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LAND USE EXISTING CONDITIONS AND IMPACT ASSESSMENT

W12A Landfill Expansion Environmental Assessment

3502 Manning Drive

London

Date:

August 2021

Prepared for:

City of London

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Abbreviations

Terms of Reference	ToR
Environment Assessment	EA
Environmental Assessment Study Report	EASR
Cubic Metres	m^3
Metres Above Sea Level	masl
City of London	City
Provincial Policy Statement	PPS
New City of London Official Plan	The London Plan
City of London Zoning By-law No. Z.-1	Zoning By-law
Waste and Resource Management Zone	WRM Zone
Agricultural Zone	AG Zone
Environmental Review Zone	ER Zone
Open Space Zone	OS Zone
Resource Extraction Zone	EX Zone

1.0 Introduction

The City of London is proposing an expansion of the existing W12A Landfill site (the Project) located at 3502 Manning Drive, London. The existing landfill property is described as part of Lots 18, 19 and 20, Concession 6 in the former Township of Westminster. Generally, this property is located in a predominately agricultural area of London, south of the City's Urban Growth Boundary.

The environment is considered in broad terms to include the natural, social, cultural, and economic aspects of the environment. This Report presents the existing conditions and impact assessment for the land use component of the Environment Assessment (EA) for the proposed W12A Landfill expansion. This assessment has been conducted in accordance with the requirements set out in the approved Terms of Reference (ToR) for the EA, dated February 2019.

This Report is a supporting document to the Environmental Assessment Study Report (EASR). As discussed in Section 3.0 of this Report, the preferred expansion alternative identified through the EA process is the vertical expansion above the existing landfill footprint.

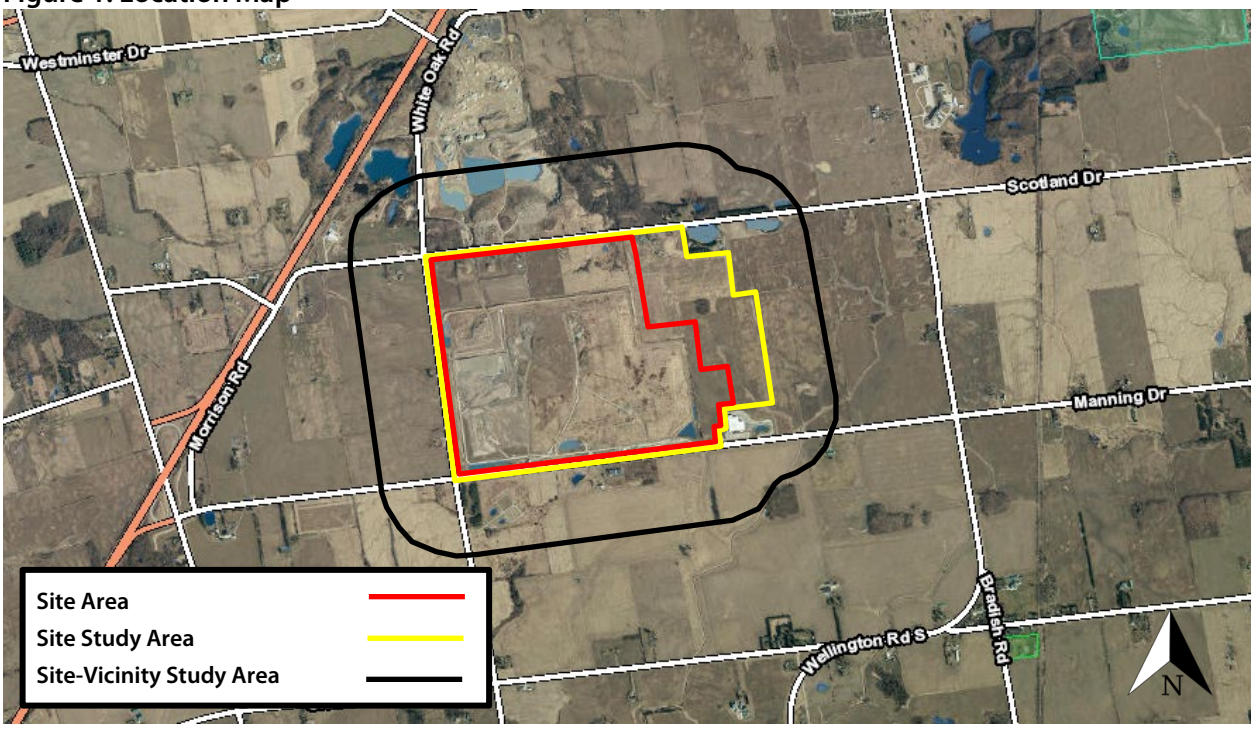
2.0 Existing Conditions

2.1 Land Use

The following provides an overview of existing land uses surrounding the W12A Landfill within the Site Area, Site Study Area and Site-Vicinity Study Area, as defined through the EA process. The boundaries of each of these study areas are described below and illustrated on Figure 1 of this Report:

- The Site Area encompasses the existing W12A Landfill site and adjacent lands required for the proposed landfill expansion;
- The Site Study Area represents the limit of property considered in conjunction with the evaluation of EA study alternatives; and
- The Site-Vicinity Study Area includes an area with a radius of 500 m around the Site Study Area.

Figure 1: Location Map



Source: City of London Maps, 2020

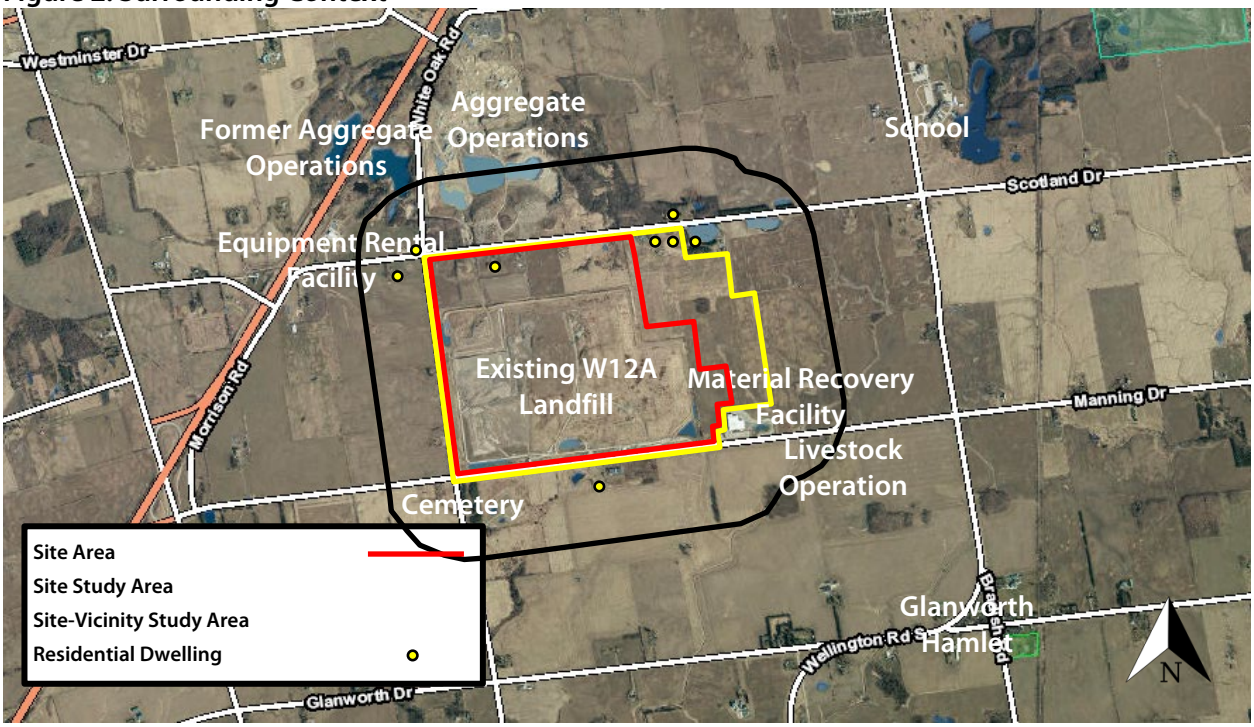
2.1.1 Description of Existing Land Uses

Figure 2 of this Report illustrates the general land uses in the vicinity of the existing landfill facility. Land uses within the Site-Vicinity Study Area are summarized in the following discussion. The identification of land use activities in this defined area was based primarily on a field survey undertaken by vehicle (i.e., 'windshield survey') on October 8, 2019, an examination of aerial imagery, and discussions with the City of London.

Existing Land Uses (Site-Vicinity Study Area):

North: A portion of the land base between the existing landfill berm and Scotland Drive is actively cultivated for cash crop production (soybeans). The remaining lands are considered fallow with hilly topography observed between the berm and Scotland Drive. These lands do not appear to have been used for agricultural production. Westcliff Pit, operated by AAROC Aggregates, and the Bre-Ex Gravel Pit, operated by Brekelmens Holdings, are located on the north side of Scotland Drive (gravel pit). Soybean and corn production were also observed on the north side of Scotland Drive. Further, storage for non-agricultural activities was visible at 3405 Scotland Drive, and rural residential dwellings are located at that property, as well as 3465, 3561, 3465 and 3801 Scotland Drive. The property at 3405 Scotland Drive includes a large pond; the property at 3465 Scotland Drive includes a demolished barn.

