



Operational Waste Management Note

Project: Highgate School

Client: Highgate School

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Executive Summary

- i. KaNect Limited ('KaNect') has been commissioned by Highgate School ('Client') to prepare an Operational Waste Management Note ('Note') for the proposed Highgate School Development ('Proposed Development') located in the administrative boundary of London Borough of Haringey (LBH).
- ii. The principal aim of this Note is to demonstrate how sustainable methods for waste and recycling management have been considered for the operational phase of the Proposed Development. Furthermore, with regards to waste and recycling management within the Proposed Development, this Strategy has the following aims:
 - To contribute towards achieving current and long-term government, Greater London Authority (GLA), North London Waste Authority (NLWA) and LBH targets for waste minimisation, recycling and re-use;
 - To comply with all applicable legal requirements for handling operational waste;
 - To achieve high standards of waste management performance, through giving due consideration to the waste generated during operation of the Proposed Development; and
 - To provide a convenient, clean, and efficient waste management strategy that enhances the operation of the Proposed Development and promotes recycling.
- iii. Once operational, the Proposed Development is anticipated to produce 94,279 (L) of waste from all buildings per week, equating to approximately 422 tonne per year (i.e., based on the following approximate densities: Mixed dry recyclables (MDR) – 41 kg/m³, Food – 563 kg/m³ and Residual waste – 73 kg/m³).
- iv. The Proposed Development will comprise of three schools including the Pre-Preparatory School for pupils aged 4-7 years, Junior School for pupils aged 7-11 years and Senior School for pupils aged 11-18 years.
- v. A total of three central bin stores have been provided to cater the Proposed Development. With one combined bin store providing space to hold waste and recycling bins for the Pre-Preparatory School and the Junior School, one bin store for the Senior School and one bin store for storing Food waste bins for the cafeteria area. It should be noted that the bin stores provided for the Pre-Preparatory School, Junior School and the Senior School will only provide space to hold bins for Mixed Dry Recycling (MDR) and Residual/General waste and all Food waste bins will be located behind the cafeteria area.
- vi. For the Pre-Preparatory School and Junior School, small bins/transparent liners will be provided within and outside the buildings, that will allow the students and the staff to deposit their waste and recycling material into. Every day (or as required), the facilities management team will collect these bins/liners and empty them into the larger bins provided within the central bin store. On the day of collection (or as agreed), the facilities management team will move the bins (to be collected) from the central bin store to Bishopswood Road, from where it will be collected.
- vii. Similar to the Pre-Preparatory School and Junior School, small bins/transparent liners will be provided within and outside the buildings of the Senior School. Every day (or as required), the facilities management team will collect these and empty them into the larger bins located within the central bin store. On the day of collection (or as required), the facilities management team will move the bins (to be collected) from the central bin store to Southwood Lane, from where it will be collected. For the Senior School The council's refuse collection vehicle (RCV) will park within 10 m distance to the bin presentation area, from where, the council's collection operatives will wheel the bins to the RCV and empty these. The collection operatives will return the empty

- viii. The Food waste bins that are provided for the cafeteria will be taken to Bishopswood Road for collection by the facilities management team.
- ix. It is understood that the MDR/recycling waste from all the school buildings will be collected by LBH, whereas the other waste streams will be collected by private waste collection contractor.
- x. Once collected and emptied, the facilities management team will return the bins into their respective central bin stores.
- xi. These provisions will result in waste produced during the operation of the Proposed Development being managed in accordance with the Waste (England and Wales) Regulations, 2011 (as amended). Additionally, all waste infrastructure introduced to the Proposed Development will comply with guidelines published by the GLA and LBH, British Standard (BS) 5906:2005 Waste Management in Buildings Code of Practice and Part H6 of the Building Regulations (2010).

1. Introduction

- 1.1 This Operational Waste Management Note (hereafter referred to as the 'Note') has been prepared by KaNect Limited ('KaNect') for Highgate School (hereafter referred to as the 'Client') for the proposed Highgate School Development (hereafter referred to as the 'Proposed Development') located within the administrative boundary of London Borough of Haringey (LBH).

Strategy Overview

- 1.2 Through the lens of the Circular Economy Model, the Strategy aims to promote a circular approach by exploring opportunities for reusing and recycling during the operation of the Proposed Development in accordance with the Waste Hierarchy.
- 1.3 Following on from the prevention and reduction of waste, this Strategy will encourage the separation and sorting of waste and recycling in-line with the Waste Hierarchy. Measures will be implemented to maximise the amount of material arising from the Proposed Development that is recycled/composed and minimise the amount of waste that is sent to landfill.
- 1.4 This Strategy provides a review of the requirements placed upon the Proposed Development under legislation and implemented policy at all levels of government (i.e., national (England), regional (Greater London Authority (GLA) and North London Waste Authority (NLWA)) and local (LBH). Consideration has also been given to the requirements included in local standards, local planning policy and guidance documents to comply with relevant objectives and targets.
- 1.5 The methodology used to identify and estimate volumes of waste generated during operation of the Proposed Development is provided in the Section 5. Following this, the approach taken towards waste management within the Proposed Development is discussed. This includes a breakdown of the waste management process, including waste handling, storage area provision, and collection arrangements. All waste reduction measures are compliant with British Standards 5906:2005 (Ref. 1), the Waste (England and Wales) Regulations, 2011 (as amended) (Ref. 2) and Part H6 of the Building Regulations (2010) (incorporating all amendments) (Ref. 3) Document (hereafter referred to as 'Part H6').
- 1.6 This Strategy has been written by KaNect, using information provided by the Client.

