetation communities (i.e. MEFM1, MEGM4, and WOMM4-1) will also be cleared in the north end of the study area. The dry-fresh form meadow and fresh-moist graminoid meadow (swale) are indicative of previous disturbance where regeneration of pioneer species and non-native invasive species have established. The fresh-moist white cedar-hardwood mixed woodland also contains non-native invasive species (i.e. common buckthorn) which is indicative of human influence. These areas do not comprise of sensitive vegetation communities or contain rare/SAR plant species. It is not anticipated that vegetation clearing will negatively impact the significant or rare vegetation communities as part of the project works.

5.3 Habitat for Species at Risk & Significant Wildlife Habitat

Due to their status of 'Special Concern,' habitat for the Eastern Wood-pewee is considered Significant Wildlife Habitat. Given that no individuals of this species were heard or observed during the June 25, 2020 field investigation and this species is known to be habitat generalist, it is not anticipated that this species will be negatively impacted by the proposed works. It is unlikely that this species relies significantly on habitat within the study area for life processes due to the species' generalist behaviour with regards to habitat and the limited amount of habitat provided within the study area. However, an avian screening should be conducted prior to any proposed vegetation clearing by a qualified avian biologist, if clearing is to be conducted from April 15 to September 5 (Hussell and Lepage, 2015), to ensure the species is not utilizing the study area for nesting purposes. Eastern Wood-pewee nests and eggs are afforded protection under the MBCA and cannot be harmed, harassed, or killed as a result of development activities.

The Eastern Milksnake may be present within the study area. This species is considered a habitat generalist and may utilize a variety of habitats within the study area. Eastern Milksnakes may utilize the forested habitats for foraging, breeding, and overwintering. It may also utilize the meadow habitats for foraging. No evidence of this

species or other snakes utilizing the study area was observed during the field investigation. The proposed works are to be conducted in the north end of the study area with limited impacts to the vegetation communities. It is not anticipated that negative impacts to Eastern Milksnakes will occur as part of the project works.

Monarchs habitat was observed in the dry-fresh forb meadow in the south end of the study area. This area contained a stand of common milkweed which provides suitable habitat for all life processes of the Monarch. No Monarchs were observed within the study area during the field investigation. The south end of the study area containing the stand of common milkweed is outside of the footprint of the proposed warehouse expansion. It is not anticipated that negative impacts will occur to Monarchs as part of the project works.

During pre-consultation with the City of Ottawa, it was noted that SAR habitat was identified further down David Manchester Road and that this EIS would need to consider any potential impacts the development may have on their habitat. As noted, SAR habitat identified adjacent to the study area will not be affected by the development of this project.

If any SAR are observed during construction, all work within the work site should cease and the local MECP management biologist should be contacted (Ottawa District Office: 613-521-3450).

5.4 Wildlife & Significant Wildlife Habitat

A total of eight (8) species of migratory birds and three (3) non-migratory birds were observed to be possible breeders within the study area during the 2020 field investigation (**Table 4**). Vegetation clearing within the north end of the study area may impact breeding birds if construction occurs during the breeding bird period of April 15 to September 5 (Hussel and Lepage, 2015). It is recommended that clearing occur outside of the breeding bird period. If construction (including any vegetation removal) is proposed to occur during the breeding bird period (April 15 to September 5), of any year, the area where clearing is proposed to occur, must be screened by an avian specialist prior to construction activity. This is recommended in order to prevent negative impacts to migratory birds and other bird species, their nests, and eggs, which are protected under the MBCA or the FWCA.

5.5 Wildland Fire Risk Assessment

According to Section 3.1.8 of the *Provincial Policy Statement*, 2014, "Development shall generally be directed to areas outside of lands that are unsafe for development due to the presence of hazardous forest types for wildland fire. Development may, however, be permitted in lands with hazardous forest types for wildland fire where the risk is mitigated in accordance with wildland fire assessment and mitigation standards."

Wildland fire assessment is necessary to determine the presence or absence of forest types associated with the risk of high to extreme wildland fire. Recommended mitigation techniques are designed to disrupt that principle of combustion by eliminating one or more of the three necessary elements of fire (heat, oxygen and fuel). They do so by minimizing the opportunity for ignition of new fires from embers; reducing the potential for direct flame contact from approaching wildland fires; and reducing the effects of radiant heat from an approaching wildland fire by reducing the opportunity for crown fire potential (MNRF, 2016).

The woody species composition (refer to Section 3.5), condition (i.e. standing cedar, mixed forest with low conifer composition, etc.), and health (i.e. low occurrence of insect or diseased trees), within 100 m of the proposed

development, characterizes the woodland within the study area as not a hazardous forest type. Therefore, further risk assessment and mitigation measures are not required.

