MOTT MACDONALD

keltbray

Former MSD Facility, Breakspear Road South, Ickenham

Operational Waste Management Strategy

September 2022

This page left intentionally blank for pagination.

Mott MacDonald
4th Floor
Mountbatten House
Grosvenor Square
Southampton SO15 2JU
United Kingdom

T +44 (0)23 8062 8800
mottmac.com

Keltbray Development Ltd

Former MSD Facility, Breakspear Road South, Ickenham

Operational Waste Management Strategy

September 2022

Issue and Revision Record

Revision	Date	Originator	Checker	Approver	Description
A	01 September 2022	David Vargas Castro Mohar Das	Shannon Stone	David Dray	Issue for Client comment
B	30 September 2022	David Vargas Castro	Shannon Stone	Anita Manns	Reissue following Client comments

Document reference: 108003-MMD-00-XX-DC-WM-0001 |

Information class: Standard

Contents

Tables

Figures

1 Introduction

1.1 General

This Operational Waste Management Strategy (OWMS) has been prepared on behalf of Keltbray Development Ltd by Mott MacDonald with respect to a proposed planning application for a new storage yard for Keltbray's construction operations. The site is located to the west of Breakspear Road South (hereafter referred as the "proposed development)near Ickenham, in the London Borough of Hillingdon (LB Hillingdon).

This document identifies the strategic approach to the management of wastes generated during the operation of the proposed development generated by the personnel, visitors and contractors.

1.2 Overview of the proposed development

Keltbray is a leading UK engineering and early-stage construction provider, and the yard is intended to support future construction sites in West and Central London being developed by Keltbray and Kerr Properties Holdings Limited, part of the Keltbray group. The proposed development would be focussed on supporting Keltbray's wider activities and is not intended to be a commercial builders' merchant which would generate activity from trade / members of the public.

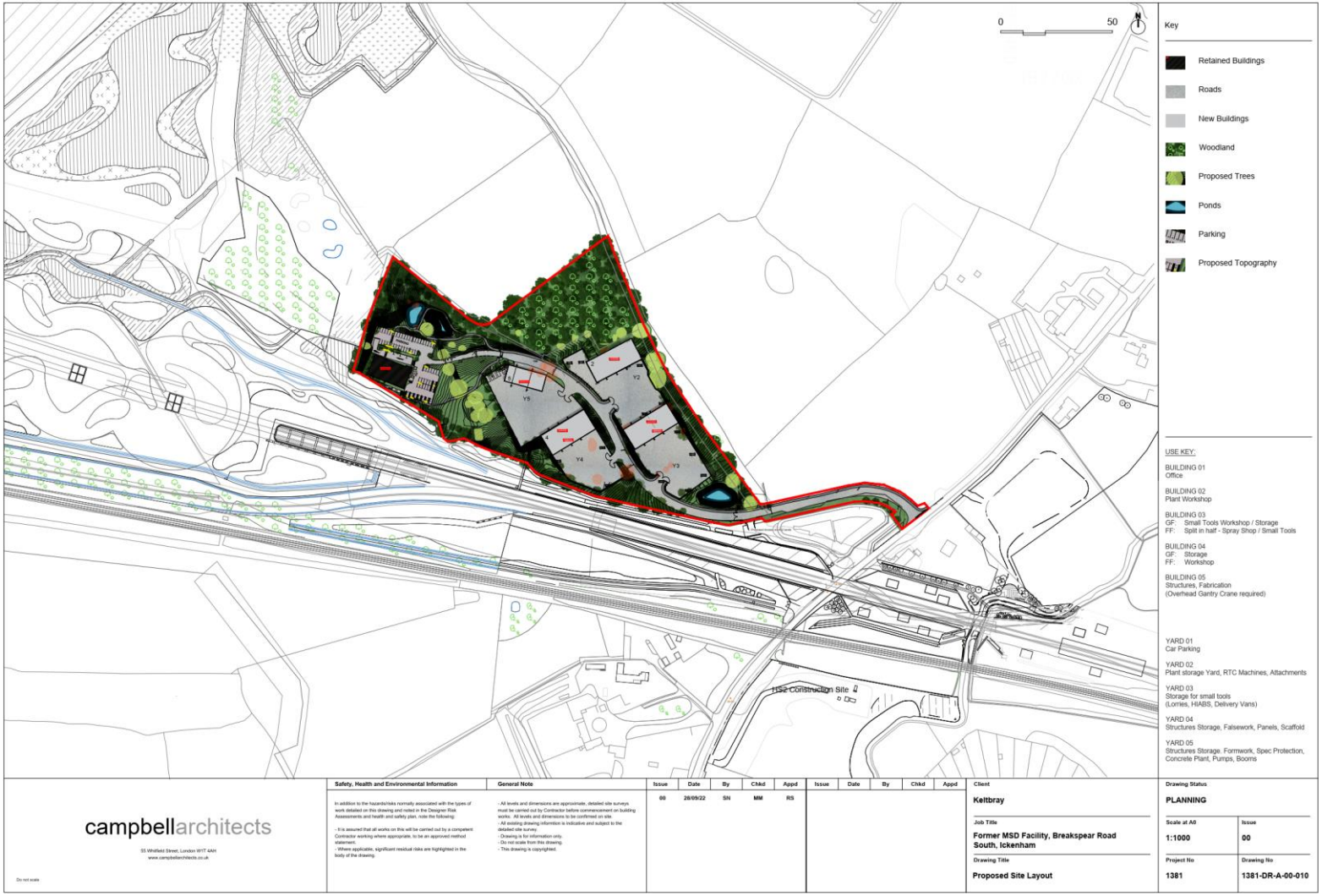
The proposed development will deliver approximately 7,650m^2 Gross External Area (GEA) of building floorspace. An administration building will be provided, utilising an existing building on the site, with the remaining structures on the site demolished. Four independently operating storage facilities will be provided with associated yard space and access points onto an internal access road. Pedestrian facilities will be provided predominately along the northern side of the internal access road, with a crossing facility provided to connect to the proposed administration building. To facilitate the use of the occasional larger HGVs associated with such a storage yard, the access road and bell-mouth with the junction of Breakspear Road South will be widened. Car parking will be included at the proposed development, with expected provisions for electric charging.

The proposed development will be an administrative and storage facility for Keltbray operations within London. The facility is intended to replace existing individual sites leased by Keltbray on Challenge Road in LB Hounslow and within the Link Park Road Estate on the edge of LB Hillingdon. In addition, it is expected that some staff will transfer from Keltbray's facility in Egham, Surrey. It is anticipated that the proposed development will be operational during 2023.