2. Waste Hierarchy and Circular Economy

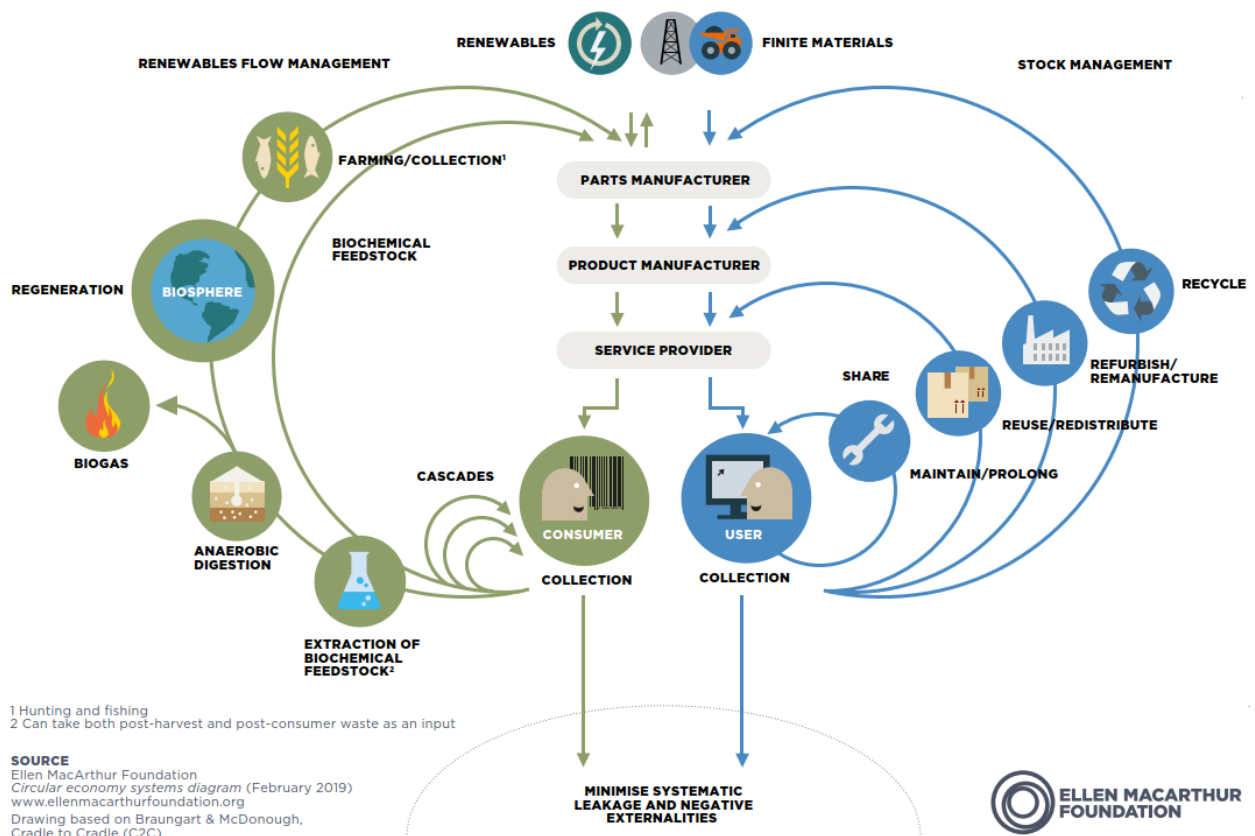
- 2.1 The Waste Hierarchy encourages the management and reduction of waste material. It is representative of a complex process influenced by the optimal management of any given product/waste material. A basic representation of the Waste Hierarchy is provided in Figure 1.

Figure 1 Waste Hierarchy



- 2.2 The prevention of waste sits at the top of the Waste Hierarchy. Prevention involves trying to reduce the amount of waste generated in the first place, for example by redesigning a product to use less, and fewer materials during manufacture.
- 2.3 The generation of waste in the UK has historically been linked with economic growth, as demonstrated by a marked decline in waste generation timed with the onset of the recession in 2008. The Circular Economy Model (see Figure 2) aims to decouple economic growth from resource consumption, by keeping resources in use for as long as possible and trying to regenerate them at the end of their life.

Figure 2 Circular Economy Model



- 2.4 It is likely that the future of waste prevention will look to adopt leasing/rental business models on a range of items (i.e., white goods, tools, phones, and clothes) which in doing so will promote an economy of repair and refurbishment. Reduction of waste will also occur by reducing the amount of packaging per item through innovation. Several initiatives will be explored to reduce waste arising from the Proposed Development including:
- Furniture Share between the School buildings;
 - Use of Recycled Paper; and
 - Collaboration with Charities for Food waste.
- 2.5 Reuse is the next tier of the Waste Hierarchy; it can involve the cleaning or repairing of products so they can be reused and redistributed as the same product. This helps to prevent products being disposed of once they become broken or dirty. Innovative exchange platforms to enable the reuse of materials include Globechain.
- 2.6 The third tier of the Waste Hierarchy and outermost loop of the Circular Economy Model is recycling – the act of turning waste materials into new products. Recycling benefits the environment as it reduces the consumption of raw materials and diverts waste materials from final disposal routes (i.e., landfill and incineration).
- 2.7 The fourth tier of the Waste Hierarchy is other recovery. This means that the waste material that cannot be recycled, it may be possible to recover energy in the form of ‘waste to energy’. This process can help to reduce carbon emissions.
- 2.8 Disposal is the final tier of the Waste Hierarchy. This would imply that the waste material collected are of no value (‘economic and environment’) and as a last resort are sent to the landfill (or incineration without energy recovery) for disposal. Due to the negative effects towards the environment (that may include impacts to air quality, climate change etc.), this is the least sustainable option.