6.0 RECOMMENDED MITIGATION

In order to minimize or eliminate environmental impacts and to help achieve ecological and environmental improvements from the proposed construction and development, the following mitigation measures are recommended:

- In accordance with Appendix 10 of the *Environmental Impact Statement Guidelines*, it is recommended that only locally appropriate native species be used for landscaping within the subject property. This would contribute to re-establishing native plants within the wider landscape and potentially have a positive impact for biodiversity (i.e. using native species for pollinators such as bees). Disturbed areas that are not part of the proposed warehouse, expansion, or driveway extension should be replanted with locally grown native species. Use of non-native plant material should be discouraged;
- To prevent the introduction and spread of invasive plant species into the site, equipment utilized during construction should be inspected and cleaned in accordance with the *Clean Equipment Protocol for Industry* (**Appendix B**);
- During construction, the Contractor should have a spill kit on-hand at all times, in case of spills;
- In accordance with Appendix 10 of the *Environmental Impact Statement Guidelines* (2015) for the City of Ottawa, no clearing of any vegetation or other construction, should occur from April 15 to September 5, unless a qualified biologist has determined that no nesting is occurring within 5 days prior to the clearing. Note: these dates are based upon breeding bird nesting data for eastern Ontario, provided by Environment Canada. The nests and eggs of many species are protected under federal and/or provincial legislation (i.e. MBCA, FWCA);
- In accordance with Table 1 of the City of Ottawa's *Protocol for Wildlife Protection during Construction* (2015b), prior to removal of any shrubs or trees in March through mid-August (breeding migratory birds), a biologist should be retained to inspect the habitat for active nests or dens. If none are determined to be present, removal should occur within a few days of the inspection (the same day if possible, during sensitive periods). Thickets or woodlands should not be removed during sensitive times of year (i.e. March through mid-August for the breeding season, Mid-October through March for overwintering wildlife). The *Canadian Wildlife Service does not support relying on inspections for migratory bird nests in such habitats due to the difficulty of locating all nests and risk to birds*, and
- Should any SAR be discovered during construction, a management biologist at MECP – Ottawa District should be contacted immediately, and operations modified to avoid any negative impacts to SAR or their habitat until further direction is provided by MNRF.

7.0 SUMMARY

This EIS supports the development of a warehouse on the property at 130 David Manchester Road, legally known as “Part Lot 1, Concession 4, Huntley Township, City of Ottawa.”

This EIS has assessed existing land use and determined the impacts to the natural heritage features, as well as SAR and SAR habitat as a result of the proposed development. The project design incorporates mitigation measures to protect natural heritage features. The mitigation measures include various mitigation measures to achieve no residual effects on the natural heritage features. If the recommendations and mitigation measures provided in Sections 5.0 and 6.0 of this report are followed, the proposed development is not anticipated to negatively impact the natural heritage features observed to be present within the study area.

8.0 LIMITATIONS

The investigations undertaken by McIntosh Perry with respect to this report and any conclusions or recommendations made in this report reflect McIntosh Perry's judgment based on the site conditions observed at the time of the site inspection(s) on the date(s) set out in this report and on information available at the time of the preparation of this report.

This report has been prepared for specific application to this site, and it is based, in part, upon visual observation of the site and terrestrial investigations at various locations during a specific time interval, as described in this report. Unless otherwise stated, the findings cannot be extended to previous or future site conditions, or portions of the site which were unavailable for direct investigation.

If site conditions or applicable standards change or if any additional information becomes available at a future date, modifications to the findings, conclusions, and recommendations in this report may be necessary.

If you have any question, comments, or concerns, please do not hesitate to contact the undersigned at McIntosh Perry at 613-903-6147.

Sincerely,
McIntosh Perry Consulting Engineers Ltd.

_____
Erik Pohanka, B. Sc.
Biologist

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APPENDIX A – SITE PHOTOGRAPHS

Photo 1: Mown lawn (left) and fresh-moist white cedar-hardwood mixed woodland (right) in the north end of the study area where development is proposed. 25 June 2020.

Photo 2: Northwest end of the study area (looking southeast) where the driveway extension is proposed. 25 June 2020.

Photo 3: Fresh-moist graminoid meadow (swale) in the north end of the study area between fresh-moist white cedar-hardwood mixed woodland areas. 25 June 2020.

Photo 4: Fresh-moist graminoid meadow (swale) in the middle of the study area between fresh-moist white cedar-hardwood mixed woodland areas connecting drains under David Manchester Road and Highway 7. 25 June 2020.

Photo 5: Drain under Highway 7 at the east boundary of the study area. 25 June 2020.

Photo 6: Mown area in the southwest end of the study area. 25 June 2020.

Photo 7: Fresh-moist white cedar-hardwood mixed woodland in the north end of the study area. 25 June 2020.

*Photo 8: Dry-fresh forb meadow in the south end of the study area which included Monarch habitat in the form of a patch of common milkweed (*Asclepias syriaca*) (foreground left). 25 June 2020.*

*Photo 9: Meadow voles (*Microtus pennsylvanicus*) and eastern chipmunks (*Tamias striatus*) were observed within the study area which dig underground for dwellings. 25 June 2020.*

Photo 10: Fresh-moist white cedar-hardwood mixed woodland in the south end of the study area. 25 June 2020.

*Photo 11: Adult American Robin (*Turdus migratorius*) observed in the fresh-moist white cedar-hardwood mixed woodland within the study area. 25 June 2020.*

*Photo 12: Juvenile American Robin (*Turdus migratorius*) observed in the mown area within the north end of the study area. 25 June 2020.*

*Photo 13: European Starling (*Sturnus vulgaris*) observed in the mown area within the north end of the study area. 25 June 2020.*

APPENDIX B – CLEAN EQUIPMENT PROTOCOL FOR INDUSTRY

Clean Equipment Protocol for Industry

Inspecting and cleaning equipment for the purposes of invasive species prevention

Invasive Species Centre

Catalyst for research and response

Ontario

Peterborough County Stewardship

Ontario Invasive Plant Council

Publication Information

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Inquiries regarding this document can be directed to the Ontario Invasive Plant Council
PO Box 2800, 4601 Guthrie Drive
Peterborough, ON
K9J 8L5

Phone: (705) 748-6324
Email: info@ontarioinvasiveplants.ca

For more information on invasive plants in Ontario, visit www.ontario.ca/invasivespecies, www.ontarioinvasiveplants.ca, www.invadingspecies.com or www.invasivespeciescentre.ca

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Introduction

Why Invasive Plants are a Problem

Invasive alien species are "a growing environmental and economic threat to Ontario. Alien species are plants, animals and microorganisms that have been accidentally or deliberately introduced into areas beyond their normal range. Invasive species are defined as harmful alien species whose introduction or spread threatens the environment, the economy, or society, including human health (Government of Canada 2004)." (Ontario Invasive Species Strategic Plan, 2012). The great majority of plant invasions occur in habitats that have been disturbed either naturally or by humans (Rejma´nek 1989; Hobbs and Huenneke 1992; Hobbs 2000).

