

Mount Pleasant – Calthorpe Street

OPERATIONAL WASTE PLAN

- FINAL
- 22 April 2013



OPERATIONAL WASTE PLAN

- FINAL
- 22 April 2013

SKM EnviroS
Unit D5, Culham Science Centre,
Nr Abingdon,
Oxfordshire
OX14 3DB
Tel: +44 (0) 1865 408280
Fax: +44 (0) 1865 407582
Web: www.skmenviros.com

COPYRIGHT: The concepts and information contained in this document are the property of Sinclair Knight Merz (Europe) Ltd. Use or copying of this document in whole or in part without the written permission of Sinclair Knight Merz (Europe) Ltd constitutes an infringement of copyright.

LIMITATION: This report has been prepared on behalf of and for the exclusive use of Sinclair Knight Merz (Europe) Ltd's Client, and is subject to and issued in connection with the provisions of the agreement between Sinclair Knight Merz (Europe) Ltd and its Client. Sinclair Knight Merz (Europe) Ltd accepts no liability or responsibility whatsoever for or in respect of any use of or reliance upon this report by any third party.

MOUNT PLEASANT – ERRATA NOTE

This note has been prepared by DP9 on behalf of the Royal Mail Group Ltd. The note should be read in conjunction with all documents and plans submitted in support of the following planning applications:

- The Calthorpe Street planning and associated conservation area consent applications to the London Borough of Islington; and
- The Phoenix Place planning application to the London Borough of Camden.

The above applications were submitted simultaneously to the relevant Local Planning Authority on 1 May 2013. Following the submission of the applications the London Borough of Camden requested that the redline application boundary for the Phoenix Place application was re-drawn to mirror the administrative boundary down the centre of Phoenix Place.

As a consequence, the redline boundary for both applications has been withdrawn and amended plans submitted to the relevant Local Planning Authority, alongside this Errata Note. The redline boundary change affects the site areas as follows:

- Calthorpe Street Site – From 2.22 ha to 2.36 ha
- Phoenix Place Site – From 1.31 ha to 1.17 ha

For the avoidance of doubt, the application proposals for the Mount Pleasant Site as a whole are unaffected and the documents submitted in support of each application remain valid and robust.

The table below lists the application documents submitted for each planning application and whether, other than plans showing the respective redline boundary and resultant site areas, this change affects the documents or conclusions.

APPLICATION DOCUMENT	EFFECT OF THE REDLINE BOUNDARY CHANGE
<i>Documents submitted in support of the Calthorpe Street Site application only</i>	
Planning Application Form, Land Ownership Certificate A and Agricultural Holdings Certificates;	Unaffected
The Covering Letter	Unaffected

Design and Access Statement: Volume 2: Calthorpe Street Development	Density calculations on page 45 amended to 1,036 habitable rooms within a site area of 2.36ha to provide a density calculation of 438 habitable rooms/hectare.
Calthorpe Street Waste Management Plan	Unaffected
Calthorpe Street Framework Travel Plan	Unaffected
Calthorpe Street Operational Waste Plan	Unaffected
Calthorpe Street Sustainability Statement including Code for Sustainable Homes Pre-Assessment and BREEAM Pre-Assessment	Unaffected
Calthorpe Street Energy Strategy including Overheating Report	Unaffected
<i>Documents submitted in support of the Phoenix Place Site application only</i>	
Planning Application Form, Land Ownership Certificate B and Agricultural Holdings Certificates	Unaffected
The Covering Letter	Unaffected
Design and Access Statement: Volume 3: Phoenix Place Development	Density calculations on page 31 amended to 1,077 habitable rooms within a site area of 1.17 to provide a density calculation of 921 habitable rooms/hectare.
Phoenix Place Waste Management Plan	Unaffected
Phoenix Place Framework Travel Plan	Unaffected
Phoenix Place Operational Waste Plan	Unaffected
Phoenix Place Sustainability Statement including Code for Sustainable Homes Pre-Assessment and BREEAM Pre-Assessment	Unaffected