3. Legislation/Planning Policy

- 3.1 A summary list of the legislation relevant to the management of operational waste is provided in this section:

National Waste Legislation

- The Animal By-Products (England) Regulations 2009 (as amended) (Ref. 4),
- Clean Neighbourhoods and Environment Act 2005 (as amended) (Ref. 5),
- Control of Pollution Act (COPA) 1974 (as amended) (Ref. 6),
- The Controlled Waste (England and Wales) Regulations 2012 (as amended) (Ref. 7),
- The Environment Act 1995 (Ref. 8),
- Environmental Protection Act 1990 (EPA) (Ref. 9),
- The Landfill Tax Regulations 1996 (as amended) (Ref. 10),
- The List of Wastes (England) Regulations (as amended) (Ref. 11),
- The Pollution Prevention and Control (Fees) (Miscellaneous Amendments) Regulations 2017 (Ref. 12),
- The Producer Responsibility Obligations (Packaging Waste) Regulations 2007 (as amended) (Ref. 13),
- The Hazardous Waste Regulations 2005 (as amended) (Ref. 14),
- The Waste (England and Wales) Regulations, 2011 (as amended),
- The Waste Batteries and Accumulators Regulations 2009 (as amended) (Ref. 15), and
- The Waste Electrical and Electronic Equipment (WEEE) Regulations 2015 (Ref. 16).
- The Environmental Act 2021 (Ref. 17).

Waste and Planning Policy

- 3.2 The national, regional, and local waste and recycling management planning policies in Table 1 contain information applicable to the Proposed Development.

Table 1 Waste and Recycling Management Policies

Waste Planning Policy Document	Date	Policy	Detail
A Green Future: Our 25 Year Strategy to Improve the Environment (Ref. 18)	2018	Chapter 4: Increasing resource efficiency and reducing pollution and waste	• Make sure that resources are used more efficiently and kept in use for longer to minimise waste and reduce its environmental impacts by promoting reuse, remanufacturing, and recycling. • Work towards eliminating all avoidable waste by 2050 and all avoidable plastic waste by end of 2025.
Our Waste, Our Resources: A Strategy for England (Ref. 19)	2018	1.1.1 1.1.4 1.3.2 2.3.1 3.1.1	• Extended Producer Responsibility - The Extended Producer Responsibility (EPR) is “a policy approach through which a producer’s responsibility for a product is extended to the post-use stage. This incentivises producers to design their products to make it easier for them to be reused, dismantled and/or recycled at end of life”, this also applies to certain materials within the construction and demolition section. • Deposit Return Scheme - In a Deposit Return Scheme (DRS), a small deposit will be added to the price of a drink container brought to a store. Once the container has been used, the consumer will dispose of it in a reverse vending machine and the deposit will be returned to the consumer. • Consistent Collections - Subject to consultation, legislation enforcing the government to “specify a core set of materials to be collected by all local authorities and waste operators” will be introduced. It is envisioned that specifying a consistent set of dry recyclable materials to be collected from all households and businesses will improve England's recycling rate, (subject to consultation) it will include mandatory separate food waste collections. At the current time these policy instruments are out for consultation and (subject to proposals) will be rolled out from 2023.
Regional			
The London Plan (Ref. 20)	2021	The London Plan Policy SI 7 Reducing Waste and Supporting the Circular Economy	This policy states that waste reduction and reduction in the quantity of waste going for disposal from London can be achieved by promoting circular economy i.e. • By encouraging the reuse of material and by using fewer resources in the production and distribution of products, • By ensuring that zero biodegradable or recyclable waste is sent to landfill by 2026, • By meeting the set recycling targets (i.e. 65% for municipal waste by 2030), • By designing developments that would provide adequate, flexible, and easily accessible storage space to support collection of dry recyclables (at least card, paper, mixed plastics, metals, glass) and food.

		The London Strategy Policy T7 Deliveries, Servicing and Construction	- This policy states that development proposals must consider the use of rail/water for the transportation of material with increased levels of direct vision on waste. - Development plans and development proposals should facilitate sustainable freight movement by rail, waterways and road. - At large developments, facilities to enable micro-consolidation should be provided, with management arrangements set out in Delivery and Servicing Plans.
London Environment Strategy (Ref. 21)	2018	Policy 7.2.2	Targets a 65% recycling rate for municipal waste (this is broken down into a 50% recycling target for household waste and a 75% target for business waste by 2030) and specifies that no biodegradable or recyclable waste will be sent to landfill by 2026.
District and Local			
North London Joint Waste Strategy (Ref. 22)	2009	Objectives	- To minimise the amount of municipal wastes arising, - To maximise recycling and composting rates, - To reduce greenhouse gases by disposing of less organic waste in landfill sites, - To co-ordinate and continuously improve municipal wastes minimisation and management policies in North London, - To manage municipal wastes in the most environmentally benign and economically efficient ways possible through the provision and co-ordination of appropriate wastes management facilities and services, - To ensure that services and information are fully accessible to all members of the Community, - To maximise all opportunities for local regeneration, - To ensure an equitable distribution of costs, so that those who produce or manage the waste pay for it.
North London Waste Plan Proposed Submission (Ref. 23)	2019	S01	States "to support the movement of North London's waste as far up the waste hierarchy as practicable, to ensure environmental and economic benefits are maximised by utilising waste as a resource".
		S02	States "to support the use of sustainable forms of transport and minimise the impacts of waste movements including on climate change".
Haringey Local Plan, Development Management Policies (DMP) (Ref. 24)	2017	Policy DM4	- All proposals should consider how to sustainably manage waste arising from the development during the design, construction and occupation phases of new developments. - All proposals will be required to make on-site provision for general waste, the separation of recyclable materials and organic material for composting. The on-site provision must: - Ensure adequate dedicated internal and external storage space to manage the volume of waste arising from the site

4. The Proposed Development

- 4.1 The Proposed Development will comprise of three schools including Pre-Preparatory School, Junior School and Senior School. Table 2 provides information on the number of pupils in each school.

Table 2 Pupil Breakdown Per School

School	Number of Pupils
Pre-Preparatory School	140
Junior School	400
Senior School	1,220
Total Students	1,760
Staff Members	650
Total Pupils	2,410

For estimating the waste and recycling arising from the Proposed Development, the staff members have been divided into three schools.

5. Methodology

School

- 5.1 A bespoke methodology has been developed by using the existing waste storage and collection data. The total quantities of waste collected from the existing school buildings was divided by the number of pupils to get the quantities of waste and recycling material arising per pupil. Table 3 provides the methodology used for estimating the waste and recycling material arising from the Proposed Development.