Commercial waste arising is anticipated from the proposed development. The site layout is given in Figure 1.1. The usage of the five buildings is given below,

- Building 01: Office
- Building 02: Storage Unit
- Building 03: Storage Unit
- Building 04: Storage Unit
- Building 05: Single Storey Storage Unit

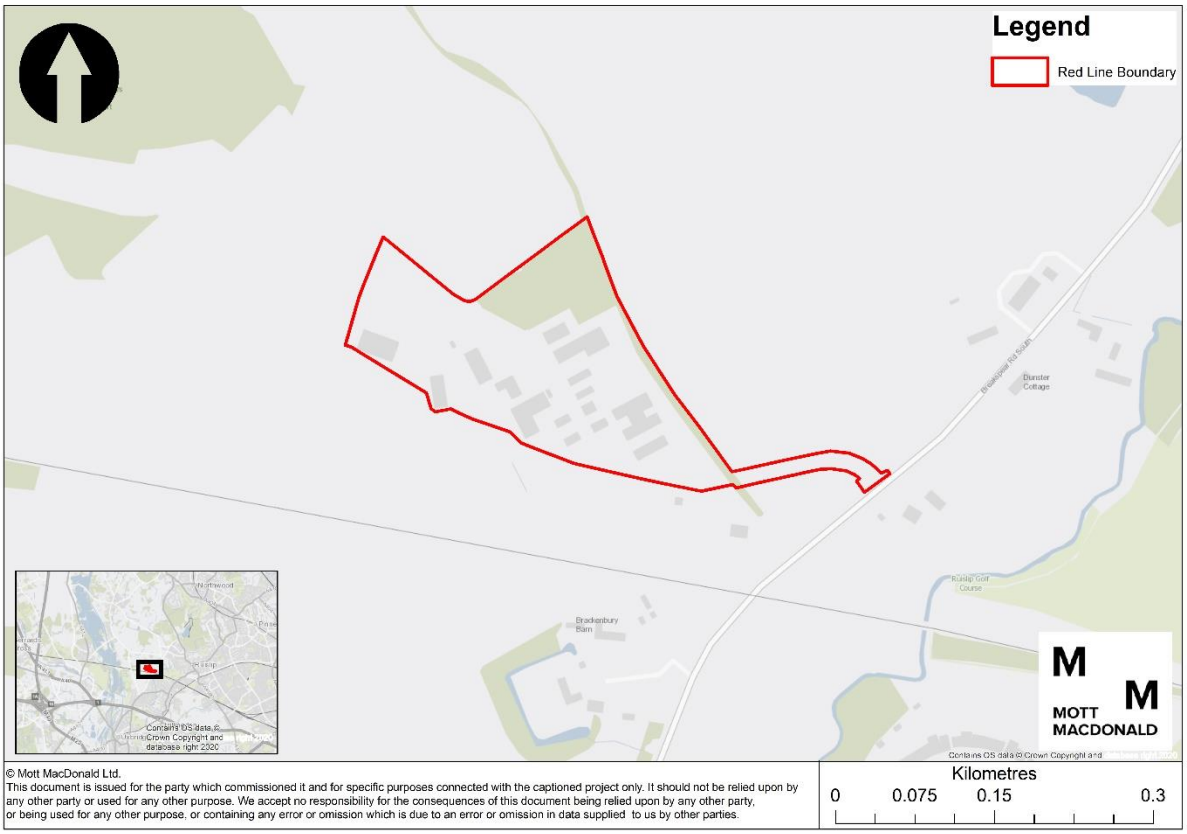
Figure 1.1: Site layout



1.3 Site location

The proposed development is located west to Breakspear Road South, at Ickenham, Uxbridge (at approximately OS Grid Reference TQ 07061 87355, postcode UB9 6LS), which is within the London Borough of Hillingdon (hereafter referred as “the Council”). To the south of the proposed development there is the HS2 Breakspear Road satellite compound, and to the north and to the west there are agricultural fields. The proposed development is a former Merck Sharpe Dohme (MSD) Animal Health Facility, and it comprises an area of 54,000m^2. The proposed development location is presented in Figure 1.2.

Figure 1.2: Red line boundary for the proposed development.



Source: Mott MacDonald, 2022.

1.4 Aims and objectives of waste management strategy

The main strategic aims will be to ensure that waste can be effectively managed, relatively unobtrusively, and measures are put in place to enable and encourage Keltbray’s personnel to separate their recyclable wastes. The OWMS identifies the strategic approach to the management of waste generated from the operation, it does not consider the waste management activities during construction of the proposed development.

To achieve these aims the following objectives will need to be met:

- Provision of facilities at suitable locations, adequately sized for the storage of wastes and recyclable materials.

- Provision of clear and understandable instructions to the personnel on the use of the facilities provided.
- Environmental controls to minimise the potential impacts from waste handling and storage.
- Sufficient flexibility and adaptability to be available through spatial allocation and equipment provision to ensure efficiency of the collection and transfer processes.
- Compliance with waste legislation, policy, and planning requirements.
- Compliance with health and safety requirements.
- Compliance with local authority planning requirements.

1.4.1 Components of waste management

There are four principal components to waste management operations. Maximum efficiency of the service provided, and cost effectiveness is to be achieved by a strategy that links the four components together. The principal steps of waste management are outlined below, together with the necessary considerations related to each one.

- Waste minimisation: includes the reduction of wastes requiring collection and disposal. Post-construction minimisation options are limited, but occupants should be able to take up the council-led measures.
- Collection: is related to the storage facilities and collection schedule for residual, recyclable and organic wastes provided by the personnel and occupants of the proposed development.
- Transfer: it refers to the transportation of the waste within and away from the proposed development. Also, the need to manage waste to ensure storage provision is adequate and space is fully utilised without exceeding storage capacity.
- Treatment/disposal: options for treatment and disposal of waste encompass the management of the waste produced on site.

1.4.2 Compliance with waste legislation, policy and planning requirements

London Borough of Hillingdon is the local authority associated with the location of the proposed development. The borough is a joint part of the West London Waste Plan[1], in conjunction with five other London boroughs.

The overarching European Directives that are applicable to waste generation and management are set out below. Whilst it is acknowledged that the UK has left the European Union (EU) it should be noted that existing legislation which transposes these Directives remains in force. Table 1.1 includes the guidance, policy, and legislation in the UK that are applicable and pertinent to waste management in the proposed development.

Table 1.1: Legislation, policy, and guidance relevant to waste management

Title	Description	Relevance to the OWMS
European Legislation		
Waste Framework Directive (2008/98/EC) [2]	The Waste Framework Directive (WFD) sets the basic concepts and definitions related to waste management. It also defines when waste ceases to be waste and becomes a secondary raw material and how to distinguish between waste	The WFD establishes the waste hierarchy for managing and disposing of waste.

[1] West London Waste Plan. (2015). West London Waste Plan – Plan adopted. [online]. Available at: https://www.hillingdon.gov.uk/west-london-waste-plan. Accessed in June 2022.

[2] Waste Framework Directive (2008/98/EC) [online]. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32008L0098. Accessed May 2022.