The ecological effects of invasive species are often irreversible and, once established, they are extremely difficult and costly to control or eradicate. According to Pimental et al. (1999), invasive species in the U.S. cause economic and environmental damages totalling over $138 billion per year, with agricultural weed control and crop losses totalling approximately $34 billion per year. Exact figures for the total economic and environmental damages are not available for Canada. In Ontario however, the costs of dealing with just one invasive species is astonishing; Zebra Mussels cost Ontario power producers who draw water from the lake $6.4 million per year in increased control/operating costs and about $1 million per year in research costs (Colautti et al. 2006).

Invasive species can spread to new areas when contaminated mud, gravel, water, soil and plant material are unknowingly moved by equipment used on different sites. This method of spread is called an unintentional introduction, and is one of the four major pathways for invasive species introduction into a new area of Ontario (Ontario Invasive Species Strategic Plan, 2012).

Buckthorn removal, Lynde Shores Conservation Area.
Photo by: Central Lake Ontario Conservation Authority

Invasive plant seed and propagules (plant material, i.e. rhizomes) have the ability to travel sight unseen in mud attached to or lodged in various parts and spaces between parts of vehicles, machinery and other mechanical equipment. A recent study at Montana State University found that most seeds (99% on paved roads and 96% on unpaved roads) stayed attached to the vehicle after traveling 160 miles (257 km) under dry conditions.

Invasive plant species are commonly transported on or in vehicles and construction equipment when they are moved to new locations. Those vehicles include four-wheel drives, excavators, tractors, loaders, water trucks and all-terrain vehicles. Failure to properly clean vehicles and machinery of soils, mud, and contaminated water that may contain invasive species seed and propagules can result in permanent, irreversible environmental impacts. These impacts can mean substantial cost to the landowner, land manager and/or the user. Businesses may also face liability issues for activities and operations that result in the introduction of invasive species.

Some of the invasive species in Ontario which have been known to spread through equipment transfer include:

- **Common Buckthorn** *(Rhamnus cathartica)*
- **Dog-strangling Vine** *(Cynanchum rossicum)*
- **Garlic Mustard** *(Alliaria petiolata)*
- **Giant Hogweed** *(Heracleum mantegazzianum)*
- **Glossy Buckthorn** *(Frangula alnus)*
- **Japanese Knotweed** *(Polygonum cuspidatum)*
- **Miscanthus or Chinese Silver Grass** *(Miscanthus sinensis)*
- **Phragmites or Common Reed** *(Phragmites australis subsp. australis)*
- **Reed Canary Grass** *(Phalaris arundinacea)*
- **Wild Parsnip** *(Pastinaca sativa)*
- **Wild Chervil** *(Anthriscus sylvestri)*

Dog-strangling vine
(Cynachum rossicum)
Photo by: Hayley Anderson

Garlic Mustard
(Alliaria petiolata)
Photo by: Ken Towle

Phragmites
(Phragmites australis subsp. Australis)
Photo by: Michael Irvine

These plants impact biodiversity by out-competing native species for space, sunlight, and nutrients. They can also have impacts on road and driver safety by physically blocking intersection sightlines, and in the case of Phragmites and Miscanthus, may fuel intense grass fires if ignited, which can damage utility stations and hydro lines.

The harmful effects of invasive species include:

- Physical and structural damage to infrastructure
- Human health hazards (i.e. Giant Hogweed and Wild Parsnip exposure)
- Delays and increased cost in construction activities
- Environmental damage (i.e. erosion)
- Aesthetic degradation
- Loss of biodiversity
- Reduced property values
- Loss of productivity in woodlots and agriculture

Why Cleaning Vehicles and Equipment is Important

Passenger and recreational vehicles as well as heavy machinery are major vectors for spreading terrestrial invasive species into new areas.

It is much more costly to control invasive species after their establishment and spread than it is to prevent their spread. The spread of invasive species through unintentional introduction can be minimized significantly by the diligent cleaning of vehicles and equipment when leaving one site and moving to the next. In the case of large properties, cleaning before moving to a new site is recommended, even if it is within the same property.

This guide has been developed for the construction, agriculture, forestry and other land management industries, to provide equipment operators and practitioners with tools and techniques to identify and prevent the unintentional introduction of invasive species. It establishes a standard for cleaning vehicles and equipment and provides a guide where current codes of practice, industry standards or other environmental management plans are not already in place.