Figure 2: Surrounding Context



Source: City of London Maps, 2020

East: Lands east of the proposed landfill expansion are under active cultivation for conventional cash crop production (corn, soybeans, wheat rotation). There is a vacant industrial storage building at the intersection of Scotland Drive and Wellington Road South. In terms of crops, typical cash crops (corn and soybeans) are found along Wellington Road South. A rural residential dwelling at 5751 Wellington Road South shows evidence of a previous farmstead (bank barn foundation and roofless silo). Rural residential dwellings are also located at 5595, 5615 and 5751 Wellington Road South.

South: A livestock operation (beef) is located at 3243 Manning Drive, approximately 400 m southeast of the Material Recovery Facility (MRF), which is situated at 3438 Manning Drive. The house on the property is vacant. Large agricultural parcels were in conventional cash crop production (corn). There is also an agricultural operation located at 3691 Manning Drive, which includes a large driving shed with solar panels, a bank barn, roofless silo and rural residential dwelling surrounded by cash crop production (corn). Livestock was not visible at this location. Additionally, the Islamic Cemetery of London (6100 White Oak Road) is located south of the existing landfill and the Shore Creek Drain traverses the Site-Vicinity Study Area south and east of the MRF.

West: There is a dilapidated barn/storage building located at 4025 Manning Drive. Large agricultural parcels were in cash crop production (soybeans). There is evidence of a farmstead at 5861 White Oak Road (treeline, foundation of buildings). There is also an

existing farmstead at 4067 Scotland Drive, which includes a small barn, Quonset hut, ancillary structures and a rural residential dwelling. This property appears to be used for storage rather than active agricultural production. A rural residential dwelling is located at 5435 White Oak Road with evidence of a previous farmstead (stand-alone silo, barn foundation).

In general, the lands surrounding the W12A Landfill within the Site-Vicinity Study Area are characterized by a mix of agricultural uses, with a limited number of residential uses. Additionally, an institutional use is located to the south of the landfill site and aggregate extraction operations are located north of the Site Area. There are also a variety of natural heritage and open space areas dispersed throughout the Site-Vicinity Study Area (e.g., drainage corridors, woodlots).

As detailed in the W12A Landfill Annual Status Report for 2019, dated March 2020, the City owns a majority of the parcels within the Site-Vicinity Study Area to the east of the Site Area, as well as a number of parcels to the west and north of the Site Area. Several residential dwellings have been removed from these properties.

3.0 Project Description

3.1 General Description

The Project incorporates a vertical expansion over 106.3 ha of the existing landfill footprint, which has a total approved footprint area of 107 ha. In effect, implementation of this Project would result in 13.8 million m^3 of additional airspace for waste and daily cover, with a highest ridge elevation of waste of 318.43 masl (approximately 43 m above ground elevation).

Additionally, the boundary of the existing landfill site is proposed to be expanded to accommodate additional on-site buffering and additional waste management activities. In comparison to existing conditions, the following modifications are proposed within this expanded boundary (Site Area):

- The northern boundary of the landfill property would be extended approximately 310 m to the Scotland Drive corridor for buffering purposes, with the eastern buffer width extended approximately 60 m. At this time, with the exception of a boundary fence, no infrastructure is proposed for these buffer areas. These lands would be seeded and left fallow, unless there is a future need for contingency measures or other infrastructure within these areas; and

- An eastern expansion of the existing landfill adjacent along the Manning Drive frontage to interface with the adjacent MRF property (approximately extension width: 145 m). Lands

in this expansion area would accommodate a new small vehicle Waste and Resource Material Drop-off Area. It is anticipated that this new facility would include a new scale and scalehouse, a grade-separated small vehicle drop-off for waste, a grade-separated small vehicle drop-off for recyclable materials, an area for drop-off of brush, tires and large items, and a new Household Special Waste depot.

Collectively, the proposed modifications would increase the landfill boundary from approximately 140.0 ha to approximately 192.4 ha. There are no proposed changes to the designated haul routes or the existing site access arrangement, with site ingress/egress being provided from the existing Manning Road entrances to the landfill property and the MRF property.

4.0 Impact Assessment

The compatibility of the Project with surrounding land uses was assessed with consideration for (1) the proposed operational practices and (2) predictive assessments related to potential nuisance effects. The methodology and findings of this assessment are described below.

4.1 Current Land Use

Based on the characterization of the Site-Vicinity Study Area identified in Section 2.0 of this Report, this area is predominately comprised of farmland and natural heritage areas, with a limited number of associated farm dwellings. There is also a cemetery located south of the landfill facility and a resource extraction operation situated north of this facility.

4.1.1 Methodology

The assessment of current and future land uses in the Site Area and Site-Vicinity Study Area was predicated on a study methodology designed at the outset of the evaluation. Generally, this methodology integrated: a review of the regulatory context and planning policy framework applicable to these areas; data collected during a field survey, an analysis of aerial photography; and information obtained through interviews with City of London (City) staff. The evaluation process was carried out between September 2019 and August 2020. Through this review, land uses that may be sensitive to the potential impacts of landfilling activities were highlighted and identified.

The following data sources were evaluated for this assessment:

- Policy documents and guidelines applicable to the Site Area and Site-Vicinity Study Area:
  - Provincial Policy Statement (2020);
  - City of London Official Plan (1989);

    - City of London Official Plan (The London Plan);
    - City of London Zoning By-law No. Z.-1;
    - Land Use Compatibility, Guideline D-1; and
    - Land Use On or Near Landfills and Dumps, Guideline D-4.

- Information collected from a field survey of the Site Area and Site-Vicinity Study Area conducted on October 8, 2019, including:
    - Photographs of land uses and properties within the area;
    - Documentation of existing land uses; and
    - Identification of any planning notice signage (no signs were identified).

- Digital sources to supplement the characterization of existing conditions:
    - GIS parcel fabric mapping from the City of London;
    - Google Earth imagery; and
    - Aerial photography from the City of London.

- Interviews and discussions carried out with City staff in September 2019 to identify planning issues and any potential development activity within the Site-Vicinity Study Area.

- Study draft reports completed to inform the EA, including:
    - W12A Landfill Expansion Environmental Assessment – Biology: Existing Conditions and Impact Assessment Report;
    - Heritage Impact Assessment: W12A Landfill Expansion EA;
    - Air Quality Existing Conditions and Impact Assessment: W12A Landfill Expansion EA;
    - Stormwater Management Report; and
    - Traffic Assessment.

- W12A Landfill Annual Status Report: January 1, 2019 to December 31, 2019.

4.1.2 Policy Overview

The following summarizes the land use policy framework applicable to the Site Area and Site-Vicinity Study Area, and presents our assessment of the Project relative to this policy framework. The findings of this evaluation have consideration for the above-referenced data sources.

4.1.2.1 Provincial Policy Statement, 2020

The 2020 Provincial Policy Statement (PPS) came into effect on May 1, 2020 under Section 3 of the *Planning Act*. The PPS provides overall policy direction on matters of provincial interest related to land use planning and development, and sets the policy foundation for regulating the development and use of land. In this respect, Section 3 of the Planning Act requires that all decisions affecting planning matters "shall be consistent with" policy statements issued under the Planning Act.

The PPS provides a vision for land use planning in Ontario that focuses growth within settlement areas, and encourages an efficient use of land, resources, and public investment in infrastructure. To support this vision, the PPS defines a number of policies to promote strong, liveable, healthy and resilient communities and to promote Ontario's long-term prosperity, environmental health and social well-being.

The Project has been evaluated with regard to the policy direction and provisions of the PPS. Based on this analysis, it is our opinion that specific policies in Section 1.0 (Building Strong Healthy Communities) and Section 2.0 (Wise Use and Management of Resources) are particularly relevant to the proposed landfill expansion. Commentary regarding these policies is provided in the following section of this Report.

Policy Context

In the context of the 2020 PPS, in our opinion, the activities associated with the W12A Landfill and the Project would be considered a 'waste management system'. It is also our opinion that a landfill would be classified as a 'major facility' under the terms of the PPS. Section 6.0 of the PPS defines these relevant terms as follows:

> **"Waste management system:** means sites and facilities to accommodate solid waste from one or more municipalities and includes recycling facilities, transfer stations, processing sites and disposal sites.
>
> **Major facilities:** means facilities which may require separation from sensitive land uses, including but not limited to airports, manufacturing uses, transportation infrastructure and corridors, rail facilities, marine facilities, sewage treatment facilities, waste management systems, oil and gas pipelines, industries, energy generation facilities and transmission systems, and resource extraction activities."