Title	Description	Relevance to the OWMS
	and by-products. Additionally, it lays down basic waste management principles.	
Landfill Directive (1999/31/EC) [3]	This Directive aims to prevent, or reduce as far as possible, negative effects on the environment from the landfilling of waste and the reliance on landfill.	This Directive includes minimum standards for landfill, including location, design, operation. Also, it sets criteria to control the nature of waste accepted for landfills, and it sets different landfill categories.
Hazardous Waste Directive (91/689/EEC) [4]	It lays down what is considered as hazardous waste, which is any waste that exhibits certain properties (such as potentially flammable, toxic, or carcinogenic) that may make it harmful to human health and the environment.	This Directive lays down strict controls and requirements for controlling hazardous waste and their movements. A consignment note is required prior to the removal of any hazardous waste.
National Legislation		
European Union (Withdrawal) Act 2018[5]	The Act introduces the concept of retained EU law. Essentially any EU regulation or decision addressed to the UK in operation before the date of exit from the EU that will remain a part of the UK law.	The Act ensures that the whole body of existing EU environmental law continues to have effect in UK law and includes the Landfill Directive and the Hazardous Waste Directive.
The Environment Act 2021[6]	It makes provision about targets, plans and policies for improving the natural environment; for statements and reports about environmental protections; about waste and resource efficiency, about the regulation of chemicals, among others.	It contains several provisions relating to waste which includes: • Producer responsibility obligations. • Producer responsibility for disposal cost. • Managing hazardous waste. • Electronic waste tracking.
The Environmental Protection Act (as amended), 1990[7]	It defines the fundamental structure and authority for waste management and control of emissions into the environment.	It includes fundamental structure for waste management, it legislates for the meaning of waste; the requirement of the duty of care in respect of waste and transferral of waste; a prohibition on the unauthorised or harmful deposit, treatment or disposal of waste on land; waste collection and waste disposal authorities and their roles.

[3] Landfill Directive (1999/31/EC). Available online at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A31999L0031. Accessed May 2022.

[4] The Hazardous Waste (England and Wales) Regulations (2005) [online] Available at: https://www.legislation.gov.uk/uksi/2005/894/contents/made Accessed May 2021.

[5] European Union (Withdrawal) Act 2018. (2018). [online]. Available at: https://www.legislation.gov.uk/ukpga/2018/16/contents/enacted. Accessed June 2022.

[6] Her Majesty's Government (2021) The Environment Act 2021 [online]. Available at: https://www.legislation.gov.uk/ukpga/2021/30/enacted. Accessed May 2022.

[7] Her Majesty's Government (1990) The Environmental Protection Act 1990 [online] Available at: http://www.legislation.gov.uk/ukpga/1990/43/contents Accessed June 2022.

Title	Description	Relevance to the OWMS
Waste (Circular Economy) (amendment) Regulation, 2020[8]	It includes the overarching European Directives that are applicable to the assessment of material resource use and waste generation. Whilst it is acknowledged that the UK has left the EU, it should be noted that existing legislation which transposes these Directives remains in force.	Sets out measures to be considered in order to prevent waste generation, and to promote the reuse and recycling of materials.
The Waste and Environmental Permitting etc (Legislative Functions and Amendment etc) (EU Exit) Regulations 2020[9]	These regulations were laid before Parliament on 16 December 2020.	These regulations ensure that the waste and environment permitting regimes continue to operate effectively after 1st January 2021.
Waste Electrical and Electronic Equipment (WEEE) Regulations, 2013[10]	It is the Regulation that applies to all Electrical and Electronic Equipment (EEE) placed on the market in the UK by the scope of the regulations.	Outlines the categories of WEEE.
Controlled Waste Regulations 2012(SI 2012/811) [11]	These regulations came in force in April 2012, replacing the Controlled Waste Regulations 1992. They define household, industrial, and commercial waste for environmental permitting purposes.	Outlines the categories of waste for the purposes of Part 2 of the Environmental Protection Act. .
Hazardous Waste (England and Wales) Regulation 2005 (as amended)[12]	The regulations provide for the control of hazardous wastes and their movements. A consignment note is required prior to the removal of any hazardous waste (UK Government, 2005). Hazardous waste is waste that exhibits certain properties (for example, it is potentially flammable, toxic or carcinogenic) such that it is or may (at or above certain concentrations) be detrimental to human health or the environment.	Sets out the requirements for the management of hazardous waste.
National policies		
National Planning Policy Framework 2021 [13]	The National Planning Policy Framework (NPPF) sets out policies for development and how these should be implemented.	It makes specific reference to the Government's policy for sustainable use of minerals and minimizing waste.

[8] Waste (Circular Economy) (Amendment) Regulation (2020). [online] Available at: https://www.legislation.gov.uk/uksi/2020/904/made. Accessed June 2022.

[9] Waste and Environmental Permitting etc (Legislative Functions and Amendment etc) (EU Exit) Regulations (2020). [online] available: https://www.legislation.gov.uk/uksi/2020/1540/made. Accessed May 2022.

[10] Waste Electrical and Electronic Equipment (WEEE) (England and Wales) Regulations, 2013 [online] Available at: https://www.legislation.gov.uk/uksi/2013/3113/made Accessed May 2022.

[11] Controlled Waste (England and Wales) Regulations (2012) [online]. Available at: www.legislation.gov.uk/uksi/2012/811/contents/made. Accessed May 2022.

[12] Hazardous Waste (England and Wales) Regulation 2005 [online] Available https://www.legislation.gov.uk/uksi/2005/894/contents/made. Accessed August 2022

[13] National Planning Policy Framework July 2021 [online] available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1005759/NPPF_July_2021.pdf Accessed June 2022.

Title	Description	Relevance to the OWMS
National Planning Policy for Waste 2014[14]	It sets out detailed waste planning policies and maintains the core principles of the 'plan led' approach with a continued focus of moving waste up the waste hierarchy.	It sets out detailed planning policies to facilitate a more sustainable and efficient approach to resource use and management.
The Government's 25 Year Environment Plan[15]	Sets out government action to help the natural world and retain good health, with proposals that aim to tackle a number of growing problems, including waste.	A number of goals and targets are set out in this Plan, aiming to minimise waste, and to reuse materials as much as possible and manage materials at the end of their life to minimise the impact on the environment.
Our waste, Our Resources: A Strategy for England[16]	This strategy complements and helps deliver the 25-Year Plan, the Clean Growth Strategy, the Industrial Strategy, and the Litter Strategy.	The Strategy features the government's approach to sustainable production, recovering resources and managing waste, waste crime and eliminate avoidable waste of all kinds.
The Waste Management Plan for England, 2021[17]	This Plan supersedes the 2013 version, and provides an overview of waste management in England, outlining the waste hierarchy as a guide to sustainable waste management.	Besides outlining the waste hierarchy, it also sets out the Government's ambition to work towards a more sustainable and efficient approach to resource use and management; and waste ambition through ensuring reuse, recovery or disposal of waste is undertaken without endangering human health or the environment.
Waste Prevention Programme for England – Consultation Version, 2021[18]	The revised Waste Prevention Programme will help embed the five principles outlined in the Resources and Waste Strategy by setting out steps towards improved product design, sustainable purchasing, reform to extended producer responsibility, circular economy and integrating strategic principles into industrial policy.	The Programme sets steps to align regulatory framework with a circular economy approach.
Local policies		

[14] Department for Communities and Local Government (2014), National Planning Policy for Waste. [online]. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/364759/141015_National_Planning_Policy_for_Waste.pdf. Accessed June 2022.

[15] HM government, a Green Future: Our 25 Year Plan to Improve the Environment, 2018 [online] available at: https://www.gov.uk/government/publications/25-year-environment-plan. Accessed June 2022.

[16] HM Government. Our waste, our resources: A strategy for England 2018. [online] available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/765914/resources-waste-strategy-dec-2018.pdf Accessed June 2022.

[17] Department for Environment Food & Rural Affairs (2021), Waste Management Plan for England. Available online at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/955897/waste-management-plan-for-england-2021.pdf. Accessed June 2022.