Phoenix Place Energy Strategy including Overheating Report	Unaffected
<i>The application documents which assess the Development across the Site are set out below</i>	
Planning Statement which includes the Economic and Regeneration Statement and draft Section 106 Heads of Terms	Density calculations for Calthorpe Street (page 37) amended to 1,036 habitable rooms within a site area of 2.36ha to provide a density calculation of 438 habitable rooms/hectare. Density calculations for Phoenix Place (page 38) amended to 1,077 habitable rooms within a site area of 1.17 to provide a density calculation of 921 habitable rooms/hectare.
Design and Access Statement: Volume 1: Mount Pleasant	Unaffected
Environmental Statement: Volume 1: Main Text	Unaffected
Environmental Statement: Volume 2: Figures	Unaffected
Environmental Statement: Volume 3: Townscape, Visual and Built Heritage Assessment	Unaffected
Environmental Statement Volumes 4A to 4F (Appendices)	Unaffected
Environmental Statement Non-Technical Summary	Unaffected
Public Realm and Playspace Strategy	Unaffected
Housing Statement	Unaffected
Internal Daylight and Sunlight Assessment	Unaffected
Residential Travel Plan	Unaffected
Delivery and Servicing Plan	Unaffected

Framework Construction Logistics Plan	Unaffected
Parking Management Plan	Unaffected
Health Impact Assessment	Unaffected
Community Involvement Report	Unaffected

DP9

4 June 2013

Contents

1.	Introduction	1
1.1.	Summary	1
1.2.	Development Proposals	1
1.3.	Purpose of this document	1
2.	Policy and Legislation Review	3
2.1.	Introduction	3
2.2.	European and National Waste Policy, Strategy and Legislation	3
	The Waste (England and Wales) Regulations 2011	3
	Waste Strategy for England 2007 and Waste Review 2011	3
2.3.	Regional Policy and Strategy	4
	The London Plan 2011	4
	The Mayor's Municipal Waste Management Strategy 2011	4
	The Mayor's Business Waste Strategy 2011	5
	GLA Draft Housing Supplementary Planning Guidance (SPG) 2012	5
	GLA Sustainable Design and Construction Supplementary Planning Guidance (SPG) 2006	6
2.4.	Local Policy	6
	Islington Borough Council - Core Strategy 2011	6
	Islington Borough Council – Draft Development Management Policies 2012	7
	Islington Borough Council - Unitary Development Plan 2002	8
	Mount Pleasant Supplementary Planning Document 2012	9
	Islington Borough Council's Green Construction Supplementary Planning Guidance (SPG) 2003	9
	Islington Borough Council's Planning Standards Guidelines 2002	10
	Islington Borough Council's Refuse and Recycling Storage Requirements Document 2009	10
	Islington Borough Council's Easi-Guide on Refuse Containment Storage and Collection Document 2009	11
2.5.	Other Guidance	12
	The Building Regulations 2010	12
	British Standard 5906:2005 Waste Management in Buildings – Code of Practice	12
	Code for Sustainable Homes	13
3.	Calthorpe Street C1 Site – Waste Management	14
3.1.	Development Proposals – C1	14
3.2.	Residential Waste Management – C1	15
3.3.	Residential Waste Container Storage Requirements – C1	16
	Basement Waste Storage Room – C1	17
	Waste Container Holding Area on the Ground Level – C1	17
3.4.	Retail Units' Waste Storage – C1	18
4.	Calthorpe Street C2 Site – Waste Management	20
4.1.	Development Proposals – C2	20
4.2.	Residential Waste Management – C2	20
	Residential Waste Container Storage Requirements – C2	21

4.3.	Retail Units Waste Storage – C2	23
4.4.	Office Waste Storage – C2	24
5.	Waste Container Store Design Requirements	25

Document history and status

Revision	Date issued	Reviewed by	Approved by	Date approved	Revision type
Draft	19/02/2013	SC	DL	28/02/2013	1 ST review
2 nd Draft	04/03/2013	SC			
3 RD Draft	14/03/2013	SC			
4 th Draft	20/03/2013	SC			
Final	18/04/2013	SC			
Final	22/04/2013	SC			

Distribution of copies

Revision	Copy no	Quantity	Issued to

Printed:	24 April 2013
Last saved:	22 April 2013 01:57 PM
File name:	Final Operational Waste Plan_Calthorpe Street_22042013
Author:	Sara Craze
Project manager:	Upinder Ubhi
Name of organisation:	Royal Mail Group
Name of project:	Mount Pleasant
Name of document:	Final Operational Waste Plan_Calthorpe Street_22042013
Document version:	FINAL
Project number:	VN50127.01

1. Introduction

1.1. Summary

This Operational Waste Strategy has been prepared on behalf of Royal Mail Group to accompany the planning application to the London Borough of Islington for the proposed development of land at the Calthorpe Street Site, within the wider Mount Pleasant development.