Passenger and recreational vehicles include:

- 2WD and 4WD cars
- 2WD and 4WD trucks
- All Terrain Vehicles (ATV's)
- Motorbikes
- Snowmobiles

Heavy machinery includes:

- Trucks
- Tractors
- Mowers
- Slashers
- Trailers
- Backhoes
- Graders
- Dozers
- Excavators
- Skidders
- Loaders
- Water Tankers and Trucks

Dog-strangling Vine plants attached to ATV.
Photo by: Francine Macdonald

Plant material attached to bobcat.
Photo by: TH9 Outdoor Services

Impacts of Invasive Species on Industry

Construction

In the UK, Japanese Knotweed (*Polygonum cuspidatum* or *Fallopia japonica*) is classified as a hazardous material. When construction occurs in established Japanese Knotweed stands workers sift the soil to remove root fragments and institute treatment plans to ensure that the Knotweed does not re-sprout, as it can damage housing foundations by growing through concrete and asphalt. The contractors must also thoroughly clean their equipment, and dispose of the contaminated soil at biohazard waste sites. While we do not have these requirements in Ontario, Japanese Knotweed is present here.

Invasive plant species can also increase site preparation and weed control costs, and reduce property values. For example, in Vermont the presence of the aquatic invasive plant Eurasian Watermilfoil (*Myriophyllum spicatum*) depressed shoreline residence property value by as much as 16.4% (Zhang and Boyle, 2010).

Forestry/Agriculture

Invasive plant species which become established in forests will out-compete native species and prevent forest re-generation after logging or natural disturbance. Dog-strangling Vine (*Cynanchum rossicum*) is of particular concern in conifer plantations. This species thrives in the filtered light and open soils of mature plantations, and suppresses seedling establishment of native hardwoods. If its invasion continues, very few juvenile trees will survive to fill the shrinking canopy of over-mature pines. Reforestation sites are also susceptible; the thick mats of vegetation and aggressive competition from Dog-strangling Vine decrease available planting space and increase costs as more mature vegetation needs to be planted in order to ensure the new vegetation can outcompete the invasive plant. As a result, expensive control programs are often required.

Land Management (Trail Use/Maintenance)

Recreational trail use and the maintenance of trails can facilitate the transport of invasive plant material and seeds, and create open and disturbed sites that are prime locations for the establishment of invasive species. Studies have proven that trails act as corridors which assist in the spread of invasive plant species. Humans, their pets, and vehicles such as ATV's can be vectors of invasion along trails because seeds and plant pieces can be carried on equipment and clothing. In addition, frequent trampling along trails alters soil properties, limits the growth of some native species, and creates conditions that may favour the growth of non-native species (Kuss et al. 1985; Marion et al. 1985; Yorks et al. 1997).

Roadsides/Utilities

Invasive species can increase the cost of roadside and utility maintenance by requiring additional maintenance and control efforts. The presence of invasive species can also provide a safety hazard. In the case of Phragmites and Miscanthus (invasive grass species), along with interrupting sight lines, the dead stalks which remain standing each autumn also provide combustible material. Fires in these stands burn intensely, and can damage utilities and hydro lines. Phragmites along roadsides is generally assumed to be spread through the transport and burial of rhizome fragments through ditching, ploughing, and other human activities that transport rhizomes on machinery. Studies have shown that vehicles and road-fill operations can transport invasive plant seeds into uninfested areas, and road construction and maintenance operations provide optimal disturbed sites for seed germination and seedling establishment (Schmidt 1989; Lonsdale & Lane 1994; Greenberg et al. 1997; Trombulak & Frissell 2000).

Steps to Prevent the Unintentional Introduction of Invasive Species from Equipment

Inspection and cleaning of all machinery and equipment should be performed in accordance with the procedures, checklists and diagrams provided in this protocol.

When visiting more than one site, always schedule work in the sites that are the least disturbed and free of known invasive species first, and visit sites with known invasive species infestations last. This will greatly reduce the risk of transferring plants to new locations.

When to Inspect

Inspection should be done before:

- Moving vehicles out of a local area of operation
- Moving machinery between properties or sites within the same property where invasive species may be present in one area, and not in another
- Using machinery along roadsides, in ditches, and along watercourses
- Vehicles using unformed dirt roads, trails or off road conditions
- Using machinery to transport soil and quarry materials
- Visiting remote areas where access by vehicles is limited

Inspection should be done after:

- Operating in areas known to have terrestrial invasive plants or are in high risk areas (i.e. recently disturbed areas near known invaded areas)
- Transporting material (i.e. soil) that is known to contain, or has the potential to contain, invasive species
- Operating in an area or transporting material that you are uncertain contain invasive species
- In the event of rain. If mud contains seeds, they can travel indefinitely until it rains or the road surface is wet, allowing for long distance transport. This may result in transporting seeds to areas where those species did not previously exist

How to Inspect

- Inspect the vehicle thoroughly inside and out for where dirt, plant material and seeds may be lodged or adhering to interior and exterior surfaces.
- Remove any guards, covers or plates that are easy to remove.
- Attention should be paid to the underside of the vehicle, radiators, spare tires, foot wells and bumper bars.

If clods of dirt, seed or other plant material are found, removal should take place immediately, using the techniques outlined below.

When to Clean

Vehicles and heavy equipment that stay on formed and sealed roads have a low risk of spreading invasive species. Cleaning is only required when inspection identifies visible dirt clods and plant material or when moving from one area to another.

Depending on the invasive species present, vehicles may need to be cleaned even when deep snow is present. Phragmites, for example, can still be spread, even in packed snow because the seed heads are usually above the surface of the snow. Other plants, such as Dog-strangling vine, will be contained beneath deep snow.