Additionally, in the context of the PPS, in our opinion, the Site-Vicinity Study Area would be classified as a prime agricultural area. Prime agricultural areas are defined as follows in Section 6:

> "**Prime agricultural area:** means areas where prime agricultural lands predominate. This includes areas of prime agricultural lands in associated Canada Land Inventory Class 4 through 7 Lands, and additional areas where there is a local concentration of farms which exhibit characteristics of ongoing agriculture. Prime agricultural areas may be identified by the Ontario Ministry of Agriculture and Food using guidelines developed by the Province as amended from time to time. A prime agricultural area may also be identified through an alternative agricultural land evaluation system approved by the Province."

Further, Section 6 defines prime agricultural land as:

> "**Prime agricultural land:** means specialty crop areas and/or Canada Land Inventory Class 1, 2 and 3 lands, as amended from time to time, in this order of priority for protection."

Policy Review

Given the nature and scale of the Project and the surrounding development context, in our opinion, the following policies contained within Sections 1.0 and 2.0 of the PPS have specific relevance to the development proposal:

Policy 1.1.1 prescribes that healthy, liveable and safe communities are sustained by:

> "a) promoting efficient development and land use patterns which sustain the financial well-being of the Province and municipalities over the long term;
>
> c) avoiding development and land use patterns which may cause environmental or public health and safety concerns;"

In our opinion, the proposed landfill expansion would promote an efficient land use pattern to help to sustain the financial well-being of the Province and the City of London over the long term. In this regard, the proposed expansion is expected to increase the available capacity of the landfill by 25 years, which will allow the City to continue to efficiently use these lands for the local disposal of waste. Further, the expansion is expected to create a public disposal option for nearby municipalities. It is anticipated that this service arrangement would provide a financial benefit to the City.

With respect to health and safety, in conjunction with the EA, noise, odour and air quality studies were conducted to assess the potential impacts of the proposed landfill expansion on adjacent sensitive land uses. Generally, it is concluded in these associated reports that the identified landfill expansion is expected to meet all Provincial criteria with respect to noise, odour and air quality. Noise and air quality monitoring programs for the W12A landfill have been proposed to verify emission rates for air quality indicators and to verify that planned mitigation measures are implemented as planned and are effective. Additionally, the vertical expansion alternative selected in conjunction with the EA would not result in the encroachment of the landfill towards existing sensitive land uses.

Provided the impact mitigation recommended in the aforementioned studies is implemented in project planning, in our opinion the proposed landfill expansion would satisfy Policy 1.1.1.

Policy 1.2.1 states that a coordinated, integrated and comprehensive approach should be used when addressing planning matters within, and across, municipalities, and with other orders of government, including:

"d) *infrastructure*, *multimodal transportation systems*, *public service facilities* and *waste management systems*."

In our opinion, the planned expansion of the W12A Landfill site has been carried out in a coordinated and comprehensive manner. In this regard, the associated EA process was carried out in accordance with an approved ToR and integrated an extensive public consultation program. In addition, the EA study process incorporates a detailed review of environment features including: atmosphere; biology; geology and hydrogeology; surface water; agriculture; archaeology; cultural heritage; land use; agriculture; socio-economic; visual; design and operations, and transportation.

Policy 1.2.6.1 of the PPS provides direction regarding land use compatibility for major facilities:

> "Major facilities and sensitive land uses shall be planned and developed to avoid, or if avoidance is not possible, minimize and mitigate any potential adverse effects from odour, noise and other contaminants, minimize risk to public health and safety, and to ensure the long-term operational and economic viability of major facilities in accordance with provincial guidelines, standards and procedures."

Section 6.0 of the PPS defines 'sensitive uses' as follows:

> **"Sensitive land uses:** means buildings, amenity areas, or outdoor spaces where routine or normal activities occurring at reasonably expected times would experience one or more adverse effects from contaminant discharges generated by a nearby major facility. Sensitive land uses may be a part of the natural or built environment. Examples may include, but are not limited to: residences, day care centres, and educational and health facilities."

As outlined in this Report, the City has implemented measures to reduce the potential impacts of the existing W12A Landfill on sensitive land uses in the vicinity of the site (i.e., dwelling removal). The applicable Official Plan policy framework also largely restricts the introduction of new sensitive land uses in the vicinity of this facility, as discussed in the following sections of this Report. Further, pursuant to this Policy, the Project has been evaluated relative to applicable components of the Land Use Compatibility (D-Series) Guidelines administered by the Ministry of Environment, Conservation and Parks (Ministry).

Based on our review of the published D-Series Guidelines, in our opinion, Guideline D-4 (Land Use On or Near Landfills and Dumps) relates most directly to the proposed landfill expansion project. This Guideline identifies restrictions and controls on land use in the vicinity of landfills and dumps, in order to protect the health, safety, convenience and welfare of residents near such facilities. As set out in the Synopsis to this Guideline, the direction provided in this document is to complement existing Ministry abatement programs for landfills, and is a direct application of Guideline D-1: "Land Use Compatibility."

Application of Guideline D-4 extends to all proposals for land use on, or near, operating and non-operating landfills, that contain municipal solid waste, industrial solid waste and/or sewage sludges. Pursuant to Section 5.1 of the Guideline, the Ministry will normally recommend against proposals for sensitive land use adjacent to operating landfills, and on land used for waste disposal purposes where there are completed or partially completed fill areas.

In accordance with Section 5.1.1 of the Guideline, the following are considered sensitive land uses for operating landfills:

> "Any existing or committed land use which includes:
>
> a. a permanent structure used in animal husbandry; or
> b. agricultural land used for pasturing livestock; or
> c. a permanent structure where:
> i. a person sleeps, or
> ii. a person is present on a full time basis;
> but not including food or motor vehicle service facilities adjacent to a highway, utility operations, scrap yards, heavy industrial uses, gravel pits, quarries, mining or forestry activities; or
> d. cemeteries"

Additionally, Section 5.1.2 identifies that compatible land uses for operating landfills may include:

> "a. utilities and above grade transportation routes except major highways;
> b. fences;
> c. wood harvesting and other forestry activities;
> d. certain farming activities;
> e. industrial uses, including incinerators permitted to operate under O. Reg. 347;
> f. gravel pits and quarries, and other mining activities(provided the landfill water table is not affected); or
> g. such land uses which would not be threatened by any hazard to public health or safety and would not be impaired by nuisance effects."

The Impact Assessment provided in Sections 4.2 and 4.3 of this Report was carried out with regard for Guideline D-4 in order to determine potential impacts associated with the proposed landfill expansion. As discussed in these Sections, the Project is not expected to generate adverse impacts on any sensitive land uses within the Site-Vicinity Study Area. In light of these considerations, in our opinion, the Project would be compatible with the local development context and has regard for the D-Series Guidelines.

Given these key considerations, it is our opinion that the proposed expansion is consistent with the direction defined in Policy 1.2.6.1.

Policy 1.6.10.1 prescribes requirements for the provision and location of waste management systems;

> "Waste management systems need to be provided that are of an appropriate size and type to accommodate present and future requirements, and facilitate, encourage and promote reduction, reuse and recycling objectives.
>
> Waste management systems shall be located and designed in accordance with provincial legislation and standards."

The EA has been carried out to evaluate options for expansion of the W12A Landfill, and to identify a preferred landfill expansion alterative that can effectively accommodate present and future requirements.

Policy 2.1.1 of the PPS directs that natural features and areas shall be protected for the long term.

The potential impacts of the Project on natural heritage features within the Site-Vicinity Study Area were investigated, as documented in the Draft W12A Landfill Expansion Environmental Assessment - Biology: Existing Conditions and Impact Assessment Report, dated November 2020. As discussed in this report, this investigation examined the potential impacts of the proposed landfill expansion on aquatic and terrestrial ecosystems identified within the study area. Generally, it is concluded in Section 4 of the report that the Project avoids many potential impacts by locating the landfill expansion within the existing footprint. Additionally, a mitigation and monitoring plan is recommended in the report to mitigate potential direct and indirect impacts of the Project on natural features during the construction, operations, closure and post-closure phases. Provided that the recommended mitigation program is implemented in project planning, in our opinion the proposed landfill expansion would satisfy Policy 2.1.1.

Policy 2.2 of the PPS defines policies serving to protect, improve or restore the quality and quantity of water. To address these provisions, a Stormwater Management Report, dated October 2020, was completed. This report generally concludes that the proposed works are predicted to result in surface water quality conditions that are comparable to existing conditions and meet Provincial requirements. A monitoring program is also recommended in these reports to help minimize potential stormwater management and surface water impacts associated with landfill operations following implementation of the Project.

A Groundwater Existing Conditions and Impact Assessment, dated November 2020, was also completed. Generally, it is concluded in this study report that the proposed expansion project is not expected to affect: the groundwater supply available to water supply wells in the area; groundwater baseflow to off-site watercourses or other natural environment features in the area of the landfill, or; off-site groundwater levels that support vegetation. Mitigation and monitoring programs are also recommended in this report (1) to meet groundwater quality objectives at the landfill boundary and (2) to continue the existing landfill groundwater monitoring program.

Provided the identified monitoring programs and mitigation measures are implemented, in our opinion the Project would satisfy Policy 2.2.