1.2. Development Proposals

The Mount Pleasant Site straddles the London Boroughs of Camden (LBC) and Islington (LBI) which is comprised of 2 separate areas known as the Phoenix Place Site and Calthorpe Street Sites.

Within the Calthorpe Street Site there are 2 sub- developments namely C1 and C2. This document considers the operational waste generation and management for the C1 and C2 sites. The overall Calthorpe Street Site (including C1 and C2) is subsequently referred to within this document as “the Development”.

Table 1.1 below details the number of residential units and the areas of commercial use on both the C1 and C2 sites. At this stage of the planning process the final occupiers have not been confirmed for the commercial units for the Calthorpe Street sites.

Table 1.1 – A summary of the number of residential units and area of commercial use for Calthorpe Street C1 and C2 Site

Site	Number of residential units				Total number of residential units	Flexible Use (A1, A2, A3) GIA (gross internal) floor area m ²	Office Use GIA floor area m ²
	1 bed	2 bed	3 bed	4 bed			
Calthorpe Street – C1	52	106	15	8	181	775	-
Calthorpe Street – C2	33	83	26	13	155	654	4,260

1.3. Purpose of this document

The purpose of this document is to describe the Operational Waste Strategy for the Calthorpe Street C1 and C2 Sites as follows:

- The policy , strategy and legislative framework which supports the Development of the Operational Waste Strategy;
- The estimated number of waste containers required in order to service the Development when operational;
- The design considerations of the waste container store; and
- How waste management logistics will be delivered when the Development is in use.

In order to ensure that this document concurs with the requirements of the London Borough of Islington, a meeting was attended by SKM Enviro staff and the Street Environment Manager, of the Environment & Regeneration Department at the LBI on 4th December 2012. This meeting was used to discuss the Development and the approaches to operational waste management that have subsequently been proposed within this document.

It should be noted that this document considers the management of operational waste and does not consider construction or demolition waste.

2. Policy and Legislation Review

2.1. Introduction

This section provides details of the waste policy, legislative requirements and guidance that are most relevant to the waste management design and operational requirements for the Development.

2.2. European and National Waste Policy, Strategy and Legislation

The Directive¹ outlines the principles for managing waste through the adoption of the waste hierarchy, as well as encouraging the application of the “self-sufficiency” and “proximity” principles when treating waste where appropriate and sustainable to do so. These principles have been adopted within various regulations in EU Member States. The relevant Regulations for England and Wales are detailed below.

The Waste (England and Wales) Regulations 2011

The Waste (England and Wales) Regulations 2011² transpose the requirements of the European Waste Framework Directive within UK legislation. It sets out the requirements for the collection, transporting, recovery and disposal of waste and makes some changes to the way waste is managed in England and Wales.

In summary, the Regulations:

- Require businesses to confirm that they have applied the waste management hierarchy when transferring waste and to include a declaration on their waste transfer note or consignment note;
- Require waste producers to ensure that waste management contractors collecting and/or managing wastes are registered with the Environment Agency as Waste Carriers; and
- Require the separate collection of waste paper, metal, plastic and glass from 1 January 2015 for all commercial properties and households.

Waste Strategy for England 2007 and Waste Review 2011

Waste Strategy 2007 takes forward the principles of the internationally accepted waste hierarchy and addresses the key challenges for future waste management.

The Strategy also identifies that all parts of society (individuals, communities and organisations) are responsible for their own waste.