**Regular inspection of vehicles and machinery will identify if any soil or plant material has been collected on or in vehicles and machinery.*

Where to Clean

Clean the vehicle/equipment in an area where contamination and seed spread is not possible (or limited). The site should be:

- Ideally, mud free, gravel covered or a hard surface. If this option is not available, choose a well maintained (i.e. regularly mowed) grassy area.
- Gently sloping to assist in draining water and material away from the vehicle or equipment. Care should be taken to ensure that localized erosion will not be created, and that water runs back into the area where contamination occurred.
- At least 30m away from any watercourse, water body and natural vegetation.
- Large enough to allow for adequate movement of larger vehicles and equipment.

**Safely locate the vehicle and equipment away from any hazards. If mechanized, ensure engine is off and the vehicle or equipment is immobilized.*

How to Clean Inside

Clean the interior of the vehicle by sweeping, vacuuming or using a compressed air device. Particular attention should be paid to the floor, foot wells, pedals, seats and under the seats.

How to Clean Outside

Knock off all large clods of dirt. Use a pry bar or other device if necessary.

Identify areas that may require cleaning with compressed air rather than water such as radiators and grills. Clean these areas first prior to using water.

Clean the vehicle with a high pressure hose in combination with a stiff brush and/or pry bar to further assist the removal of dirt clods.

Start cleaning from the top of the vehicle and work down to the bottom.

Emphasis should be placed on the undersides, wheels, wheel arches, guards, chassis, engine bays, radiator, grills and other attachments.

When the cleaning is finished avoid driving through the waste water when removing the vehicle or equipment from the cleaning site.

For equipment such as water trucks that may be exposed to aquatic invasive species, trucks should be disinfected with bleach solution before conducting work in a new area. For further information please refer to the Invading Species Awareness Program's Technical Guidelines listed under Contacts and Resources.

Hosing down a vehicle in Queensland Australia
Photo by: TH9 Outdoor Services

Final Inspection Checklist

Conduct a final inspection to ensure the following general clean standard has been achieved:

- No clods of dirt should be visible after wash down.
- Radiators, grills and the interiors of vehicles should be free of accumulations of seed, soil, mud and plant material parts including seeds, roots, flowers, fruit and or stems.

Diagrams have been provided to assist in quickly identifying key areas to inspect and clean on a variety of vehicles associated with the targeted industries. These can be used in combination with vehicle checklists to ensure all areas of the vehicles have been inspected and cleaned.

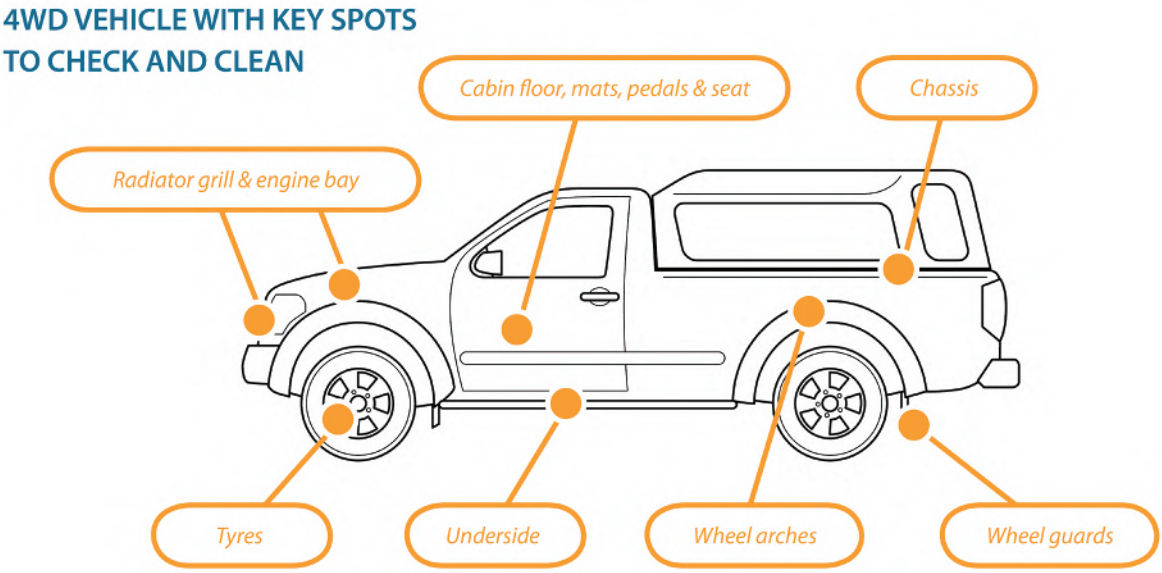
Equipment Required

- A pump and high pressure hose OR High pressure water unit
- Minimum water pressure for vehicle cleaning should be at least 90 pounds per square inch. Water can be supplied as high volume/low pressure or low volume/high pressure (NOAA Fisheries Service).
- Air compressor and blower OR Vacuum
- Shovel
- Pry bar
- Stiff brush or broom