Table 3 Methodology for School

Methodology	Storage Requirements
Bespoke	12.17 L of MDR per person (including staff) per Week 25.10 L of Residual Waste per (including staff) per Week 1.84 L of Food Waste per (including staff) per Week

- 5.2 It should be noted that the MDR will constitute of all recycling streams (including):

- Paper and Cardboard;
- Mixed Plastics;
- Glass; and
- Metals (which is believed to be in small quantities).

6. Management Strategy

Waste and Recycling Arisings

6.1 Based on the methodology provided in Table 3 , the estimated weekly waste and recycling material arising from the Proposed Development are provided in Table 4.

Table 4 Weekly Waste and Recycling Arisings

School	Number of Students	Staff Members	Total Occupants	MDR (Litre/Week)	Food (Litre/Week)	Residual (Litre/Week)	Total
Pre-Preparatory	140	216	356	4,333		8,937	13,270
Junior School	400	216	616	7,498		15,464	22,962
Senior School	1,220	218	1,438	17,503		36,099	53,602
Cafeteria					4,445		4,445
Total	1,760	650	2,410	29,334	4,445	60,500	94,279

For estimating the waste and recycling arising from the Proposed Development, the staff members have been divided into three schools.

For cafeteria, it is assumed that all pupils will be using this facility, therefore, this will be the only place where Food waste is generated.

6.2 However, it is anticipated that the MDR will be collected weekly by LBH, whereas the Food waste and Residual waste will be collected twice every week. Considering this, the waste and recycling arisings are provided in Table 5.

Table 5 Waste Arisings (Weekly for MDR and Twice per Week for Food and Residual)

School	Number of Students	Staff Members	Total Pupil	MDR (Litre/Week)	Food (Litre/Week)	Residual (Litre/Week)	Total
Pre-Preparatory	140	216	356	4,333		5,362	9,695
Junior School	400	216	616	7,498		9,278	16,776
Senior School	1,220	218	1,438	17,503		21,659	39,162
Cafeteria					2,667		2,667
Total	1,760	650	2,410	29,334	2,667	36,299	68,300

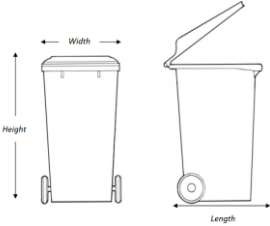
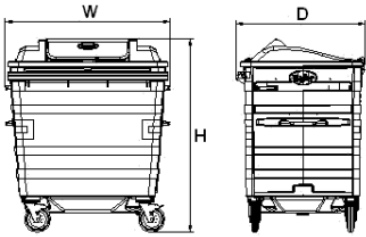
For estimating the waste and recycling arising from the Proposed Development, the staff members have been divided into three schools.

The Proposed Development is assumed to be operational for 5 days every week.

Storage Containers

6.3 Table 6 provides the example dimensions of storage containers ('bins') that are proposed to be used. Please note that bin dimensions may vary between different manufacturers, therefore, these dimensions provided should be used as reference only.

Table 6 Standard Bin Dimensions

Bin	Dimensions	Land Uses and Type of Waste the Bins are Used for
	Capacity (L): 240	For Food Waste
	Height (mm): 1,100*	
	Length (mm): 740*	
	Width (mm): 580*	
	Height (mm): 1,360*	
	Length (mm): 764*	
	Width (mm): 1,371*	
	Capacity (L): 1,100	For MDR & Residual Waste
	Height (mm): 1,410*	
	Length (mm): 1,000*	
	Width (mm): 1,265*	

*Bin dimensions might vary between manufacturers

Waste and Recycling Storage Requirements and Management Strategy

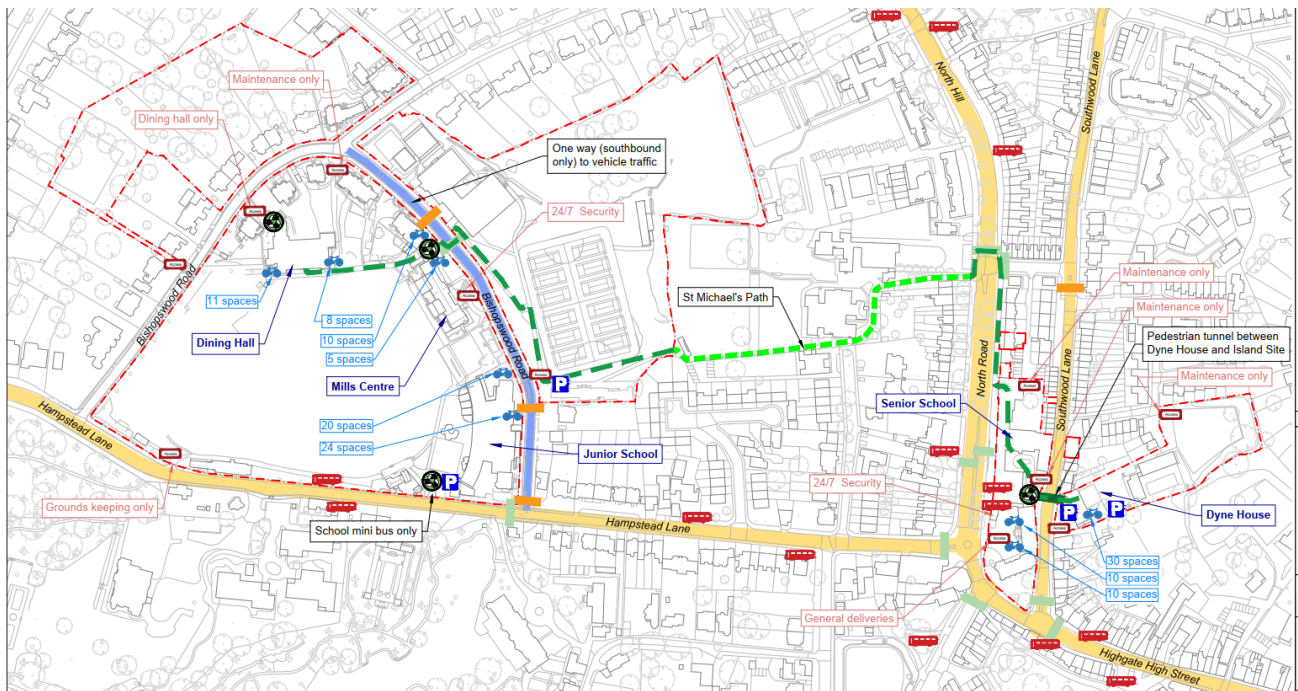
6.4 Based on the waste and recycling arisings as provided in Table 5, the subsequent storage requirements are provided in Table 7.