[18] Department for Environment, Food & Rural Affairs (2021) Waste Prevention Programme for England – Consultation Version. [online]. Available at: https://consult.defra.gov.uk/waste-and-recycling/waste-prevention-programme-for-england-2021/supporting_documents/Waste%20Prevention%20Programme%20for%20England%20%20consultation%20document.pdf. Accessed August 2022.

Title	Description	Relevance to the OWMS
Hillingdon Local Plan: Part 1 – Strategic policies[19]	This strategy identifies how the borough will guide future developments.	The document sets out policies within the Borough of Hillingdon for strategic planning towards the development of the Borough. It includes policy EM11 in sustainable waste management. Additionally, it states that this policy will be implemented in coordination with West London Waste Plan and other Borough members of the plan. Targets for waste apportionment in Hillingdon will take into account targets set in the Mayor Environment Strategy from 2011.
West London Waste Plan (2015)[20]	It sets out a strategy for the sustainable management of waste arising in the area until 2031. It comprises six west London boroughs, including Hillingdon.	Provides a policy framework to assess planning applications for waste management facilities and relates to the London's targets of waste management. The plan incorporate targets for waste recycling/re-use, including a target of >70% for commercial and industrial waste.
Mayor Environment Strategy[21]	Is an integrated strategy to improve quality of the environment within London.	It includes targets and aims for different waste streams management within London.
Waste Technical Paper (2017)[22]	This document has information related to waste arising, forecast and management capacities for the London boroughs.	It includes relatable information for London Borough of Hillingdon.
Guidance		
Guidance for waste and recycling storage and collection (London Borough)[23]	This document is guidance for storage of recycling and commercial waste.	It includes requirements that need to be met for the storage of recycling and commercial waste in the London Borough of Hillingdon.
Recycling and waste storage requirements (City of Westminster)[24]	This document is guidance for storage of recycling and commercial waste. It also includes benchmarks for estimating the waste arisings from commercial developments.	It includes guidance on the calculation of waste quantities that may arise from the use commercial and industrial developments. It also includes further guidance on appropriate collection and storage of waste.

[19] London Borough of Hillingdon (2012) Hillingdon Local Plan: Part 1 – Strategic policies [online] Available at https://www.hillingdon.gov.uk/local-plan. (Accessed August 2022).

[20] West London Waste Plan. (2015). West London Waste Plan – Plan adopted. [online]. Available at: https://www.hillingdon.gov.uk/west-london-waste-plan. Accessed in June 2022.

[21] Greater London Authority. (2018). London Environment Strategy. [online]. Available at: https://www.london.gov.uk/what-we-do/environment/london-environment-strategy. Accessed June 2022.

[22] Anthesis Consulting. (2017). Waste technical paper. [online] Available at: https://planningconsult.rbkc.gov.uk/gf2.ti/f/782882/24802277.1/PDF/-/Waste_Technical_Paper_for_WPAs_in_the_WRWA_Area_January_2017.pdf. Accessed June 2022.

[23] London Borough of Hillingdon (n.d.) Guidance for waste and recycling storage and collection.

[24] City of Westminster, Recycling and waste storage requirements. [online]. Available at: https://www.westminster.gov.uk/recycling-and-rubbish/waste-storage-planning-advice. Accessed August 2022.

Title	Description	Relevance to the OWMS
The Building Regulations H6 – Solid waste storage[25]	It reiterates the requirement for developers to meet the Environmental Protection Act 1990.	It also reiterates the importance for adequate conditions for waste storage.
British Standard 5906:2005 Waste management in buildings — Code of practice[26]	A code of practice for methods of storage, collection, segregation for recycling and recovery, and on-site treatment of waste from residential and non-residential buildings and healthcare establishments	It includes guidance on the calculation of waste quantities that may arise from the use commercial and industrial developments.

1.4.3 Compliance with health and safety requirements

Waste handling is inherently dangerous because of the nature of some of the materials involved and because of the integration of manual handling operations with mechanical plant and vehicles. The health and safety of waste handling operatives, staff and visitors to the Site must be a paramount driver in the design of the development and in the method of its operation. This strategy attempts to limit the amount of manual handling and in particular lifting as far as reasonably practicable.

[25] HM Government (2015) The Building Regulation 2010 [online] Available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/442889/BR_PDF_AD_H_2015.pdf. Accessed June 2022.

[26] Standards Policy and Strategy Committee (2005) British Standard 5906:2005 Waste management in buildings — Code of practice [online] Available at https://www.rbkc.gov.uk/pdf/BS5906-2005.pdf Accessed September 2022

2 Existing waste management infrastructure and services

2.1 Business waste collection

The Council in the London Borough of Hillingdon offers a commercial waste collection for premises producing commercial waste, including residual refuse and mixed recyclables. This is only available upon request and at a charge which covers the full collection and disposal cost. Refuse and recyclable waste collection services can be provided weekly if waste containers are sacks, and can be collected weekly or fortnightly when they are stored in bins. It is advisable for commercial waste producers to obtain a number of quotations from commercial waste contractors in advance of entering into any collection contract.

The Council has commercial waste containers in the following ranges:

General waste:

- Rubbish sacks;
- Recycling sacks;
- 360 litre bin;
- 1,100 litre bin; and
- 1,280 litre bin.

Recycling:

- 1,100 litre bin; and
- Recycling sack (up to 10 kg capacity)

Table 2.1 includes the details of current collection costs for commercial waste by the Council.

Table 2.1: Hillingdon Council commercial collection costs

Type of container	Weekly cost (one collection per week)	Estimated annual cost (one collection per week)
Rubbish		
Sack	£2.5	£130
360 litre bin	£9	£468
1,100 litre bin	£21 (£15.5 if you have four or more)	£1,092 (£806 if you have four or more)
1,280 litre bin	£23.6	£1,227.2
Recyclables		
Sack	£1.2	£62.4
1,100 litre bin	£8	£416

Source: Hillingdon Council (2022)[27]

The Council does not offer separate collection for food waste, green waste or textiles for businesses, neither for construction nor industrial waste.

[27] Hillingdon Council. (2022). Business waste and recycling. [online]. Available at https://www.hillingdon.gov.uk/article/1722/Containers-and-prices. Accessed August 2022.

2.2 Local waste management facilities

Table 2.2 outlines other local and available facilities for recycling and recovery of waste, which manage commercial and industrial waste, either through transfer, treatment, crushing and screening, and storage; and which are within 5km from the proposed development.

Table 2.2: Permitted waste management facilities for recycling and recovering within 5km from the proposed development

Site name	Waste activity	Distance from the proposed development (km)
Crows Nest Farm	A22: Composting	0.5
High View Farm	A16: Physical Treatment Facility	0.7
High View Farm, Harefield	A11: Household, Commercial & Industrial Waste Transfer Station (HCI Waste TS)	0.7
EDS Grab Hie Elm Tree Farm	S1506 No6: HCI Waste WTS + treatment	0.7
West London Composting Ltd	Recovery or a mix of recovery and disposal of >50t/d of non-hazardous waste involving biological treatment	0.7
BFA Recycling Ltd	S0821: 75kte Metal recycling site	1.1
GNB Services Ltd	A11: Household, commercial & industrial WTS	1.4
Thames Materials	A16: Physical Treatment Facility	1.9
Train Loading Bay	A11: Household, commercial & industrial WTS	2.1
Springbridge Direct Ltd	SR2010 No12: Treatment of waste to produce soil	3.7
New Denham Quarry	A25: Deposit of waste to land as a recovery operation	4.3
O'Hara Edible oils & waste	A16: Physical treatment facility	4.5
Civic Way Recycling Centre	A11: Household, commercial & industrial WTS	4.9
Victoria Road WTS	A11: Household, commercial & industrial WTS	5.0
Victoria Road WTS	A11: Household, commercial & industrial WTS	5.0

Source: Environment Agency's Public Register 2022[28].