Policy 2.3 of the PPS integrates a series of policies relating to Agriculture. MHBC completed an assessment of these policies in conjunction with an evaluation of an assessment of Project-related impacts on agricultural land and operations within the Site-Vicinity Study Area. This evaluation was detailed in the Agricultural Resources Existing Conditions and Impact Assessment Report: W12A Landfill Expansion Environmental Assessment, dated November 2020.

In our opinion, specific policies contained within Policy 2.3 are particularly relevant to this proposed landfill expansion. These policies are identified below:

1. Policy 2.3.1 states that prime agricultural areas shall be protected for long-term use for agriculture;

2. Policy 2.3.3 addresses permitted land use in prime agricultural areas:

    - Policy 2.3.3.1 states that, "In prime agricultural areas, permitted uses and activities are: agricultural uses, agriculture-related uses and on-farm diversified uses";

    - Policy 2.3.3.2 prescribes that all types, sizes and intensities of agricultural uses and normal farm practices shall be promoted and protected in prime agricultural areas, in accordance with provincial standards; and

    - Policy 2.3.3 states that new land uses shall comply with the Minimum Distance Separation (MDS) formulae developed by the Province.

3. Policy 2.3.5 prescribes that lands can only be excluded from prime agricultural areas to delineate or expand settlement areas in accordance with related policies.

4. Policy 2.3.6 identifies several circumstances where non-agricultural uses may be permitted in prime agricultural areas (e.g., the land does not comprise a speciality crop area).

Respecting Policies 2.3.1, 2.3.3.1, 2.3.3.2, 2.3.5 and 2.3.6, the Project integrates vertical expansion over the existing landfill footprint, as well as a boundary expansion to accommodate additional buffer areas and a Waste and Resource Material Drop-off Area. As detailed in the following Official Plan discussion, the expansion area is located within the defined boundary of the site-specific W12A Landfill policy area. In our opinion, the proposed boundary expansion would be accommodated on lands specifically designated for a waste management system. Accordingly, in the context of the PPS, the Project would not exclude lands from a prime agricultural area or introduce a new non-agricultural use into this area. Further, in our opinion, the components of the Project would not specifically constrain, or compromise, existing agricultural uses and normal farm practices within the prime agricultural area proximate to the Site Area.

With regard to Policy 2.3.3, MDS setbacks are applied to separate uses to reduce incompatibility concerns relating to odour emissions from livestock facilities. Specific direction on the applicability of MDS formulae is provided in the Minimum Distance Separation (MDS) Document, prepared by OMAFRA (Publication 853). Guideline No. 3 of this Publication states that MDS I and II setbacks are not required for landfills. Accordingly, consistent with Policy 2.3.1 of the PPS, the existing landfill area and the proposed buffer area should not constrain existing agricultural operations in proximity of this facility, including those within the Site-Vicinity Study Area.

Policy 2.6 of the PPS contains several polices related to the conservation of significant cultural heritage and archaeological features. A Heritage Impact Assessment, dated August 2020, was completed that details areas of potential cultural heritage within the vicinity of the W12A landfill site. Generally, it is concluded in Section 7 of this study report that cultural heritage resources would not be directly or indirectly impacted by the proposed expansion, and no further studies or monitoring is required.

Conclusion

In light of these considerations and our broader evaluation of this Project relative to the PPS, provided recommended monitoring and mitigation measures are implemented, it is our opinion that the Project satisfies, and is consistent with, the Provincial Policy Statement.

4.1.2.2 City of London Official Plan (1989)

The City of London Official Plan was adopted by Council in June 1989. A comprehensive five year update of the Official Plan was carried out during the period of 2006 to 2009. This review process concluded with the approval of Official Plan Amendment No. 438 by the Minister of Municipal Affairs and Housing, with modifications, on December 17, 2009. Certain policies incorporated into the update were referred to the Ontario Municipal Board; however, these appeals were subsequently resolved.

Section 1.2 of the 1989 Official Plan states that, "The Official Plan for the City of London contains City Council's objectives and policies to guide the short-term and long-term physical development of all lands within the boundary of the municipality." Policies defined within the Official Plan provide direction on a range of planning considerations, such as growth management, urban form, urban design and public consultation, in order to promote the physical development of a healthy, sustainable community.

Figure 3 of this Report illustrates that the Site Area and Site-Vicinity Study Area contain the Agriculture, Open Space and Environmental Review and use designations pursuant to Schedule 'A' (Land Use Plan) of the 1989 Official Plan:

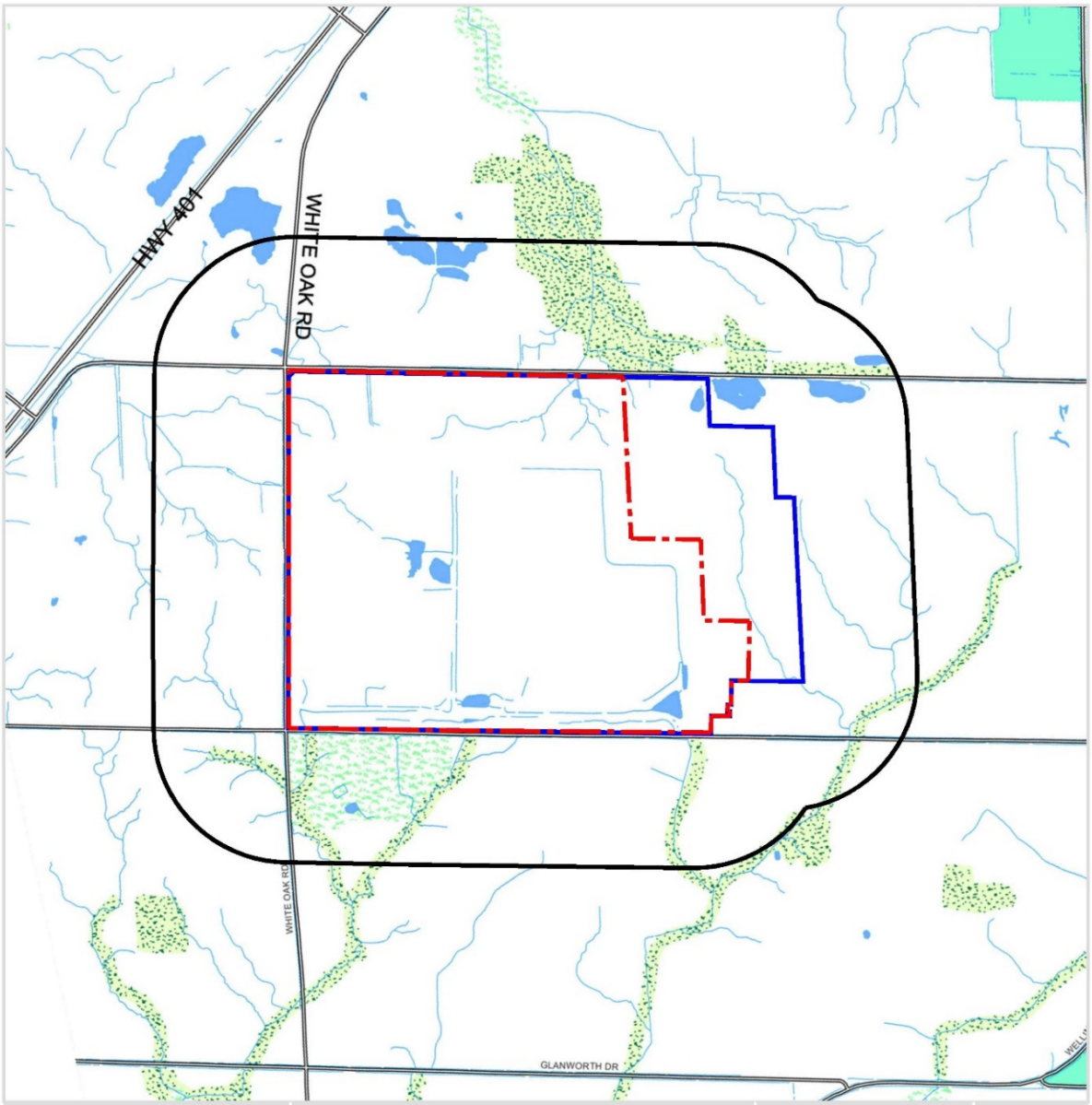


Figure 3

Schedule A - Land Use

Map 11 & 14 - City of London Official Plan, 1989

W12A Landfill
City of London

Legend

Site Area

Site Study Area

Site-Vicinity Study Area

Regional Facility
Community Facility
Open Space
Urban Reserve Community Growth
Urban Reserve Industrial Growth
Rural Settlement
Environmental Review
Agricultural
Urban Growth Boundary

DATE:	Dec. 3, 2020
SCALE:	1:20,000
FILE:	08227L
DRN:	JB

North

K:\08227L - W12A LANDFILL\RPT\LONDON OP_1989_DEC2020.DWG

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The following provides a summary of the identified land use designations:

Agriculture Designation

The preamble to Chapter 9 of this Official Plan outlines that the Agriculture designation is applied to lands outside of the urban community. As illustrated on Figure 3, this designation comprises the majority of the Site Area and Site-Vicinity Study Area including the W12A landfill site. Section 9.1.1 sets out a series of objectives for the Agriculture designation. In our opinion, the following objectives are particularly relevant to the Project:

"i) Protect, maintain and improve the prime agriculture land base for future generations. Prime agricultural land consists of Classes 1, 2, and 3 soils according to the Canada Land Inventory Capability Classification for Agriculture mapping and specialty croplands.

ii) Promote and support a healthy and productive agricultural industry as a key component of the City's economic base and heritage.

iii) Promote farm practices which encourage the conservation of surface and ground water resources, aquatic habitat, woodlands, wetlands, wildlife habitat and other natural features, where such practices do not impose undue limitations on the farming community.

ix) Mitigate impacts from any new non-agricultural uses on surrounding agricultural operations and lands to the extent feasible."