Table 7 Waste and Recycling Storage Requirements based on Weekly Collection for MDR and Twice per Week Collection for Food and Residual Waste

School	MDR	Food	Residual	Total
Pre-Preparatory and Junior School	11 × 1,100 L		14 × 1,100 L	25 × 1,100 L
Senior School	16 × 1,100 L		20 × 1,100 L	36 × 1,100 L
Cafeteria		12 × 240L		12 × 240L
Total	27 × 1,100 L	12 × 240L	34 × 1,100 L	61 × 1,100 L 12 × 240 L

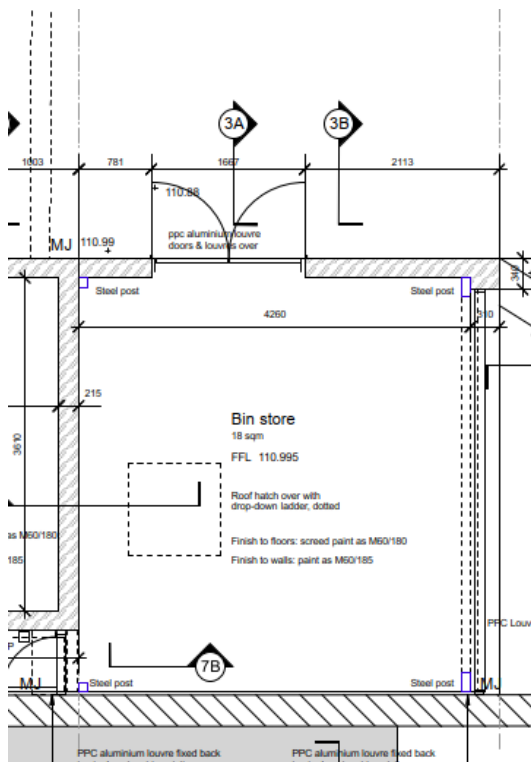
6.5 Figure 3 provides the locations of these central bin stores (marked by blue star). Whereas Figure 4 provides the proposed bin store between the Mill Centre and the pre-preparatory building.

Figure 3 Location of Central Bin Stores



Please note that this Figure is not drawn to scale. The green circles represent the bin stores.