[28] Environment Agency. (2022). Public register. [online]. Available at https://environment.data.gov.uk/public-register/view/index. Accessed June 2022.

3 Waste generation

3.1 Building layouts

The building layout of the proposed development is given in Table 3.1.

Table 3.1: Proposed building areas

Building	Purpose	Level	Gross Internal Area (GIA), sqm	Total GIA, sqm
01	Office	00	645 (~322.50 for canteen)	1,290
		01	645	
02	Storage Unit	00	900	1,800
		01	900	
03	Storage Unit	00	900	1,800
		01	900	
04	Storage Unit	00	900	1,800
		01	900	
05	Single Storey storage Unit		480	480
	Total floor area			7,170

Source: Proposed Site Plan, Drawing Nr 1381-DR-A-30-100

The waste strategy will need to be reviewed following finalisation of the detailed design drawings, to ensure it remains relevant with any amendments required to the designs.

3.2 Estimated waste quantities

3.2.1 General

The Council has produced guidance on its local requirements for the provision of space and related facilities for the storage and collection of waste in developments. However, the guidance is focused on developments of flats, restaurants and takeaways. Alternatively, the following guidelines will be used to estimate the waste quantities that may arise from the use of commercial and industrial developments:

- The waste management guideline from City of Westminster[24] will be used as an example of good practices, and,
- British Standard 5906:2005 Waste management in buildings — Code of practice[26].

This City of Westminster's recycling and waste storage requirement guidance is designed to ensure that the arrangements for storing, collecting and managing waste are appropriate to each site. Well-designed bin storage should be located in a position that provides easy and safe access for both producers and collectors.

It is recommended that commercial sites consult with other waste collection providers to ensure that their requirements are also met.

3.2.2 Commercial/business and non-domestic waste

3.2.2.1 Assumptions for waste storage space calculations

Waste storage space required is based on the guidelines provided by City of Westminster.

The class usage of Buildings 02 to 05 would typically be classed as B8, suitable for storage and distribution, and Building 01 as office space (class B1). Storage of materials is the main purpose of Buildings 02 to 05, with no expectation of engineering activities such as use of workshops. The majority of activities that can generate waste will be from staff undertaking administration and auditing tasks, and cleaning and general maintenance. Therefore, and based on professional judgement and the description of activities to be undertaken by staff within Buildings 02 to 05, it has been assumed that waste generated would be more aligned to office waste arisings and composition.

The office building will have a kitchen area operated by a canteen company to provide catering. The dining area and kitchen covers an area of 322.50m^2, and this area will be assessed against the class usage described in the Westminster document for restaurants and cafes (A3) of 3500 litres per 1000m^2, of which 40% to be food waste, 10% glass, 10% paper and cardboard and 10% other dry mixed recyclables[29].

The proposed development will have up to three commercial collections services for waste in a week. However, it is understood that the Council will only undertake up to two collections per week, as their service does not exceed this frequency.

Collection contracts (Council or private) will be different for Building 01 compared to Buildings 02 to 05. Building 01 will have a bin storage area for wheelie bins, while the other buildings will utilise waste skips stored adjacent to Building 05.

A safety factor of 20% (1.2) has been included in the calculations, to take into consideration that there will not be a uniformed distribution of waste generation over a year.

The waste storage provisions will also allow for three skips stored adjacent to Building 05, one for recyclable packaging waste, one for metal scrap waste, and one for general waste to be collected by a commercial waste contractor.

3.2.2.2 Estimated waste quantities

The activities of possible commercial spaces/ class usage of the buildings have been confirmed. As such, the waste generation arising from commercial/business activities has been based on class usage.

Class usage[30] of the different categories for buildings that are relevant for this proposed development are listed below:

- A3: Restaurants and cafes, premises where the primary purpose is the sale and consumption of food and light refreshments on the premises;
- B8: Storage and distribution; and
- E(g)(i) Offices to carry out any operational or administrative functions (This was previously stated as class B1 prior to the updating of Use classes on 1 Sept 2020).

[29] City of Westminster, Recycling and waste storage requirements. [online]. Available at: https://www.westminster.gov.uk/recycling-and-rubbish/waste-storage-planning-advice. Accessed August 2022.

[30] Current Use Classes. [online]. Available at: https://www.planningportal.co.uk/permission/common-projects/change-of-use/use-classes Accessed August 2022.

The types of waste expected to be generated in the commercial areas are likely to include:

- Mixed dry recyclables (e.g. paper and magazines, cardboard packaging, dense plastic packaging and cups, aluminium and ferrous cans, glass bottles and jars, tetrapaks);
- Reusable textiles (e.g. shoes, clothing);
- Food scraps, unavoidable food waste, horticultural waste and tea bags;
- Reusable/recyclable wooden pallets;
- Waste electrical and electronic equipment (WEEE);
- Bulky items (e.g. carpet/underlay, furniture);
- Plastic bags and plastic film packaging;
- Sanitary waste (e.g. sanitary towels);
- Hazardous wastes (batteries, cleaning chemicals, aerosols,waste oils, resins and paints, etc.); and
- Construction and demolition waste from operation of the premises.

The City of Westminster's guidelines for offices (B1) states that 2000 litres of waste storage space is required for every 1000m^2 of gross floor space. 70% of this capacity to be retained for the storage of separated material (50% paper and cardboard, 10% other dry mixed recyclables, 10% food waste).

The waste storage space required by the proposed development will be dependent on the class usage of the building. In the absence of guidelines for waste storage space to be considered for storage units, the waste storage space estimates are based on guidelines for office space (City of Westminster guidelines). From this, the waste storage space required for the commercial space has been calculated and given in Table 3.2. The proposed development requires waste storage provisions for 17,789 litres of waste for a week.

Table 3.2: Provision for storage space for usage of premises, based on City of Westminster guidelines

Building	Class usage	Commercial space, m^2	Storage capacity required, L	Storage capacity with 20% safety factor, L
01	B1[a]	967.50	1,935	2,322
01	A3[b]	322.50	1,129	1,355
02	B8[a]	1,800	3,600	4,320
03	B8[a]	1,800	3,600	4,320
04	B8[a]	1,800	3,600	4,320
05	B8[a]	480	960	1,152
Total		7,170	14,824	17,789

Source: Mott MacDonald Limited, [a]= commercial space x (2000 litres/1000m^2), [b]=Food outlet space x (3500 litres/1000m^2)

Although Hillingdon Council has provision for weekly and twice weekly collection of commercial waste, it is proposed that commercial waste is collected three times a week. Keltbray expect to use private contractors for all waste collection, however, if the Council service is used this will be for Building 01 and additional fees will be paid for refuse collection for collections that exceed a twice-weekly frequency. By increasing the number of collections, less number of bins and thus area for storage of bins will be required.