In accordance with Section 9.2.1 of this Official Plan, the primary permitted use of land in the Agriculture designation is the cultivation of land and the raising of livestock. Further, a full range of farm-related activities are permitted in this designation including general farming, livestock farming, cash crop farming, market gardening, specialty crops, nurseries, forestry, aquaculture and agricultural research. Farm residences are also permitted in this designation, as are home occupations and secondary farm occupations subject to specific provisions set out in the Official Plan.

Open Space Designation

Pursuant to Section 8A of the 1989 Official Plan, the Open Space designation is applied to lands which are to be maintained as park space or in a natural state. Within the Site-Vicinity Study Area, the Open Space designation is only applied to the Islamic Cemetery of London lands located at the southeast corner of Manning Drive and White Oak Road (south of the W12A Landfill site). In accordance with Section 8A.2.2, private open space areas such as cemeteries are permitted in this designation.

The proposed expansion to the landfill boundary would not encroach into areas designated Open Space.

Environmental Review Designation

Schedule 'A' identifies that the Environmental Review designation has been applied to several lands in the Site-Vicinity Study Area, including lands adjacent to drainage corridors, and a large area in the northeast corner of the Site-Vicinity Study Area.

As set out in Section 8B of this Official Plan, areas designated Environment Review are identified through Subwatershed Planning Studies and are identified on Schedule 'A'. As stated in this Section, these lands are to be protected from activities that would diminish their functions pending the completion of a detailed environmental study. In accordance with Section 8B.3, pending further evaluation of these features, permitted uses in this designation include agriculture, woodlot management, horticulture, conservation, recreational uses, and essential public utilities and municipal services.

The proposed expansion to the landfill boundary would not encroach into areas designated Environmental Review.

Waste Management Area Policies

Notwithstanding the permissions set out for the Agricultural designation, specific policies for landfill sites are provided under Section 9.2.15 'Waste Management and Resource Recovery Area' and Section 17.4 'Operating and Closed Landfill Sites' of this Official Plan.

Section 9.2.15 specifically pertains to the Waste Management Resource Recovery Area which encompasses the W12A Landfill site and the lands generally located within the block bounded by Wellington Road South, Manning Drive, White Oak Road and Scotland Drive. In accordance with Section 9.2.15.1, properties addressed as 3137 and 3405 Scotland Drive and 5529, 5595, 5615, 5751 and 5879 Wellington Road South, which are located within this City block, do not form part of this specific policy area.

Section 9.2.15.2 addresses the planned function of the W12A Landfill and the adjacent MRF site:

> "The City of London recognizes the importance of the existing W12A landfill and the suitability of the existing location to minimize environmental and social impact while providing the important economic function of waste management. The adjacent site is also a suitable location for landfill expansion and the development of an integrated Resource Recovery Centre for municipally managed waste reduction, waste disposal, waste diversion and waste processing, using principles of sustainability which are socially, environmentally and fiscally responsible."

Further, this Section identifies a set of objectives for the use of land within the Waste Management and Resource Recovery Area. In our opinion, the following objective is particularly relevant to the Project:

> "i To support the environment, public health and safety and the interests of residents by ensuring that all environmental, social and financial impacts of waste management / resource recovery activities are sufficiently controlled or mitigated in a timely manner."

In our opinion, the Project supports the planned function of the Waste Management Resource Recovery Area. In this regard, the Project proposes to expand the existing landfill property to accommodate additional waste management facilities with consideration for sustainable design principles (as discussed in relation to associated PPS policies). It is also our opinion that the Project aligns with the referenced Waste Management Resource Recovery Area objective, as the facility expansion is being planned in a manner that considers the environment, public health and safety and the public interest.

In accordance with Section 9.2.15.3, a variety of waste management/resource recovery uses may be permitted within this defined area subject to site-specific zoning. Among the permitted uses in this defined area are municipal waste disposal facilities, as well as other waste disposal facilities such as material recovery facilities, yard waste composting facilities, and source separated organic composting facilities.

It is further noted in this Section that:

- Permitted uses are subject to the criteria listed in Section 9.2.15, 17.4 and 17.5 of the Official Plan;
- Farm dwellings and secondary farm dwellings are not permitted within this area; and
- Waste management and resource recovery uses should be planned to minimize disruption to existing agricultural uses and facilities.

In addition to the policy direction provided in Section 9.2.15, Sections 17.4 and 17.5 provide additional policies relating to operational landfills and other waste management facilities, respectively. In our opinion, Section 17.4.3 is of particular relevance to the Project. This policy sets out criteria for development in proximity of the existing landfill:

> "Notwithstanding the land uses designated on Schedule "A" of this Plan and any associated policies, **future development will not be permitted on or in the vicinity of operating landfill sites,** closed landfill sites and other sites which produce gases similar to those found in landfill areas, **unless it is determined that the development satisfies the provisions of the Environmental Protection Act, and the development complies with any other provincial and municipal guidelines,** as applicable." (emphasis added)

As discussed, the Project integrates a boundary expansion to the existing landfill property to accommodate additional lands for buffering and a Waste and Resource Material Drop-off Area. This expansion would be encompassed within the existing boundary of the defined Waste Management Resource Recovery Area. Further, with consideration for the intended use of the expansion area, it is our opinion that the Project would (1) comply with existing permissions for the Waste Management Resource Recovery Area and (2) align with the identified objectives of the Agricultural designation. Additionally, as discussed in the aforementioned agricultural impact assessment, the Project should not adversely impact on existing agricultural uses and normal farm practices proximate to the Site Area.

Conclusion

Based on the foregoing and our broader evaluation of the proposed landfill expansion relative to the 1989 Official Plan, it is our opinion that the Project conforms with the planning direction and development permissions of this Official Plan.

4.1.2.3 City of London Official Plan (The London Plan)

The City of London Council adopted a new City of London Official Plan ('The London Plan') on June 23, 2016 and the Ministry of Municipal Affairs (MMA) issued its approval of the new Official Plan, with modifications, on December 28, 2016. Several parties subsequently appealed policies and schedules of the MMA-approved Official Plan to the Ontario Municipal Board, now the Local Planning Appeal Tribunal.

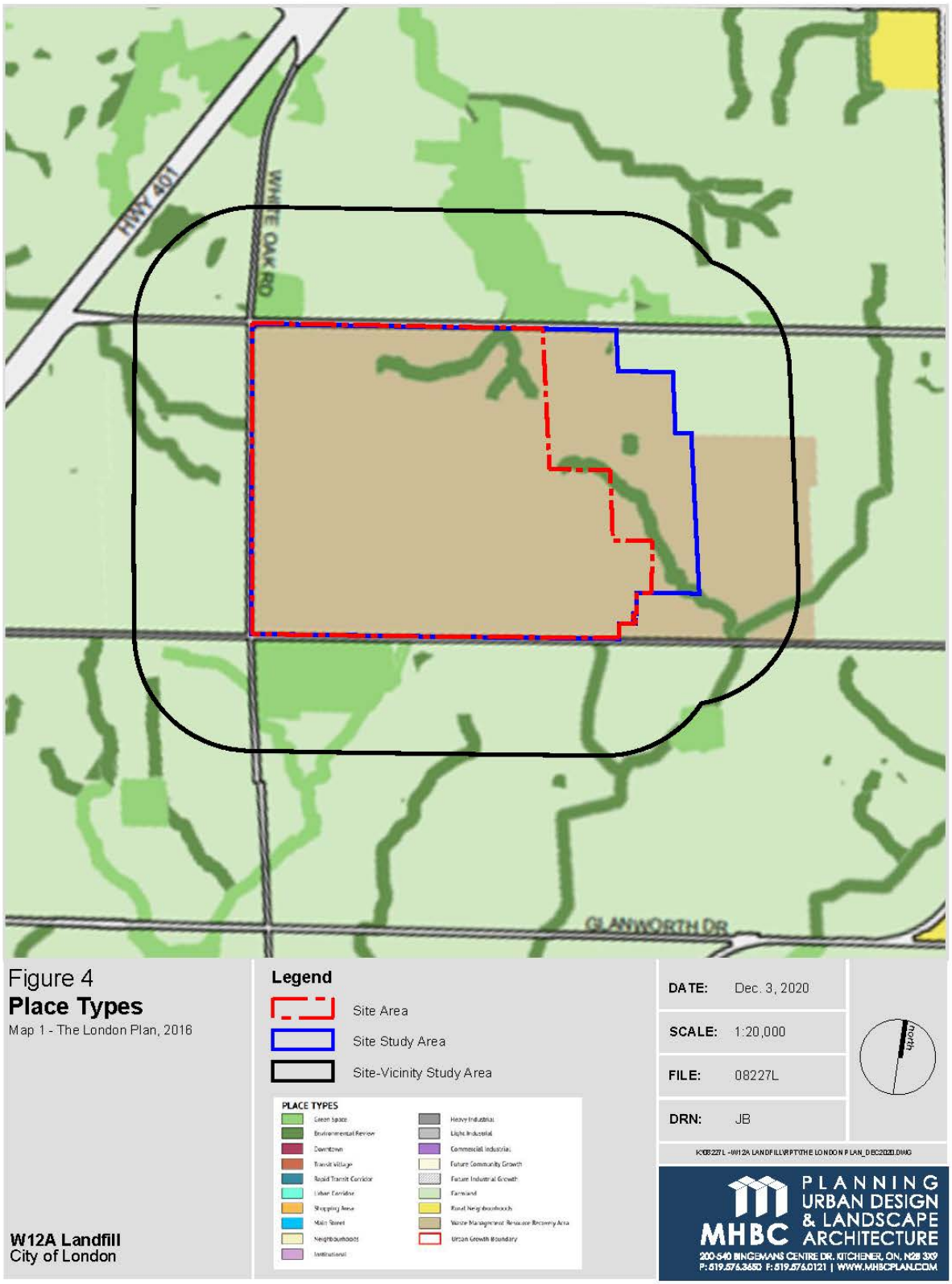
At this time, certain policies and schedules applicable to the Site Area and Site-Vicinity Study Area remain under appeal and are not currently in effect. Notwithstanding, the following discussion describes how the Project aligns with the policy direction and development provisions of The London Plan as approved by the MMA. Additionally, City staff have advised that The London Plan is considered the determinative analysis for establishing Official Plan policy direction.