¹ Waste Framework Directive 2008/98/EC <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:312:0003:0030:EN:PDF>

² The Waste (England and Wales) Regulations 2011 <http://www.legislation.gov.uk/ukxi/2011/988/made>

In order to encourage the application of waste management options which are higher up the waste hierarchy, the Strategy has set targets for recycling, composting and reducing household waste. The targets are:

- Recycling and composting of household waste, at least:
 - 40% by 2010
 - 45% by 2015
 - 50% by 2020
- Reduction of household residual waste from 2000 levels:
 - 2010: 29% reduction
 - 2015: 35% reduction
 - 2020: 45% reduction

The Waste Strategy was reviewed in 2011 and a requirement was included to encourage the diversion of municipal waste from landfill, including wastes produced by commercial businesses. Additional requirements for the promotion of business waste recycling from small and medium sized enterprises were also included as well as measures to improve the regulation of business waste producers as to how they report waste management activities.

2.3. Regional Policy and Strategy

The London Plan 2011

The London Plan is the overall strategic plan for London, setting out an integrated economic, environmental, transport and social framework for the development of London over the next 20–25 years. The Plan proposes a target to exceed recycling/composting levels in municipal solid waste (MSW) of 45% by 2015, 50% by 2020 and aspiring to achieve 60% by 2031. The Plan also proposes a target to exceed recycling/composting levels in commercial and industrial (C&I) waste of 70% by 2020.

The London Plan also states that suitable waste and recycling storage facilities are required in new developments. These recycling performance and storage requirements are addressed within this document.

The Mayor's Municipal Waste Management Strategy 2011

The Mayor's Municipal Waste Management Strategy (MWMS) was published on 18th November 2011. The Mayor has proposed the following waste management targets for London:

- To achieve zero municipal waste direct to landfill by 2025;
- To reduce the amount of household waste produced from 970kg per household in 2009/10 to 790kg per household by 2031. This is equivalent to a 20% reduction per household;

- To increase London's capacity to reuse or repair municipal waste from approximately 6,000 tonnes a year in 2008 to 20,000 tonnes a year in 2015 and 30,000 tonnes a year in 2031; and
- To recycle or compost at least 45% of municipal waste by 2015, 50% by 2020 and 60% by 2031.

The Mayor's Business Waste Strategy 2011

The Mayor's Business Waste Strategy 2011³ sets out the Mayor's strategy for meeting the C&I targets set out in the London Plan. The primary focus of the strategy is the promotion of resource efficiency as a means of waste prevention.

A policy proposal to improve storage capacity and collection access arrangements to business premises is also detailed in the Strategy. The Mayor states that he will make use of the planning process, through the London Plan and the supplementary planning guidance on sustainable design and construction, to ensure the provision of appropriate waste storage space in new and developments. Local planning authorities will be required to ensure that all planning applications for new developments have provided for sufficient waste storage space. This is considered to be directly relevant to the Development and has, therefore, been included in the design proposals for the Development.

In addition, an Operational Waste Strategy for new developments should be submitted to show how the potential types and quantities of waste that may be generated can be managed on-site in such a way as to achieve 70% recycling of C&I waste.

This document details how waste produced by the Development will be managed. Provision for separate recycling and non-recyclable waste containers has been made at the Development.

GLA Draft Housing Supplementary Planning Guidance (SPG) 2012

The Draft Housing Supplementary Planning Guidance⁴ states that *communal refuse and recycling containers, communal bin enclosures and refuse stores should be accessible to all residents including children and wheelchair users, and located on a hard, level surface.*

The Development will have waste container stores that are accessible to all residents and they will be located on a hard and level surface.

³ Mayor of London 2011 The Mayor's Business Waste Strategy – Making Business Sense of Waste http://www.london.gov.uk/sites/default/files/Business%20Waste_FINAL.pdf

⁴ GLA 2012 Draft Housing Supplementary Planning Guidance <http://www.london.gov.uk/sites/default/files/spg-housing-draft.pdf>

GLA Sustainable Design and Construction Supplementary Planning Guidance (SPG) 2006

The Sustainable Design and Construction SPG⁵ states that *the design of a development is critical to ensure that sustainable waste management can be achieved. Integration of sustainable waste management principles into design includes:*

- *Storage and recycling facilities – design of suitable individual or shared waste sorting and recycling facilities (such as storage bins in kitchens and integrating recycling bins or composting areas into the building or site fabric). Suitable recycling storage facilities should be incorporated into non-domestic developments.*
- *Provision of local facilities encourages uptake of recycling and reduces the need to drive to a central facility. Siting of recycling facilities should follow consideration of vehicular access to the site and potential nuisance (noise) impacts on amenity.*

The Development will have dedicated waste container storage areas for both recycling and non-recycling waste thereby satisfying the Sustainable Design and Construction SPG requirements.