Cleaning station at construction site.
Photo by: Mark Heaton, OMNR

Inspection and Cleaning Diagrams and Checklists

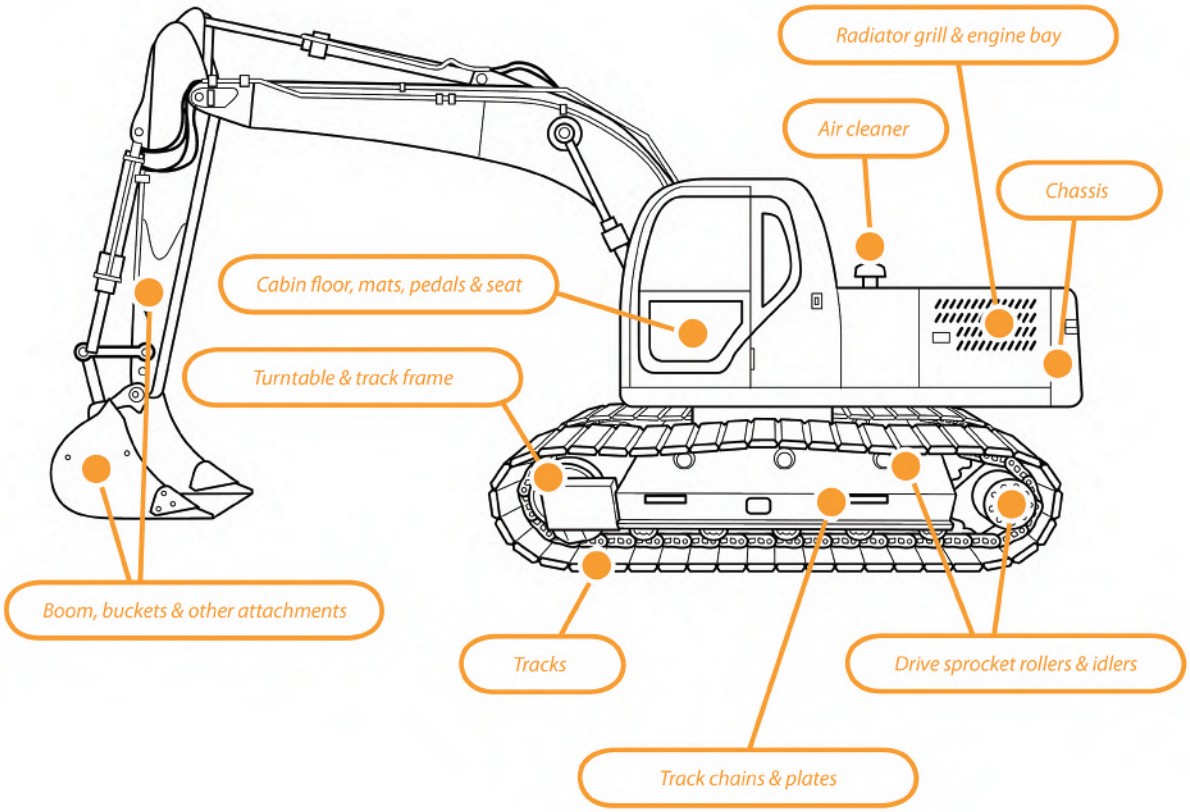
2WD and 4WD Vehicles



		✓
Cabin	Floor, mats, pedals, seats	
Engine	Radiators, engine bay, grill	
Body	Underside, chassis, crevices, ledges, bumper bars	
Wheels	All wheels (including spare), wheel arches, guards	
Tray	Floor, canopy (if included)	

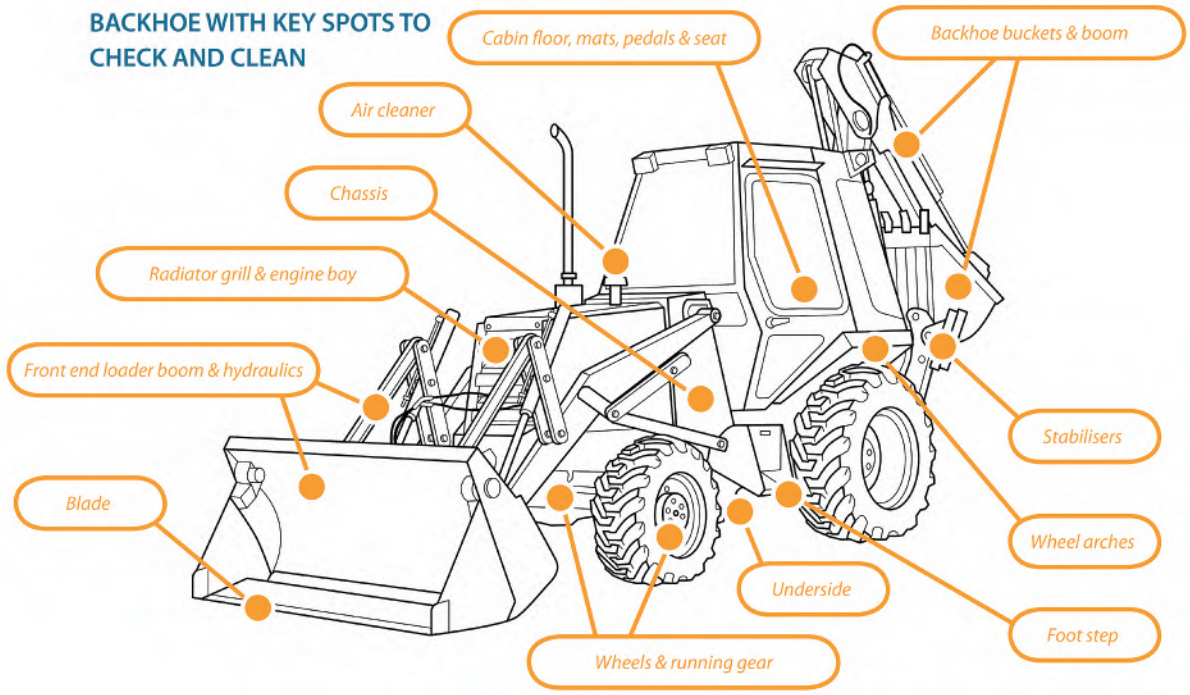
Excavator

EXCAVATOR WITH KEY SPOTS TO CHECK AND CLEAN



		✓
Cabin	Floor, mats, pedals, seats	
Engine	Radiators, engine bay, grill, air cleaner	
Tracks	Tracks, track frame, drive sprocket rollers, idlers	
Body Plates	Plates of cabin	
Body	Ledges, channels	
Bucket		
Booms		
Turret Pivot		