Figure 4 Proposed Bin Store b/w Mills Lane and Pre-Preparatory School

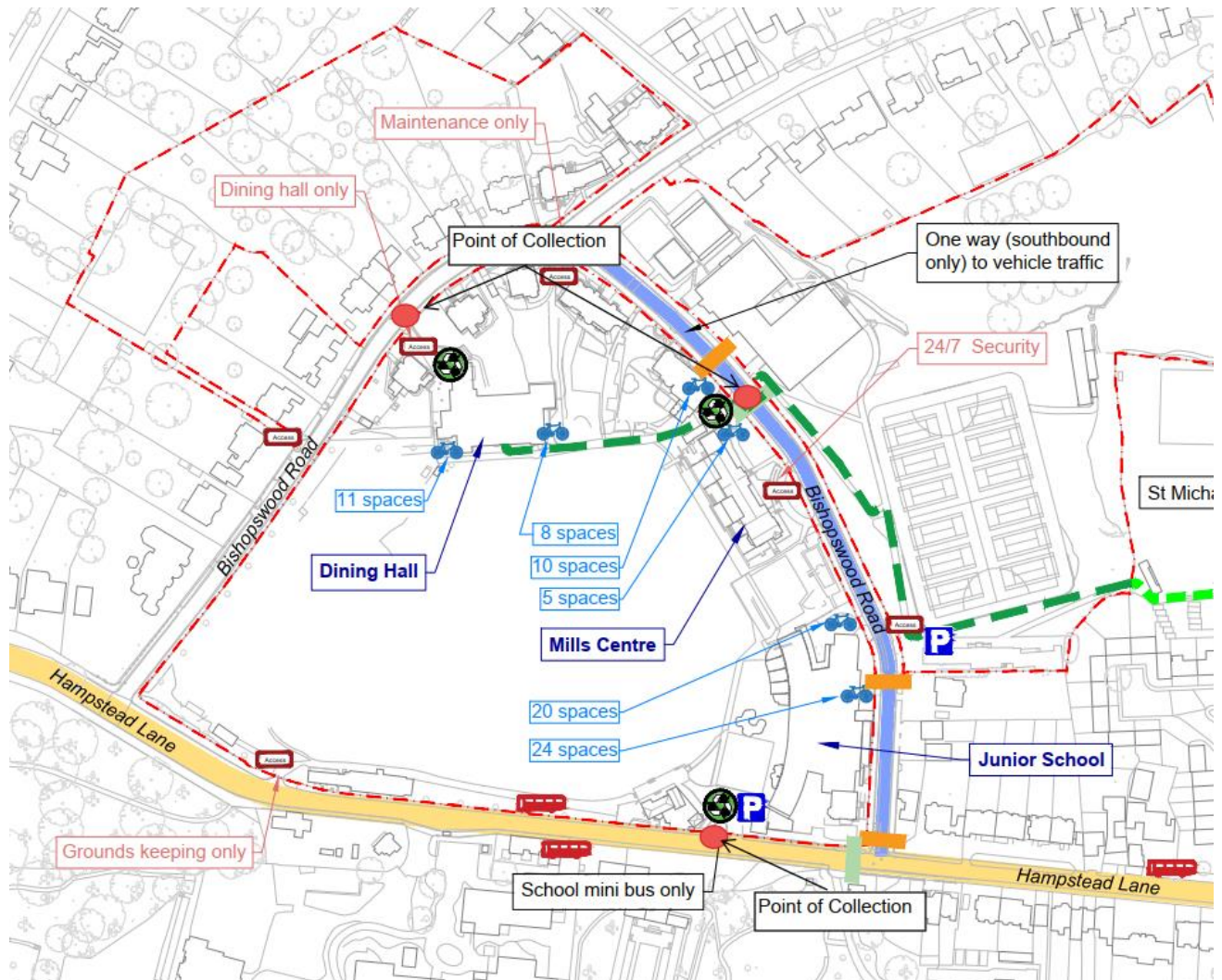


Please note that this Figure is not drawn to scale

- 6.6 Small bins or transparent liners will be provided inside and across each school, which will allow the pupils and staff to deposit their waste and recycling into. Daily (or as required), the facilities management team will take these bins/liners to the central bin stores and empty

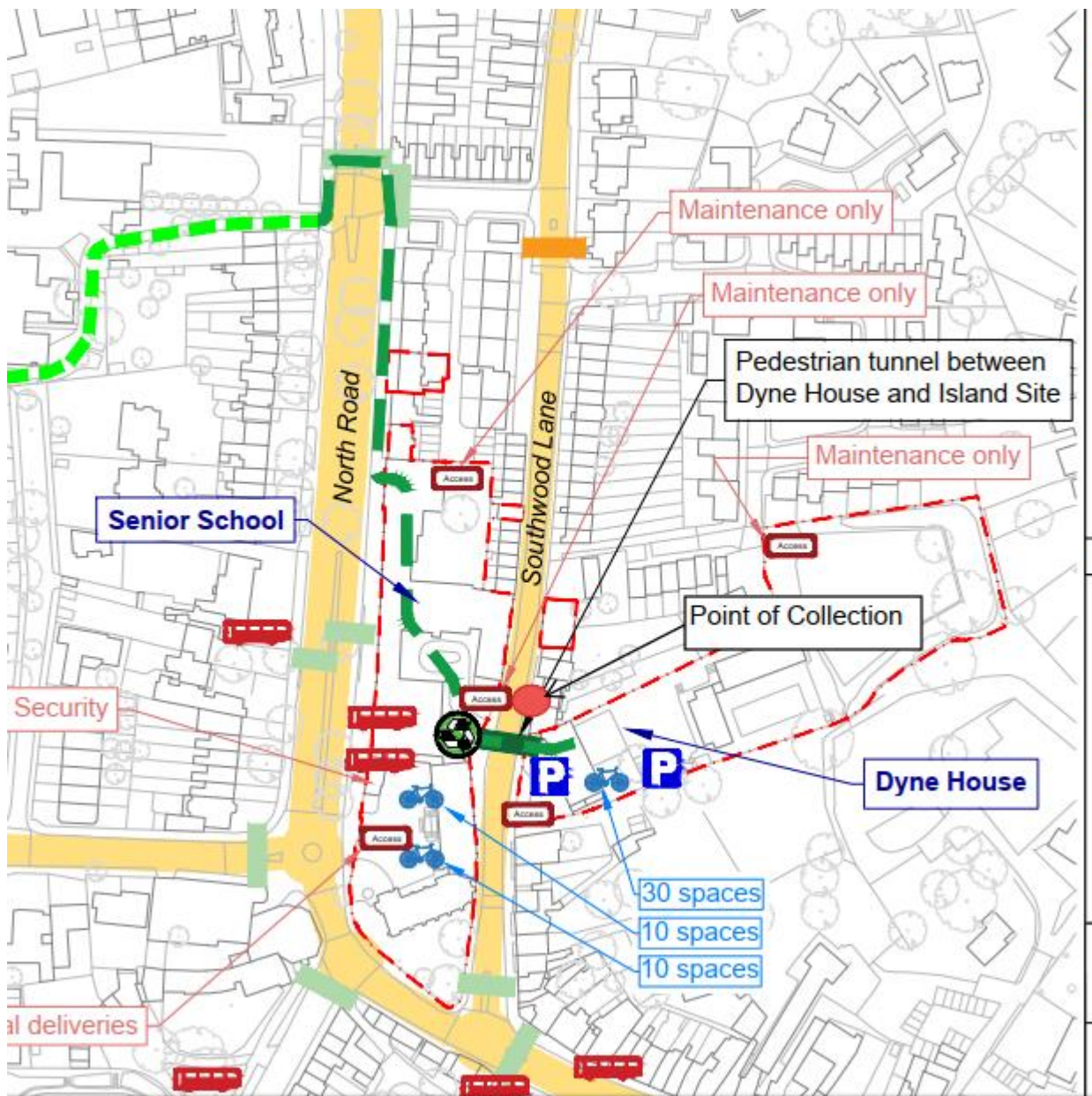
them. On the day of collection (or as agreed), for the Pre-Preparatory School, Junior School and the cafeteria, the facilities management team will wheel the bins (required for collection) to Bishopswood Road, from where these will be collected. Once emptied, the facilities management team will return these bins back to the central bin store. Please see Figure 5 for the location of collection.

Figure 5 Pre-Preparatory, Junior School and Cafeteria - Point of Collections



Please note that this Figure is not drawn to scale. Red circles represent collection points.

- 6.7 For Senior School, prior to the day of collection (or as agreed), the facilities management team will wheel the full bins (required for collection) to Southwood Lane, from where it will be collected. Once emptied, the facilities management team will transfer these empty bins back to the central bin store. Please see Figure 6 for the location of collection.

Figure 6 Senior School - Point of Collection

Please note that this Figure is not drawn to scale, Red circle represent the point of collection.

- 6.8 At this stage it is envisioned that the MDR/recycling will be collected by LBH, whereas all other wastes will be collected by private waste collection contractors.