Policy Context

Figure 4 of this Report illustrates that the Site Area and Site-Vicinity Study Area contain the following designations pursuant to Map 1 (Place Types) of The London Plan:

- Waste Management Resource Recovery Area;
- Farmland;
- Green Space; and
- Environmental Review.

An overview of the applied place types follows Figure 4.


HWY 401
WHITE OAK RD
GLANWORTH DR
Figure 4
Place Types
Map 1 - The London Plan, 2016
W12A Landfill
City of London
Legend
Site Area
Site Study Area
Site-Vicinity Study Area
PLACE TYPES
Green Space
Environmental Review
Downtown
Transit Village
Rapid Transit Corridor
Urban Corridor
Shopping Area
Main Street
Neighbourhoods
Institutional
Heavy Industrial
Light Industrial
Commercial Industrial
Future Community Growth
Future Industrial Growth
Farmland
Rural Neighbourhoods
Waste Management Resource Recovery Area
Urban Growth Boundary
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& LANDSCAPE
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Waste Management Resource Recovery Area

The existing W12A Landfill site and adjacent lands are designated Waste Management Resource Recovery Area. As set out in Policy 1254 of The London Plan, this place type was developed specifically for the W12A Landfill to provide for the continued evolution of the landfill and surrounding area as an integrated waste management centre.

Policy 1254 also states that, "Landfills are important to the city's future growth and development, provide a necessary public benefit and the ability to manage the city's solid waste". It is further prescribed in this Policy that landfills will be (1) designed to maximize utility and minimize negative impacts and (2) maintained in accordance with all relevant federal, provincial and municipal legislation and regulations.

Pursuant to Policy 1256 of this Official Plan, polices pertaining to the Waste Management Resource Recovery Area place type are intended to address several key objectives, including to:

- Apply to lands that are either currently being used as a landfill, are being considered for expansion, or a landfill in the process of remediation;
- Facilitate the transition into productive use as a landfill; and
- Promote best practices in site selection, site design, operation, and remediation.

In accordance with Policy 1258, the following uses are generally permitted on lands designated Waste Management Recourse Recovery Area place type:

- Landfills;
- Related uses necessary to support waste reduction, re-use, recycling, resource recovery, treatment and waste disposal; and
- Eco-Industrial Parks where industries use materials available from the Waste Management Resource Recovery Area.

In addition to the above-noted uses, it is stated in Policy 1259 that a number of related uses are permitted in this place type through a site-specific Zoning By-law Amendment. These associated uses include a municipal waste disposal facility, community recycling drop-off depot, material recovery facility, and other similar waste uses.

The London Plan also contains a number of policies to guide land use and development in the vicinity of this place type. Most notably:

- Policy 1272 states that lot creation, either by consent or by plan of subdivision within the Waste Management Resource Recovery Area place type will not be permitted unless required to support approved landfill or resource recovery activities; and

- Policy 1273 provides the following policies for lands located within a 1,500 m radius of the Waste Management Resource Recovery Area place type boundary:

    "1. The City will continue to work with property owners within a 1,500 metre radius of the Waste Management Resource Recovery Area to mitigate impacts related to odour, dust, litter and traffic.

    2. Within the Farmland Place Type, the City will discourage new official plan and/or zoning by-law amendments to allow the development of new residential uses or other sensitive land uses within a 1,500 metre radius of the Waste Management Resource Recovery Area Place Type to provide appropriate separation distance to mitigate impacts.

    3. The City will confine all municipal waste management and resource recovery uses and accessory uses to the Waste Management Resource Recovery Area Place Type."

Farmland Place Type

Figure 4 illustrates that the majority of lands within the Site-Vicinity Study Area surrounding the Waste Management Resource Recovery Area are designated Farmland place type. In accordance with Policy 1179, this place type is the prime agricultural area of London, and consists of prime agricultural land (Canada Land Inventory Classes 1, 2, and 3 soils) and associated Class 4 through 7 soils. This Policy also prescribes that the prime agricultural area, "…will be protected and maintained for the long term as the base to support a healthy, productive, and innovative agricultural industry as a key component of the city's economic base and cultural heritage."

Policy 1181 provides additional direction regarding the intent of the Farmland place type. In our opinion, the following objectives for this place type are of particular relevance to the Project:

"9. Discourage uses which are not supportive of agriculture from locating in the Farmland Place Type. Limited non-agricultural uses may be permitted only where it can be demonstrated that the proposed use is consistent with the Provincial Policy Statement.

10. Minimize the potential for land use conflicts between residential uses and farm operations.

11. Mitigate impacts from any new or expanding non-agricultural uses on surrounding agricultural operations and lands."

As prescribed in Policy 1182, the Farmland place type permits a variety of agricultural and agricultural-related uses, and certain associated residential uses including principal farm residences, secondary farm dwelling units, and residential uses on existing lots of record.

With respect to sensitive land uses, pursuant to Policy 1186, the predominant type of development permitted in the Farmland place type is the farm unit. Pursuant to Policy 1186, the farm unit consists of the land base, the principal farm residence, secondary farm dwelling units that are required for the farm operation, and barns, silos, drive sheds, manure storage facilities and other farm buildings/ structures that support the farm operation.

Green Space

The Green Space place type is applied to the Islamic Cemetery of London (6100 White Oak Road) located south of the landfill facility. Within the Site-Vicinity Study Area, this place type is also applied to two woodlots on the north side of Scotland Drive, and a woodlot south of Manning Drive.

In accordance with Policy 758 of The London Plan, the Green Space place type is comprised of the following:

> "… public and private lands; flood plain lands; lands susceptible to erosion and unstable slopes; natural heritage features and areas recognized by City Council as having city-wide, regional, or provincial significance; lands that contribute to important ecological functions; and lands containing other natural physical features which are desirable for green space use or preservation in a natural state."

In accordance with Policy 762, uses permitted within this place type vary depending on the natural heritage features and areas contained on a site, the hazards present, and the presence of natural resources.

Environmental Review

The Environmental Review place type is applied to stream and drainage corridors throughout the Site-Vicinity Study Area. In accordance with Policy 779 of The London Plan, the Environmental Review place type is applied to lands that may contain natural heritage features and areas that have not been adequately assessed to determine their environmental significance.

In accordance with Policy 784, existing uses are permitted in this place type. Pending evaluation through environmental studies, permitted uses in the Environmental Review place type also include agriculture, woodlot management, horticulture, conservation, and recreational uses.

Conclusion

The Project integrates a proposed vertical expansion to the existing landfill footprint, as well as an expansion to the existing landfill boundary for additional buffering and a Waste and Resource Material Drop-off Area. As discussed, the boundary expansion would be encompassed within the existing boundary of the defined Waste Management Resource Recovery Area.

Given the intended use of the proposed expansion area, it is our opinion that the Project would comply with the policy objectives and existing permissions of the Waste Management Resource Recovery Area place type. In this respect, the Project was selected as the preferred alternative for the EA, in part, to maximize utility and minimize negative impacts associated with the landfill expansion. Further, activities associated with the expanded landfill would be maintained in accordance with applicable legislation and regulations.

Additionally, it is our opinion that the Project would align with the function and objectives of the Farmland designation. In particular, as discussed in relation to the PPS, the components of the Project should not conflict with, or compromise, existing agricultural operations and normal farm practices proximate to the Site Area.