The number of bins that are allocated for recyclable and residual waste will be dependent on the type and proportion of waste generated on the proposed development. Based on recycling

practice as recommended by City of Westminster guidelines, it is recommended that 70% of storage space is allocated for recyclable (including food waste) and 30% to residual waste. The number of bins required for Building 01 if the collection service was weekly, twice or three times a week is given in Table 3.3.

Table 3.3: Total waste storage bins required for weekly, twice weekly and three times a week collection service at Building 01

Collection service	Waste storage space required, L	Bins for dry recyclable waste (70%)	Bins for residual waste (30%)	Total 1,100 litre bins	Total 140 litre bins (for food waste)*
Weekly	3,677	2	1	3	6
Twice weekly	1,838	1	1	2	3
Three times a week	1,226	1	1	2	2

Source: Mott MacDonald Limited

Note: *Food waste is calculated as 10% of total waste for Class B1, and 40% for Class A3

Building 01 is anticipated to have food waste arisings of 774 litres of storage capacity. This would require:

- six bins of 140 litres capacity to store food waste, if weekly commercial collection service is undertaken; or
- three food storage bins of 140 litres capacity if twice-weekly collection by a commercial waste contractor is undertaken[31].

It is recommended to have three waste collection service per week for the 1,100 litre capacity bins. The collection frequency of the waste should be reviewed by the developer after the site is operational and could be reduced to twice-weekly or weekly collection if reduced waste is generated on the proposed development.

Adjacent to Building 05 another waste storage area will be located, where skips will be used to store waste generated from Building 02 to 05. The capacity and number of these skips is demonstrated in Table 3.4.

Table 3.4: Skip capacities adjacent to Building 05

Skip type	Waste type	Capacity, L	Total number of skips
10 Yard skip	Packaging waste (plastics, paper, cardboard)	9, 600	1
20 Yard rollon/off skip	One skip for metal scraps One skip for general waste	16,500	2

Source: Capacity determined from Forge Waste and Recycling[32]

Table 3.5 outlines the requirements of waste storage requirements for Building 02 to 05, assuming 70% of the waste generated is allocated for recyclable waste (including the metal scraps) and 30% would be general waste.

No benchmark was found to define the proportion of metal. However, based on City of Westminster's guidance for commercial spaces it has been assumed the storage buildings will generate 50% cardboard and paper, and 20% other dry recyclables, as food waste is not expected to be generated at these buildings. Any food waste that is generated will be sent to

[31] The Council does not remove food waste for businesses.

[32] Forge Waste and Recycling (n.d.) Recyclable Waste Containers [online] Available at https://www.forgerecycling.co.uk/services/waste-containers/ Accessed September 2022

the food waste bins in Building 01, which accounts for a safety value of 20% to allow for some fluctuation.

It is recommended to have weekly waste collection service for the 10 yard skip for packaging waste, and fortnightly for the 20 yard skips used for metal and general waste. The collection frequency of the waste should be reviewed by the developer after the site is operational and could be reduced to weekly collection for packaging waste if reduced waste is generated on the proposed development.

Table 3.5: Total waste storage skips required for weekly collection at Building 05

Collection service	Waste storage space required, L		Packaging waste (50%)	Metal waste (20%)	General waste (30%)
B2 to B5	14,112	**Litres**	7,056	2,822	4,234
		Proportion of skip size	74%	17%	26%

Source: Mott MacDonald

4 Waste management infrastructure

4.1 Waste storage

There will be two waste storage areas, both located at ground floor for ease of collection. There will be a waste storage area for the office building (Building 01), which will store wheelie bins. The other waste storage area will be located adjacent to Building 05 and will be provided with skips for the storage of waste generated by Buildings 02 to 05. Waste will be conveyed to storage points by cleaning contractor or personnel appointed by Keltbray, and the waste storage areas will be clearly designated using walls and signs.

Keltbray will procure and maintain the proposed development's waste infrastructure and collection contractors. Keltbray will maintain security measures to prevent unauthorised access to the proposed development, and therefore to the waste storage areas.

An allowance of at least 150mm will be provided between individual wheelie bin containers, and between wheelie bin containers and adjacent walls or fences to allow for the easy removal and manoeuvring of containers. The storage layout will allow for one container to be serviced without having to move any other wheelie bin containers. In addition, there will be sufficient clearance provided to allow full opening of the wheelie bin container lid and, therefore, a minimum working headroom of at least 2m is required.

The ground between the storage location and the bulk bins and the loading position will be smooth, hard surfaced without kerbs and either level or a fall away to the collection vehicle at a gradient no steeper than 1:20, with a width of at least 2m. The configuration of waste storage areas will be to ensure contractors will not be required to move large containers (four wheels) more than 10m to the vehicle.

The proposed development will benefit from CCTV security, sufficient lighting, and one entry point which is gated to allow only authorised personnel and visitors to access the proposed development, thus, to prevent trespassing into the development.

In accordance with Council requirements, if a gate or door is added to the enclosure it will be metal, hardwood or softwood clad with metal, and the door frame will allow clearance of 150mm either side of the bin when it is being pulled out for collection. The door frame will be rebated into the reveals of the opening, and there will be a latch or clasp to hold the gate/door open while collection process take place.

It is proposed that RFID (radio frequency identification) tags are used on bins to ensure that only those with specific fobs or cards can gain access and use the bins. Waste collection contractors will be able to gain access freely to the storage areas, so if RFID or any other security measure is used to keep the area locked then it will be accessible by using standard 'Fire Brigade' pattern key numbers 'FB2' or 'FB4'.

4.1.1 Site waste storage provision

Table 4.1 provides the typical dimensions of each waste container for the proposed development, and the required spatial area for the two waste storage areas.

Table 4.1: Site waste storage provisions for waste storages adjacent to Building 01 and Building 05

Container type	Height, m	Width, m	Depth, m	Required area, m^2	Number of containers	Total area required, m^2	Allocated area, m^2
Building 01 bin store							
1,110 litre wheelie bin (a)	1.37	1.26	0.98	1.23	2	3	16
140 litre wheelie bin (a)	1.07	0.59	0.74	0.44	3		
Building 05 skip store							
10 yard skip (b)	1.50	1.7	3.74	6.66	1	34	80
20 yard rollon/off skip (b)	1.62	2.23	6.07	13.54	2		

Source: a) City of Westminster[24] b) Cheap Skips[33]

City of Westminster recommends 140 litre wheelie bins are used for the collection of food waste. These bins will be stored by the office building. Any food waste generated elsewhere at the proposed development will be taken to the office waste storage area, to avoid disposal in the general waste bins.

The waste storage area for Building 01 is designed to be 16m^2 with an adjacent bin wash area. The bin store will hold at least two 1,100 litres bins and three 140 litres bins, which would require 3m^2, therefore, there will be adequate space for waste storage, allowing for the required additional space of 150mm on either side/s to enable the bins to be moved out.

The proposed development has provision for 80m^2 for waste skips. The skip storage area will contain at least three skips, which would require 34m^2. Therefore, there will be adequate space for waste storage for waste generated at Buildings 02 to 05.