Unique Waste

- 6.9 There is likely to be a small component of the overall waste arising from the Proposed Development that will comprise other waste streams, such as waste electrical and electronic equipment (WEEE), printer and toner cartridges and fluorescent light tubes. Building maintenance will also give rise to materials such as paints and waste lubricating oils that will require separate storage in dedicated sealed containers.
- 6.10 This type of waste is termed “unique” as it will not be produced on a regular basis and therefore its management will be on special arrangement with a registered waste handler for

the specific waste that is produced. Hazardous waste is required to be kept separate from general and bulky waste. There is space for this within the bin store for these types of waste. In addition, battery bins will be provided in different location of the schools. Separate arrangements will be made by the building management team for the safe disposal of these waste streams, as covered by the Hazardous Waste (Amendment) Regulations 2016 and WEEE Regulations 2015. All waste management will have to comply with Environmental Protection Act 1990 and The Waste (England and Wales) (Amendment) Regulations 2014.

7. Monitoring

- 7.1 The facilities management team will be responsible for monitoring the small bins and liners that are placed around the schools, to check for any contamination. If contamination is noted, then the facilities management will remove the contamination and deposit it into the correct bin or liner.
- 7.2 The facilities management team will also keep a record of the quantities of waste of waste being generated. Similarly, the collection contractor will also be responsible to do so. All this data will be kept in records with the facilities management team.

8. Waste and Recycling Storage and Collection Provision

- 8.1 In accordance with BS EN 840, as set out in BS 5906:2005, all waste containers within the Proposed Development will be stored under cover in a specially designed waste storage room, which will be built to the same general standard for commercial premises. The walls and roofs of this store will be formed of non-combustible, robust, secure and impervious material, and have a fire resistance of one hour when tested in accordance with BS 476-21 - Fire tests on building materials and structures: Part 21 (Ref. 25), whilst the door of the store will be made of steel, and will have a fire resistance of 30 minutes when tested in accordance with BS 476-22 - Fire tests on building materials and structure: Part 22 (Ref. 26).
- 8.2 Further to these requirements, the Proposed Development will also comply with the guidance set out in BS 5906:2005 and Part H6 as provided below:

Location

- Bin stores will be located at vehicle access level.
- Bin stores will be away from the main entrance to the building.
- Waste and recycling containers will be sited so that the containers can be taken to the collection point without being taken through a building unless it is a porch, garage, car port or other open space.
- External storage areas for waste and recycling containers will be away from windows and ventilators and preferably be in shade or under shelter.

Convenience

- Wheelie bins will be located no further than 15 m from the point of collection.

- Bulk waste containers will be located no further than 10 m from the point of collection.

Screening or covering

- The waste and recycling containers housed will be big enough to fit as many containers as are necessary to facilitate collection and will be high enough for lids to open and close where lidded containers are installed. Internal housing layouts will allow all containers to be accessed by users.
- Bins will be fitted with close fitting lids to prevent vermin access.
- Internal built storage areas will conform to BS 5906:2005.

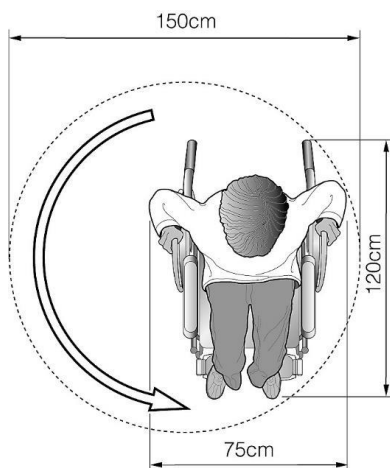
Signage

- Waste and recycling storage areas will be marked, and signs should be provided in the bin stores.
- There are a number of industry standard colours that are accepted for different categories of waste and recycling. These will not to be used when the bin doesn't hold the specific waste and recycling category.
- Users will be made aware of the fire risk from waste and recycling storage. This will be done using signage and displaying the danger when waste and recycling materials are stored carelessly.
- All roads will be clearly marked and controlled to prevent unauthorised parking

Accessibility

- Waste and recycling storage areas will be located in a position that provides easy and safe access for both waste and recycling producers and collectors. In addition, this will also provide an ease of use for older persons, persons short of stature and people with disabilities.
- Internal and external facilities for buildings will be designed for older persons and persons with disabilities as set out by the Disability and Discrimination Act (DDA), as specified in BS 8300:2001 (Ref. 27).
- Waste and recycling storage areas will provide a clear turning circle with a minimum diameter of 1,500 mm for wheelchair users, as specified in Part M of the Building Regulations (Ref. 28) and shown in Figure 7.

Figure 7 Example Wheelchair Turning Circle



Access paths and roads

- All doors and pathways will be 200 mm wider than any bins that are required to pass through or over them.
- Routes from bin storage areas to collection points will be as straight as possible with no kerbs or steps. Gradients will be no greater than 1:12 and surfaces should be smooth and sound, concrete rather than flexible. Dropped kerbs will be installed as necessary.
- There will be no steps and projections at the entrance of a bin store.
- The bin store will be external to the building or capable of being isolated from the main building. This will ensure access to the main building will not be used through the bin store.
- Roads will have a minimum width of 5 m.

Vehicle Access

- Adequate waste and recycling storage arrangements will be made so that waste and recycling does not need to be placed on the public highway other than immediately before it is due to be collected.
- Roads will be arranged so that collecting vehicles can continue mainly in a forward direction.
- Vehicles will not be reversing.
- Vehicles operating in service areas will enter and leave in a forward-facing direction.

Materials and finishing

- The walls and roofs of the bin store will be formed of non-combustible robust and secure materials with a smooth finish suitable of washing down. The door of the bin store will be made of steel.