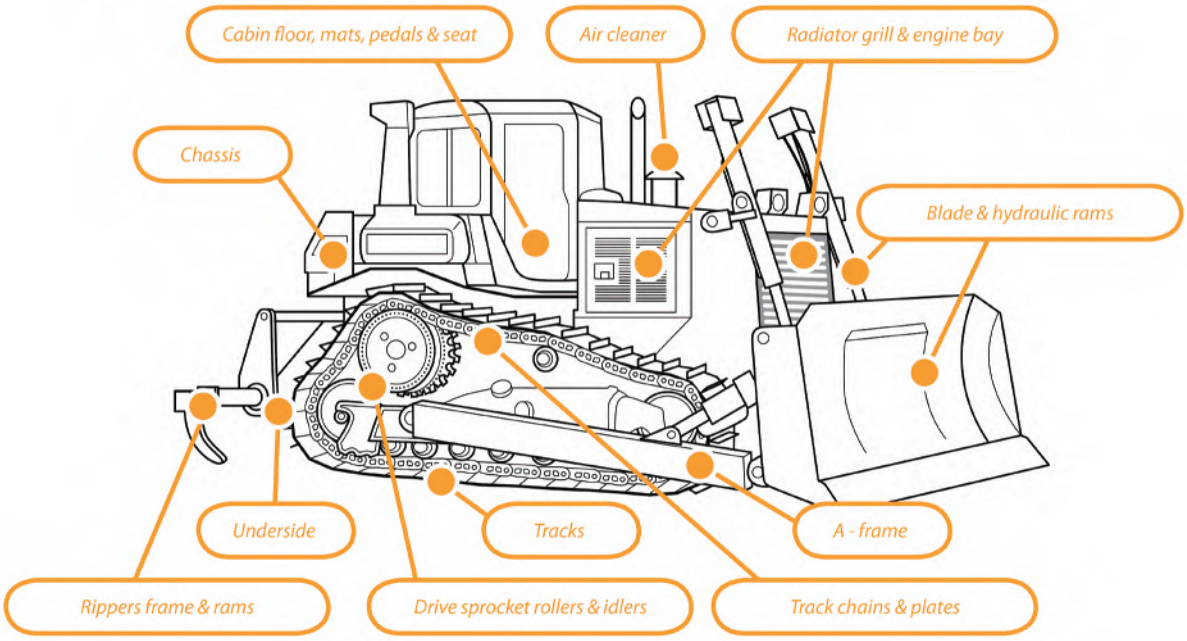
Backhoe



		✓
Cabin	Floor, mats, pedals, seats, foot step	
Engine	Radiators, engine bay, grill, air cleaner	
Wheels	All wheels (including spare), wheel arches, guards	
Front end loader	Blade, hydraulics, booms	
Backhoe	Buckets, boom, hydraulics, stabilizers	

Bulldozer

BULLDOZER WITH KEY SPOTS TO CHECK AND CLEAN



		✓
Cabin	Floor, mats, pedals, seats	
Engine	Radiators, engine bay, grill, air cleaner	
Tracks	Tracks, track frame, drive sprocket rollers, idlers	
Body Plates	Belly plates and rear plates	
Body	Ledges, channels	
Blade	Pivot points, hydraulic rams, a-frame	
Ripper	Ripper frame, ripper points	

Contacts and Resources

Ontario Invasive Species Strategic Plan 2012. Government of Ontario. Online, accessed May 8, 2012.
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http://www.bcinvasiveplants.com/iscbc/publications/TIPS/Highways_Operations_TIPS.pdf

Invading Species Awareness Program Workshop Manual: Aquatic Invasive Species: An Introduction to Identification, Collection and Reporting of Aquatic Invasive Species in Ontario Waters (includes information on decontaminating equipment).
http://www.invadingspecies.com/download/publications/manuals/WorkshopManual.pdf

Reporting Invasive Species

To report invasive species, or view maps of existing records, visit the Invading Species Awareness Program website www.invadingspecies.com/report/ or www.eddmaps.org/Ontario.

Or call the OFAH/MNR Invading Species Awareness Program Hotline at **1-800-563-7711**

Acknowledgements

We gratefully acknowledge NRM South (Tasmania, Australia) for allowing the use of their artwork and text from their "Keeping it Clean – A Tasmanian Field Hygiene Manual to Prevent the Spread of Freshwater Pests and Pathogens".