In light of these considerations, and our broader evaluation of the proposal relative to the policies of The London Plan, it is our opinion that the Project conforms with the planning direction and development permissions of this Official Plan.

4.1.2.4 City of London Zoning By-law

Figure 5 of this Report illustrates the zoning applied to the Site Area and Site-Vicinity Study Area pursuant to City of London Zoning By-law No. Z.-1 (Zoning By-law). As illustrated, the W12A Landfill is zoned Waste and Resource Management (WRM1). Lands surrounding the landfill site within the Site-Vicinity Study Area are primarily zoned:

- Agricultural (AG2) Zone;
- Environment Review (ER) Zone;
- Open Space (OS3(1)) Zone; and
- Resource Extraction (EX) Zone.

A brief description of each zone follows Figure 5.

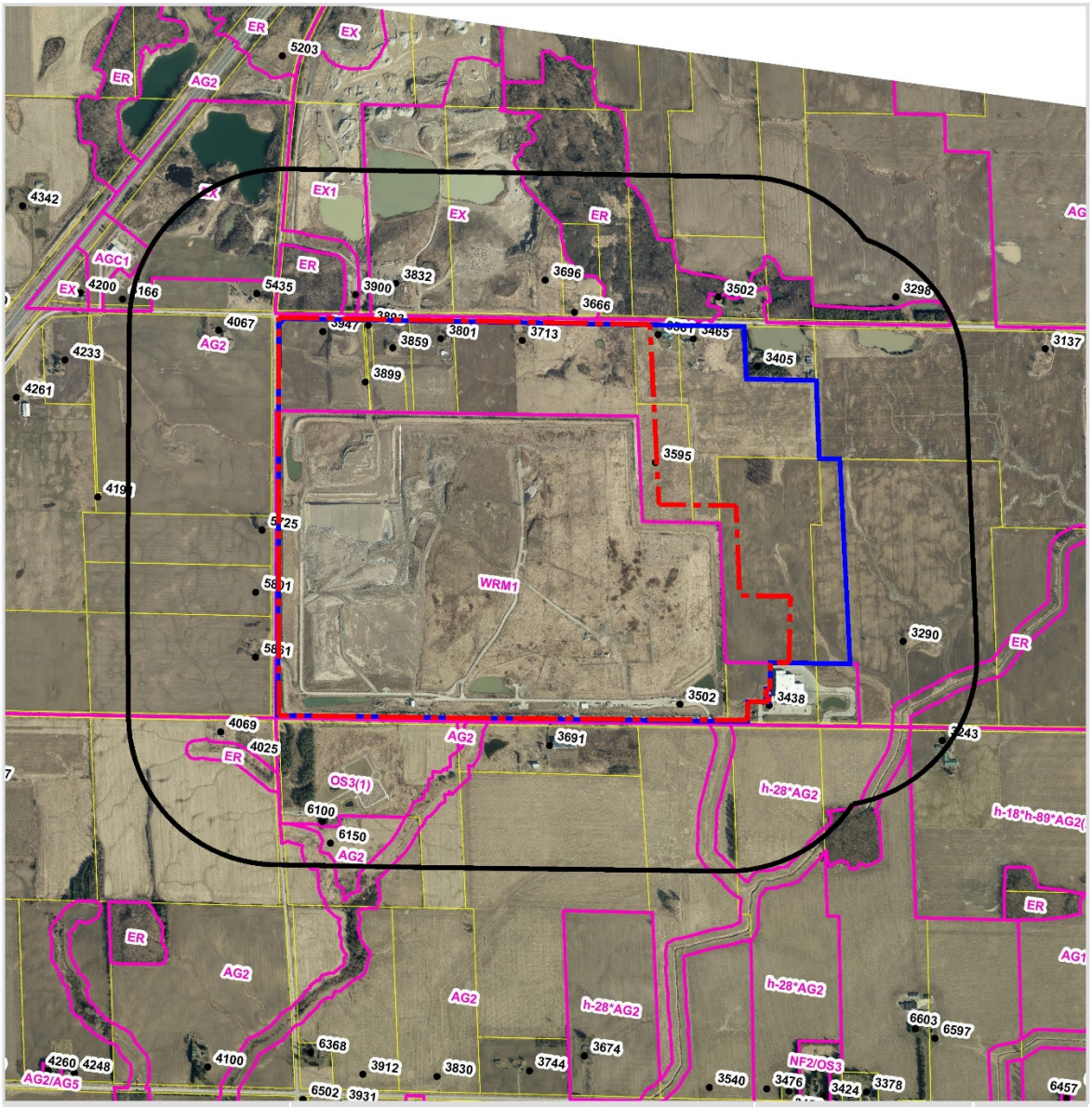

Figure 5
Zoning
City of London

Legend

- Site Area
- Site Study Area
- Site-Vicinity Study Area
- Parcel Fabric
- Zoning

DATE:	Dec. 3, 2020
SCALE:	1:18,000
FILE:	08227L
DRN:	JB

North

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W12A Landfill
City of London

Waste and Resource Management (WRM) Zone

Section 51.1 of the Zoning By-law states that the WRM Zone is applied to lands within the rural area of the City planned for waste management resource recovery areas. It is further stated in this Section that this Zone regulates a range of waste management and resource recovery uses, which are to be permitted by site-specific zoning.

In accordance with Section 51.2, agricultural uses and municipal waste disposal facilities are permitted in the WRM1 Zone variation applied to the Site Area and the MRF property:

- Agricultural uses;
- Municipal waste disposal facility;
- Leachate pre-treatment/hauled liquid waste facility;
- Public drop-off for municipal hazardous and special waste;
- Community recycling and drop-off depot;
- Yard waste composting facility; and
- Material recovery facility.

Municipal waste disposal facility and material recovery facility are defined in Section 2 of the Zoning By-law as follows:

> "MUNICIPAL WASTE DISPOSAL FACILITY" A Municipal Waste Disposal Facility is a facility for final disposal and includes landfills, solid waste incinerator and waste to energy facilities, including the flaring of landfill gas."

Agricultural (AG) Zone

The Agricultural Zone is applied to the majority of the area surrounding the W12A Landfill, including those lands intended for the landfill boundary expansion. In accordance with Section 45.1 of the Zoning By-law, this Zone is intended to be applied to lands which are designated Agriculture in the Official Plan. As identified below, the AG1 Zone variation permits a wide range of non-intensive agricultural uses whereas the AG2 Zone variation permits intensive and non-intensive agricultural uses. AG2 zoned lands are located within the Site-Vicinity Study Area.

In accordance with Section 45.2 of the Zoning By-law, the following uses are permitted in the AG2 Zone.

AG1:

- Agricultural uses;
- Livestock facilities provided that such facilities are located at least 300 m from the City's Urban Growth boundary; or in accordance with the minimum distance separation regulations, whichever is greater;
- Farm dwelling;
- Forestry uses;

- Kennels;
- Conservation lands;
- Wayside pits;
- Nursery;
- Passive recreation use;
- Farm market;
- Small Wind Energy Conversion System; and
- Greenhouse Farm.

AG2:

- Any use permitted in the AG1 Zone variation;
- Livestock facilities;
- Compost facility;
- Aquaculture;
- Agricultural research station;
- Manure storage facility; and
- Mushroom Farm.

The lands associated with the proposed buffer expansion are zoned AG2. In light of the intended use of these lands, in our opinion the buffer area would need to be rezoned WRM1. The required Zoning By-law Amendment would be undertaken following submission of the EA.

Environmental Review (ER) Zone

Section 37.1 of the Zoning By-law states that the ER Zone applies to areas designated Environmental Review on Schedule 'A' of the 1989 Official Plan. It is further stated that lands in this zone are intended to remain in a natural condition until their significance is determined through detailed environmental studies. In keeping with the local application of the Environmental Review designation, the ER Zone is primarily applied to drainage and stream corridors and to the woodlot near the northeastern corner of the Site-Vicinity Study Area.

Pursuant to Section 37.2, the following uses are permitted in the ER Zone:

- Conservation lands;
- Conservation works;
- Passive recreational uses;
- Managed woodlot; and
- Agricultural uses.

Open Space (OS3(1)) Zone

The Open Space (OS3) Zone is applied within the Site-Vicinity Study Area to the Islamic Cemetery of London. Pursuant to Section 36.1 of the Zoning By-law, the OS3 Zone variation is applied to cemeteries that have no alternative uses.

Further, a site-specific OS3(1) Zone variation is applied to the cemetery lands. As prescribed in Section 36.3 of the Zoning By-law, structures related to assembly, mausoleum or crematorium are not permitted within the OS3(1) Zone boundary.

Resource Extraction (EX) Zone

Within the Site-Vicinity Study Area, lands zoned EX and EX1 are located on the north side of Scotland Drive. Section 43.1 of the Zoning By-law states that this zone regulates resource extraction operations.

Section 43.2 prescribes that the following uses are permitted in these zones:

EX Zone:
- Resource extraction operations, including accessory aggregate reprocessing;
- Farms;
- Wayside pits; and
- Forestry uses.