Next to the skip storage area, adjacent to Building 05, an area of 16m^2 has been provided as a potential wheelie bin store for four 1,110 litre bins, with space for bin washing available. This provides Keltbray with space to store additional or spare waste containers, should these be needed. However, at this time, Keltbray propose to solely use skips for the waste generated at Buildings 02 to 05.

Waste will be taken to the waste bin storage areas as quickly as practicable. Cleaning staff may temporarily store collected waste across the site in a storage room to then be taken to Building 01 waste storage area.

The proposed development will have provision for bunded storage of waste oil to be collected by a waste contractor. The collection frequency will depend on the capacity and rate of

[33] Cheap Skips (n.d.) Skip hire prices – the overall cost of waste removal services? [online] Available at https://www.cheap-skips.co.uk/skip-sizes/#:~:text=Skip%20Size%20Comparison%20Chart%20%20%20%20SKIP,%20%205%E2%80%9911%E2%80%B3%20%207%20more%20rows Accessed September 2022

generations, which is expected to be variable depending on operational needs. Keltbray will arrange for collection in advance of reaching capacity.

4.1.2 Waste fire protection

The proposed development will be designed in accordance with all relevant fire safety regulatory requirements.

Waste storage areas are external. However, if the design of the proposed development changes to include internal storage, it will be constructed to BS 5588-1 (any wall enclosing a refuse storage chamber will be constructed with a fire resistance of not less than 60 minutes). Additionally, doors or gates of any waste storage room (internal) will be metal, hardwood or softwood clad with metal, and where feasible, door/gate will be fire resistant of 30 minutes when tested to BS 476-22.

4.1.3 Waste odour control

Odour problems from waste are invariably linked to the age of the putrescible content (food residues). It is anticipated that wastes within receptacles across the proposed development will be collected weekly, at least. However, it will be essential that waste is not allowed to remain uncollected from any storage areas for more than fourteen days, and preferably no more than seven days. Waste collected by cleaning staff will be handled as quickly as possible to be taken to the outdoor waste storage area.

The external bin storage areas will be away from the site boundary and lids kept closed and secure to prevent nuisance to local receptors.

4.1.4 Drainage requirement of waste areas

The external storage areas will be periodically washed down to reduce the potential for odour issues. A water supply and drainage to foul sewer will be present for each storage area. The floor of the waste storage area will have a suitable fall (no greater than 1:20) towards the drainage points.

4.1.5 Mobile container washing facilities

A specific area will be set aside for the washing out of mobile containers. This will have a water supply and drainage to foul sewer.

4.2 Waste handling

Keltbray will appoint a cleaning contractor to manage the recyclables and residual waste streams across the proposed development. They will ensure that waste from litter bins is transferred to the waste storage area/s at the end of the workday or whenever each bin is filled, whichever is the soonest.

Recyclables and residual waste bins will be placed throughout the offices and storage yards, and in other common areas. Paper recycling bins will be placed in all printing/ copying/ shredding areas, while at least one toner/printer cartridge bin will be present on each floor with printing facilities. Food tin/drink cans, and plastic bottle recycling bins will be placed in kitchen facilities, the kitchen/canteen area will include designated food waste bins. Having a used battery collection point at reception, or in another secured, supervised area will be considered.

4.3 Waste collection

The waste collection system that is currently proposed to be adopted is an expansion of the current waste collection system employed by the Council for the waste storage area by Building

01. The collection system will allow for the collection of recyclables and residual waste streams. A private contractor will be contacted for the waste collection of the waste storage area by Building 05, as the waste will be stored in skips, and for food waste collection at Building 01.

As outlined in Section 3, for a three times a week collection for two bins of capacity 1,100 litres and three 140 litre food waste bins will be required for Building 01. Additionally, three skips will be located by Building 05 to store waste generated in Buildings 02 to 05. Due to the capacity of the skips, it is anticipated these skips would benefit from fortnightly collections for metal and general waste, and weekly for packaging/other recyclable waste.

Wherever practical it will be possible to collect waste direct from each storage area so that there is no requirement for it to be moved to a separate collection point in advance of collection.

The measurement of the largest refuse vehicle is likely to be[34]:

- Height :3.75m;
- Length:10.5m;
- Width including mirrors: 3.5m; and
- Required turning circle: 12m.

The design of the waste collection points have taken into consideration the dimensions to ensure feasible manoeuvring of refuse vehicles.

4.4 Other waste arisings

4.4.1 Hazardous, special management, and bulky waste

Hazardous wastes may be generated by the offices and storage yards. Hazardous, special management, that are likely to arise in the proposed development may include:

- Fluorescent lighting tubes and bulbs;
- Large commercial electronics and WEEE (e.g. televisions, white goods, air-conditioning units, photocopiers, computers, refrigeration units etc);
- Waste oils and lubricants;
- Rechargeable nickel-cadmium electronic devices, batteries and lead batteries; and
- Detergents, paints, inks, adhesives and resins containing hazardous elements above dangerous substance limits.

General provisions for managing hazardous wastes produced at the proposed development include:

- Hazardous waste will be stored separately from non-hazardous waste;
- Storage of hazardous wastes will be in a locked area that is inaccessible to the general public;
- Incompatible wastes will be stored separately, so they cannot mix; this may be a legal requirement for some substances;
- Hazardous liquid wastes will be stored in leak-proof containers suitable for the wastes being stored. The provision of secondary containment will allow for a minimum of either 25% of the total volume of the containers or 110% of the largest container, whichever is the greater volume;

[34]Former Nestle Factory Waste and Recycling Response Note, Appendix B. [online] available: https://planning.hillingdon.gov.uk/OcellaWeb/viewDocument?file=dv_pl_files%5C1331_APP_2017_1883%5CFinal+LBH+Response+20.10.17.pdf&module=pl. Accessed 23 August 2022.

- All waste will be clearly labelled with details of what they contain and any hazard they pose; and
- Spill kits will be provided and maintained in locations where liquid hazardous wastes are likely to be temporarily stored.

The Council or a licensed waste carrier or contractor will be contacted to collect and dispose of hazardous wastes. Additionally, lockable store cupboards will be supplied for storing dangerous substances used for cleaning such as toilet cleaning agents, bleach, and others.

The proposed development will also generate bulky waste, such as damaged office furniture. Keltbray will make specific arrangements for major re-fits or maintenance activities.

4.4.2 Surplus construction and industrial material

Waste will arise from the proposed development mainly from demolition and site clearance, excavation and any unavoidable construction waste. Construction waste management scheme is still applicable as provided in the Site Waste Management Plan (SWMP) submitted with the planning application, where the principal contractor is responsible for instructing workers, overseeing and documenting results of the SWMP.

5 Environmental impacts

5.1 General

The main potential impacts of any waste management system are:

- Noise;
- Litter;
- Odour;
- Traffic;
- Dust;
- Vermin; and
- Visual intrusion.

The design and placement of waste receptacles and the spatial allocations to waste storage must take into account of the potential adverse environmental impacts listed above.

5.2 Noise

Consideration will need to be given to the noise emanating from the discharge of containers into refuse collection vehicles, which should be done within working hours. The proposed waste collection area for the proposed development waste storage areas is within the car park of Building 01 and adjacent to Building 05, each located in the south-western part of the proposed development.