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Clean Equipment Protocol Working Group:

Diana Shermet, Central Lake Ontario Conservation Authority; Paula Berketo, Ontario Ministry of Transportation; Travis Cameron, Ontario Ministry of Natural Resources; Jennifer Hoare, Ontario Parks; Michael Irvine, Ontario Ministry of Natural Resources; Alison Kirkpatrick, OFAH/MNR Invading Species Awareness Program; Erika Weisz, Ontario Ministry of Natural Resources; Amanda Chad, Ontario Power Generation; Nancy Vidler, Lambton Shores Phragmites Community Group; Nigel Buffone, Du Pont Canada Company; Ewa Bednarczuk, Lower Trent Conservation Authority

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More Information:

Ontario Invasive Plant Council: www.ontarioinvasiveplants.ca

Appendix A: Identification of Invasive Plants found in Ontario

- **Common Buckthorn** (*Rhamnus cathartica*) and **Glossy Buckthorn** (*Frangula alnus*)
- **Dog-strangling Vine** (*Cynanchum rossicum*)
- **Garlic Mustard** (*Alliaria petiolata*)
- **Japanese Knotweed** (*Polygonum cuspidatum*)
- **Phragmites or Common Reed** (*Phragmites australis subsp. australis*)
- **Giant Hogweed** (*Heracleum mantegazzianum*)

common & glossy buckthorn

(Rhamnus cathartica & R. frangula)

Plant type: Shrub/small tree

Arrangement: Common buckthorn are sub-opposite (almost opposite). Glossy buckthorn are alternate.

Leaf: The common buckthorn leaf is egg shaped, edge of the leaf is "pebbled" (small rounded teeth). Veins converging toward leaf top. The glossy buckthorn leaf is more slender (tear drop shaped) and smooth margined.

Bark: Smooth, young bark with prominent raised patches or lenticels; rough texture and peeling bark when mature.

Seed/Flowers: Flowers are green-yellowish, small and inconspicuous. Green berries becoming purplish/black in late summer, berry > 1 cm in diameter.

Buds/Twigs: Common buckthorn has thorn-like tip on many twigs. Glossy buckthorn buds have no bud scales and lack thorny tips to twigs.

Habitat: Various - forest, thickets, meadows, dry to moist soils.

Similar native species: Native dogwoods, which lack the thorny "tip". Native dogwoods are truly opposite in arrangement of twigs; only alternate leaved (pagoda) dogwood has alternate branching.

dog-strangling vine
(Cynanchum rossicum & C. nigrum)



Plant type: Herb, twining vine

Arrangement: Opposite

Leaf: Lance shaped, smooth margin (edge)

Bark: n/a

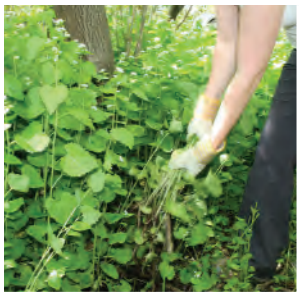
Seed/Flowers: Bean shaped seed pod with seeds attached to downy 'umbrellas'. Flowers - pink (C. rossicum) or purple (C. nigrum) with five petals.

Buds/Twigs: n/a

Habitat: Dry to moist soils; more dominant in meadows and woodland edges.

Similar native species: Swamp milkweed (Asclepias incarnata spp.), is an upright plant, typically found in wetland habitats.

garlic mustard
(Alliaria petiolata)



Plant type: Herb

Arrangement: Alternate

Leaf: Saw tooth like edge, elongated heart shape. Garlic/onion smell when crushed. Leaves are kidney shaped with prominent veins.

Bark: n/a

Seed/Flowers: Cluster of small white flowers with four petals. Small black < 1 mm rounded seed found in elongated 'tube-like' seed pods (similar to a bean pod).

Buds/Twigs: n/a

Habitat: Various – dry to moist soils, in all habitat types, less often in meadows.

Similar native species: n/a

japanese knotweed
(Polygonum cuspidatum)

Plant type: Herb, 2 - 4 m in height.

Arrangement: Alternate

Leaf: Tear drop shaped, sharp pointed, dark green, flattened at base.

Bark: n/a

Seed/Flowers: Flowering stalk of many small greenish-white flowers.

Buds/Twigs: Large plant with a 'bamboo-like' stem. Stem light green maturing to tan colour.

Habitat: Moist to wet soils found in wetlands, water-courses and roadside ditches.

Similar native species: None.

common reed
(Phragmites australis)

Plant type: Grass

Arrangement: Alternate

Leaf: Broad leaf > 1 cm wide.

Bark: n/a

Seed/Flowers: Dense cascading 'broom-like' flower head. 'Cottony' in appearance when mature.

Buds/Twigs: Stems rough and ridged, ligule a densely hairy band. Mature plants > 3 m tall.

Habitat: Moist to wet soils. Found in wetlands, water- courses and road side ditches.

Similar native species: Species of mannagrass (Glyceria sp) including tall northern, eastern and rattlesnake grass. A native common reed exists but has a smooth stem and the ligule is not hairy. It is also quite rare.

giant hogweed
(Heracleum mantegazzianum)

Plant type: Herb. Mature plants can be over 3m tall.

Arrangement: Alternate

Leaf: Lobed leaf 1-2 m wide, lobes sharp-pointed.

Bark: n/a

Seed/Flowers: Small, white flowers in a large umbrella-shaped cluster, .75 m wide.

Buds/Twigs: Hairy stem with purple spots.

Habitat: Fresh to wet soils in forests, swamps, meadows, marshes.

Similar native species: Cow parsnip *(Heracleum maximum)* – has smaller flowers, no purple spots on stems.Angelica (Angelica atropurpurea) has a rounded-topped flower cluster and leaves divided into many leaflets.

Do not touch this plant because it is poisonous. If you do, wash your skin immediately in cool soapy water and do not expose the area to sunlight.

Seek professional advice before removing.

Identification of Invasive Plants found in Ontario Photos by:

Credit Valley Conservation, Greg Bales, Ken Towle, Patrick Hodge,
Ontario Federation of Anglers and Hunters, Francine Macdonald, Matt Smith

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Invasive Plant Council