Safety and anti-social behaviour

- Location of the bin store will be considered to minimise environmental impacts and nuisance from anti-social behaviour.
- The door of the bin store will be capable of being opened from the inside as well as the outside for reasons of safety.
- Unsightly bins can damage the visual amenity and contribute to increased level of anti-social nuisance such as odour and litter. Therefore, bins are planned carefully and will not be stored in a publicly accessible area.

Fire safety

- Stored waste and recycling material will be identified as a potential hazard in any fire risk assessment.
- Internal bin stores will be constructed within a fire compartment structure which is designed to contain a fire.
- Suitably sized manual fire extinguishers will be deployed. For larger risks, a dedicated automatic fire sprinkler or water mist system will be considered.

- The walls and roofs of the bin store will have a fire resistance of one hour when tested in accordance with BS 476-21. The door of the bin store will be made of steel or have a fire resistance of 30 minutes when tested in accordance with BS 476-22.

Ventilation and Lighting

- Bin stores will be lit to be safe for facilities management team and collection operatives to use and service during darkness hours.
- Permanent ventilators will be provided giving a total ventilation area of not less than 0.2 m². Passive ventilators will be fly and vermin proof and will be located near to the ceiling and floor of the bin store as possible but away from windows and dwellings.
- Electrical lighting will consist of sealed bulkhead fittings with houses related to IP65 in BS EN 60529:1992 (Ref. 29) for the purpose of cleaning down with hoses and inevitable splashing.
- Luminaires will be low energy light fittings or low energy lamp bulbs, controlled by a proximity detection or time delay button to prevent lights being left on.

Maintenance

- Arrangements will be made for the cleaning of the bin store with water. A hose union tap should be provided in agreement with the local water authority and the Environment Agency.
- The floor of the bin store will have a suitable fall towards the drainage point. Gullies will be positioned not to be in the track of container wheels and should incorporate a trap which maintains a seal, even during prolonged periods of disuse

Landscaping Waste

- 8.3 The landscaping contractor will be responsible for removing the landscaping waste from the Proposed Development where and when generated.

Sanitary Waste

- 8.4 The sanitary waste arising from the Proposed Development will be collected in-situ i.e., a specialist waste contractor will be commissioned to collect this type of waste directly from the generation points.

9. Summary

- 9.1 In keeping with national, regional (London) and local (NLWA and LBH) policy, this Note demonstrates how the Proposed Development will continue to promote sustainable waste and recycling management methods.
- 9.2 In following the Waste Hierarchy, the Proposed Development will promote resource efficiency to help reduce potential environmental impacts as a result. This Strategy has firstly looked to prevent waste, reuse resources where possible and recycle materials, minimising the generation of waste.
- 9.3 The Proposed Development includes sufficient space to enable best practice recycling methods and flexibility in the future. This Strategy shows how the Proposed Development has segregated and provided space for Recycling, Food and Residual streams.
- 7.4 Alongside striving towards local policy objectives, this Strategy can help achieve wider district goals such as reaching recycling targets (65% of municipal waste) alongside providing adequate, flexible, and easily accessible bin store to support recyclables and food waste as set by the London Strategy – 2021.

10. References

- Ref. 1 British Standards Institute (BSI), (2005); BS 5906:2005, Waste Management in Buildings – Code of Practice
- Ref. 2 Her Majesty Statutory Office (HMSO), (2011); The Waste (England and Wales) Regulations (as amended)
- Ref. 3 Department for Communities and Local Governments (DCLG), (2013); Building Regulations – Approved Document H: Drainage and Waste Disposal (Incorporating 2010, 2013, and 2015 amendments)
- Ref. 4 HMSO, (2011); The Animal By-Products (Enforcement) Regulations 2011.
- Ref. 5 HMSO, (2015); Clean Neighbourhoods and Environment Act 2015.
- Ref. 6 HMSO, (1989); Control of Pollution Act 1989.
- Ref. 7 HMSO, (2012); The Controlled Waste (England and Wales) Regulations 2012.
- Ref. 8 HMSO, (1995); Environment Act 1995.
- Ref. 9 HMSO, (1990); Environmental Protection Act 1990.
- Ref. 10 HMSO, (1996); The Landfill Tax Regulations 1996.
- Ref. 11 HMSO, (2005); The List of Wastes (England) Regulations 2005.
- Ref. 12 HMSO, (2017); The Pollution Prevention and Control (Fees) (Miscellaneous Amendments) Regulations.
- Ref. 13 HMSO, (2007); The Producer Responsibility Obligations (Packaging Waste) Regulations 2007.
- Ref. 14 HMSO, (2005); The Hazardous Waste Regulations 2005 (as amended)
- Ref. 15 HMSO, (2009); The Waste Batteries and Accumulators Regulations 2009.
- Ref. 16 HMSO, (2013); The Waste Electrical and Electronic Equipment (WEEE) (as amended)
- Ref. 17 HMSO, (2021); The Environmental Act
- Ref. 18 HMSO, (2018); A Green Future: Our 25 Year Strategy to Improve the Environment.
- Ref. 19 HMSO, (2018); Our Waste, Our Resources: A Strategy for England.
- Ref. 20 Greater London Authority (GLA) (2021); London Strategy, Spatial Development Strategy for Greater London.
- Ref. 21 GLA (2018); London Environment Strategy.
- Ref. 22 North London Waste Authority (NLWA), (2009); Joint Waste Strategy
- Ref. 23 NLWA, (2019); Waste Plan Proposed Submission
- Ref. 24 London Borough of Haringey (LBH), (2017); Local Plan, Development Management Policies
- Ref. 25 BSI, (1987); BS 476-21, Fire tests on building materials and structures: Part 21.
- Ref. 26 BSI, (1987); BS 476-22, Fire tests on building materials and structures: Part 22.
- Ref. 27 BSI, (2009); BS 8300:2001 – Design of buildings and their approaches to meet the needs of disabled people.
- Ref. 28 DCLG, (2010); Building Regulations – Approved Document M – Access to and use of buildings (2015) (Amendment 2016).
- Ref. 29 BSI, (1992); BS EN 60529:1992, Specification for degrees of protection provided by enclosures (IP code)