5.3 Litter

Inspections will be undertaken to check the remaining storage capacities of bins to determine whether additional collections are required, or to modify the frequency for generally collecting the waste, once the site is in operation. The frequency of these inspections will depend on the use of the bins.

Some waste spillage may occur during the transfer process to bulk vehicles and this should be cleared prior to the bulk vehicle leaving the development or waste storage area. Some litter may also be spilt by personnel travelling to waste storage areas to deposit their wastes. All litter will be cleared promptly and effectively.

5.4 Odour

The main concern with respect to odour will be from the waste storage areas.

It is proposed that the waste storage areas are washed down as part of the maintenance procedures for the development. The frequency of wash-down will need to be considered once the development commences operations. It is also recommended that any fixed or mobile containers are regularly washed out and an area should be provided to enable this activity to be undertaken within the boundary of the development.

5.5 Dust

Sweeping the hardstanding periodically could ensure that dust deposition is not significant. However, dust from the collected waste is not expected to be significant, since it they will be enclosed in containers.

5.6 Traffic

Traffic movements will be limited to the collection of residual and recyclable commercial waste. It is unlikely that the numbers of traffic movements of refuse collection vehicles will be an issue. However, in order to minimise nuisance, it is recommended that, where possible, waste collections are undertaken at off-peak times.

5.7 Pests

The use of wheeled bins, or containers with lids, should help to limit the attraction of vermin, flies and scavengers, so long as the lids are kept closed, when not in use.

Any waste spillage will be cleared up, as soon as practically possible, after discovery, where applicable.

Should vermin, flies or other scavengers be discovered within the development, measures will need to be taken to eradicate the problem.

5.8 Visual intrusion

In order to minimise this impact, the waste will be stored in designated areas. These areas will be made accessible to the personnel but will be within areas specifically designed for the purpose of waste storage.

6 Waste minimisation and reuse

Keltbray is committed to improving their sustainability and environmental performance. As such the following are being explored by Keltbray to increase waste minimisation and reuse.

6.1 Awareness raising

- Making waste a performance measure for a senior manager/director in the office and storage yards;
- Removing bins by each staff desk, thereby raising awareness of the quantities of waste that are being generated and the options for segregating waste streams for recycling;
- Providing regular updates to staff in the form of posters/emails/intranet pages on waste and recovery rates;
- Reducing the need for printing hard copy information, but raising awareness of software options to print more than one page to a side when undertaken;
- Organising competitions between offices or office areas; and
- Holding regular meetings with employees not only to communicate the importance of reducing waste, but also to allow for new ideas to be voiced and for those making stand-out contributions to be rewarded.

6.2 Operational measures and processes

- Regularly checking computerised mailing lists and removing duplicates and out-of-date addresses;
- Maximising the use of electronic media for dissemination of information both internally and externally (and considering how these should be designed to facilitate their being read on-screen and avoiding the need for printing);
- Instigating a print release scheme (where the user has to formally ‘pull’ their printing to a specific printer); this will reduce wastage of printing that is not collected;
- Where vending machines are used for hot drinks, arrange collection for recycling – and provide recycled plastic cups for use with the machine and/or encourage staff to use reusable mugs;
- Reusing shredded documents as packaging filler when shipping fragile objects;
- Avoiding colour printing whenever possible;
- Using single spacing and narrower margins for less important documents;
- Reusing out-of-date headed paper and wasted printouts as scrap/notebooks;
- “Unsubscribing” from senders of junk mail;
- Sending toner cartridges for recycling;
- Exploring composting of waste food; and
- Ring-fencing savings achieved from waste reduction activities to contribute towards staff social activities or charitable donations.

6.3 Procurement

- Bulk buying to reduce the amount of packaging;
- Forming relationships with charities/other organisations that may have use for surplus office furniture or could recondition it for resale;
- Storing and reusing cardboard shipping boxes;

- Considering renting equipment that is used only occasionally rather than having to store it in the workplace;
- Investing, where possible, in high-quality equipment that is durable and repairable;
- Ordering lighter weight papers when possible;
- Sending back reusable items to suppliers where possible; and
- Sustainable procurement of singe use products.

6.4 Staff

- Monitoring whether staff are correctly adhering to quality checking procedures and are not disposing of perfectly good products;
- Identifying a waste champion in the management team to lead discussions with office and site managers regarding the review of operational waste strategy and to set targets for reduction and recycling of waste through the proposal of waste minimisation and recycling initiatives;
- Ensuring staff are educated and fully aware of the business' waste policy and procedures; and
- Training staff on how to properly handle packaging and avoid contamination in order to allow for reuse.

6.5 Technologies and Products

- Ensuring that printing/copying equipment provides double-sided prints and setting this up as the default option for photocopiers and staff computers;
- Selecting plant landscaping that requires low maintenance and produces less waste; and
- Not allowing obsolete equipment to take up space and collect dust. The sooner it is recycled, the quicker that valuable resources will be available for reuse, thus avoiding the processing of more virgin materials.

6.6 Store procedures

- Ensuring clear and effective communications above recycling stations;
- Implementing an incentives scheme to allow recycling/ return cups, cans, bottles etc
- Ensuring standard operating procedures (SOPs) that aim to minimise waste generation be established; and
- Tying waste reduction into promotional planning, management and evaluation. The impacts that different promotions have on waste should be regularly examined across all types of promotion and waste should be made a key factor in all stages of promotional management

7 Summary of Key Conclusions/ Recommendations

Key Conclusions and Recommendations for Keltbray Development Limited

- Storage requirements for waste for the five buildings is recommended to have:
  - Three waste collection services for a week for the 1,100 litre bins;
  - Bunded storage for waste oil to be collected by a waste contractor, storage capacity and frequency of collection will be depended upon requirement;
  - Three bins of a capacity of 140 litres for food waste, to be collected by a commercial waste contractor at least twice per week[35].
  - Two 20-yard skips, one each for metal waste and general waste, to be collected at least fortnightly by a commercial waste contractor
  - One 10-yard skip for packaging waste to be collected weekly
- The collection frequency for the waste generated from the five buildings spaces will be dependent on the contract that Keltbray Development Ltd will have in place with licensed waste contractors, but the collection contract (Council or private) will be combined for all Buildings 01 to 05.
- The collection frequency of the waste should be reviewed by the Keltbray after the site is operational and could be reduced if a reduction of waste is generated on the proposed development.
- The bin storage space for the five buildings will be within the boundary of the proposed development.
- Hazardous waste must be stored separately to all other waste streams.
- It will be essential in order to minimise any odour problems that waste is not allowed to remain uncollected from waste storage areas for preferably more than seven days. In addition, all refuse stores will require a water supply and positive drainage to a foul sewer so they can be washed down periodically. A further specific area will need to be set aside elsewhere in the development for the washing out of mobile containers.
- Care must be taken to avoid lifting injuries resulting from the management of the wastes. The receptacles have been detailed with waste handling in mind, but it would seem appropriate for staff to be instructed on lifting techniques as part of an overall instruction on management of the development.
- Awareness raising to be implemented to all personnel to encourage waste minimisation, and effective use of bin provisions across the proposed development to collect and separate recyclables from residual waste.

[35] The Council does not remove food waste for businesses.