EX1 Zone:
- Resource extraction operations, including accessory aggregate reprocessing, asphalt batching plants, and concrete batching plants;
- Farms, except for livestock facilities;
- Wayside pits; and
- Forestry uses.

Conclusion

In summary, it is anticipated that the proposed vertical expansion of the landfill and the proposed Waste and Resource Material Drop-off Area would be permitted uses in the WRM1 Zone. However, in our opinion the proposed buffer would need to be rezoned WRM1. The required Zoning By-law Amendment would be undertaken following submission of the EA. As discussed, it is our opinion that the proposed Waste and Resource Material Drop-off Area and expanded on-site buffer area would be consistent with existing Official Plan permissions.

With respect to the other zones within the Site-Vicinity Study Area, the existing zoning structure limits development permissions in the vicinity of the Site Area. Further, in light of the existing

zoning structure and the associated Official Plan policy framework, in our opinion, it is unlikely that new sensitive land uses would be introduced in close proximity to the Site Area.

4.2 Assessment of Effects on Current Land Uses

As identified in Section 4.1.2 of this Report, Guideline D-4 itemizes sensitive land uses for operating landfills:

- A permanent structure used in animal husbandry;
- Agricultural land used for pasturing livestock;
- A permanent structure where: a person sleeps, or a person is present on a full time basis (but not including food or motor vehicle service facilities adjacent to a highway, utility operations, scrap yards, heavy industrial uses, gravel pits, quarries, mining or forestry activities); and
- Cemeteries.

As an outcome of our land use evaluation, the following sensitive uses were identified within the Site-Vicinity Study Area in proximity to the existing landfill facility. Figure 2 of this Report illustrates the general location of the identified uses.

North:	Seven residential dwellings; aggregate extraction operation;
West:	Agricultural land;
East:	City of London MRF; agricultural land; and
South:	Cemetery; agricultural land; farm and associated dwelling; cattle farm.

As identified in Section 4.1.1 of this Report, several studies have been completed to assess potential impacts of the Project on existing land uses within the Site-Vicinity Study Area including identified sensitive land uses. Of particular relevance to this assessment are the noise, odour and air assessments. Generally, it is concluded in these associated reports that the proposed landfill expansion (1) is expected to meet all Provincial criteria with respect to noise, odour and air quality and (2) is not expected to result in impacts in excess of these criteria. Mitigation and monitoring programs are recommended in these reports to help minimize potential impacts associated with landfill operations following implementation of the Project.

Additionally, as outlined in Section 3.1 of this Report, the proposed landfill expansion does not result in the limits of waste being extended towards any of the sensitive land uses identified above. A residential dwelling is currently located to the north of the existing landfill on lands addressed as 3801 Scotland Drive. This residence is situated within the area intended for the landfill boundary expansion. In conjunction with the landfill expansion process, this dwelling will be removed to facilitate additional on-site buffering.

Given these considerations, provided the recommended impact mitigation is implemented, in our opinion the Project should not generate adverse impacts on these existing land uses. Further,

in light of the intended use of the proposed expansion area, it is our opinion that the Project would be compatible with the existing land uses within the Site-Vicinity Study Area.

4.3 Assessment of Effects on Planned Future Land use

No current development applications have been identified within the Site-Vicinity Study Area. Additionally, given the policy framework described under Section 2 of this Report it is not anticipated that sensitive land uses would be constructed in the Site-Vicinity Study Area within the 2035 planning horizon defined for the London Plan (pursuant to Policies 24 and 67). Our opinion on future land use in proximity to the landfill site is based, in part, on the following considerations:

- Pursuant to Section 17.4.3 of the 1989 Official Plan, future development is not permitted on or in the vicinity of operating landfill sites, unless it is determined that the development satisfies the provisions of the Environmental Protection Act, and the development complies with any other applicable provincial/municipal guidelines; and

- Policy 1273 of The London Plan prescribes that within the Farmland place type, the City will discourage new official plan and/or zoning by-law amendments to allow the development of new residential uses or other sensitive land uses within a 1,500 m radius of the Waste Management Resource Recovery Area place type (to provide appropriate separation distance to mitigate impacts).

In addition, the City owns a majority of the parcels within the Site-Vicinity Study Area to the east of the Site Area, as well as a number of parcels to the west and north of the Site Area. As outlined in this Report, the City has implemented measures to reduce the potential impacts of the existing W12A Landfill on sensitive land uses in the vicinity of the site (i.e., dwelling removal).

In light of these considerations, in our opinion it is anticipated that any future development in the Site-Vicinity Study Area within the 2035 planning horizon would be compatible with the uses planned for the Site Area. In this respect, given the planning framework applicable to Site-Vicinity Study Area, it is unlikely that new sensitive uses would be established in close proximity to the W12A Landfill site.

Based on the forgoing, it is our opinion that the Project should not adversely impact on future land uses within the Site-Vicinity Study Area.

5.0 Mitigation and Monitoring

As discussed in this Report, in our opinion measures recommended in conjunction with this Environmental Assessment should be implemented to mitigate any potential impacts to land uses proximate to the existing landfill facility. In this respect, project planning should have regard for (1) any mitigation required to protect surrounding land uses from noise, odour and dust impacts and (2) mitigation measures recommended to protect natural heritage features and functions.

6.0 Other Approvals

Section 4.1.2 of this Report identifies that the existing W12A Landfill and the Site Area limits are located within the Waste Management Resource Recovery Area of the City of London Official Plan (1989) and are designated Waste Management Resource Recovery Area pursuant to The London Plan. In our opinion, the core components of the Project (i.e., vertical landfill expansion, expanded on-site buffer area, Waste and Resource Material Drop-off Area) would be consistent with the existing land use permissions of both Official Plans.

Additionally, as identified in Section 4.1.2 of this Report, it is anticipated that the proposed vertical expansion of the landfill and the proposed Waste and Resource Material Drop-off Area would be permitted uses in the WRM1 Zone. However, in our opinion, the proposed buffer would need to be rezoned to WRM1. The required Zoning By-law Amendment would be undertaken following submission of the EA.

7.0 Conclusion

The City of London is proposing an expansion of the existing W12A Landfill site (the Project) located at 3502 Manning Drive, London. Generally, this property is located in a predominately agricultural area of London, south of the City's Urban Growth Boundary.

The proposed landfill expansion incorporates a vertical expansion over 106.3 ha of the existing landfill footprint. Additionally, the existing landfill property boundary is proposed to be extended to accommodate (1) additional on-site buffering north and east of the existing landfill facility and (2) a new small vehicle Waste and Resource Material Drop-off Area. Collectively, these site

modifications would increase the landfill boundary from approximately 140.0 ha to approximately 192.4 ha.

This Report evaluates the compatibility of the Project with surrounding land uses with consideration for (1) the proposed operational practices and (2) predictive assessments related to potential nuisance effects. The assessment of current and future land uses in the defined Site Area and Site-Vicinity Study Area was predicated on a study methodology designed at the outset of the evaluation. Generally, this methodology integrated: a review of the regulatory context and planning policy framework applicable to these areas; data collected during a field survey, an analysis of aerial photography; and information obtained through interviews with City of London (City) staff. The evaluation process was carried out between September 2019 and August 2020. Through this review, land uses that may be sensitive to the potential impacts of landfilling activities were identified.

In effect, the core elements of the Project would not result in an expansion to the existing landfill footprint; however approximately 52.4 ha of adjacent lands would be integrated into the facility for site buffering and additional waste management activities. These lands are currently within City of London ownership and are encompassed with the Waste Management Resource Recovery Area permissions of the City's1989 Official Plan and The London Plan. Based on our planning analysis of the Project and the applicable planning policy framework, it is our opinion that the Project would (1) comply with existing permissions for this special policy area and (2) align with the identified objectives of these Official Plans.

As identified in this Report, several studies have been completed to assess potential impacts of the Project on existing land uses within the Site-Vicinity Study Area including identified sensitive land uses. Of particular relevance to this assessment are the noise, odour and air assessments. Generally, it is concluded in these associated reports that the proposed landfill expansion is expected to meet all Provincial criteria with respect to noise, odour and air quality and is not expected to result in impacts in excess of these criteria. Further, as outlined in this Report:

- The proposed landfill expansion does not result in the limits of waste being extended towards any of the identified sensitive land uses; and

- Given the intended use of the proposed expansion area, it is our opinion that the Project would be compatible with existing land uses in the Site-Vicinity Study Area.

Additionally, in our opinion it is anticipated that any future development in the Site-Vicinity Study Area within the 2035 planning horizon of The London Plan would be compatible with the uses planned for the Site Area. In this respect, given the planning framework applicable to Site-Vicinity Study Area, it is unlikely that new sensitive uses would be established in close proximity to the W12A Landfill site.

In light of these findings, provided recommended impact mitigation is implemented, in our opinion the Project should not generate adverse impacts on current or future land uses in the Site-Vicinity Study Area. It is also our opinion that the Project would be compatible with current and future land uses within this defined study area.

Respectfully submitted,

MHBC

Planning, Urban Design & Landscape Architecture

Scott Allen, MA, RPP
Partner

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