2.4. Local Policy

Islington Borough Council - Core Strategy 2011

The Core Strategy for Islington Borough Council was adopted in February 2011⁶ and forms part of the Council's Local Development Framework. The Core Strategy aims to influence planning decisions and shape development within the borough to 2025.

In terms of waste, Policy CS11 states:

“The Council will promote Sustainable Waste Management by:

- A. Promoting waste reduction, re-use, recycling, composting and resource efficiency over landfill.*
- B. Requiring developments to provide waste and recycling facilities which fit current and future collection practices and targets and are accessible to all.”*

In terms of policy compliance, the Development includes dedicated recycling storage which concurs with the collection services provided in the London Borough of Islington in terms of material streams. Also, a building management company will help to ensure that disabled

⁵ GLA 2006 Sustainable Design and Construction Supplementary Planning Guidance
<http://static.london.gov.uk/mayor/strategies/sds/docs/spg-sustainable-design.pdf>

⁶ Islington Borough Council Core Strategy 2011
http://www.islington.gov.uk/publicrecords/Documents/Environment/Pdf/ldf_pack/CS_adoption/Core_Strategy_Adopted_February_2011.pdf

residents' waste and recycling is deposited in the storage areas, thereby ensuring accessibility to all residents.

Islington Borough Council – Draft Development Management Policies 2012

The Development Management Policies (DMP)⁷ develops the themes and broad policies in the Core Strategy. The Development Management Policies sets out detailed planning policies the Council will use when determining applications for planning permission in Islington alongside strategic policies in the Core Strategy and other policies within the Development Plan. Currently the Development Management Policies are in draft form and are subject to consultation, following which the documents will be submitted for examination by an Independent Planning Inspector.

Chapter 3 Housing states:

“Suitable refuse and recycling provision must be provided in accordance with the Islington Refuse and Recycling Storage Requirements.”

The requirements of the *Refuse and Recycling Storage Requirements* document are considered below.

Under Chapter 8 Transport, the DMP states within *Policy DM 50 Delivery and servicing for new developments that:*

- A. *“Provision for delivery and servicing should be provided off-street; particularly for commercial developments over 500m² gross floor area. In order to ensure proposed Delivery and Servicing arrangements are acceptable:*
 - i. *It must be demonstrated that servicing and delivery vehicles can enter and exit the site in forward gear.*
 - ii. *Details shall be submitted to establish the delivery and servicing needs of developments*
 - iii. *Delivery and servicing bays are required to be strictly controlled, clearly signed and only used for the specific agreed purpose.*
- B. *Where on-street servicing is proposed details must be submitted to demonstrate the need for on-street provision and that on-street provision is not practical, and to show that arrangements will be safe and will not cause a traffic obstruction or nuisance. Traffic modelling may be required.*
- C. *For major developments, details of refuse and recycling collection must be submitted, indicating locations for collection vehicles to wait and locations of refuse and recycling bin stores. Applications for larger residential developments must demonstrate that delivery and servicing would not impact negatively on refuse collection arrangements.*

⁷ Islington Borough Council 2012 Development Plan Document
http://www.islington.gov.uk/services/planning/planningpol/local_dev_frame/pol_dm/Pages/default.aspx?extra=8

D. It must be demonstrated that worst case scenarios have been assessed and their impacts mitigated, in terms of delivery and servicing. It may be required to demonstrate such scenarios in TRAVL (Trip Rate Assessment Valid for London)."

Under Chapter 8 Transport, the DMP also states:

"For commercial developments over 500m² gross floor area on-street servicing will only be allowed where it has been demonstrated that it would not be possible to provide servicing on site, due to issues such as highways safety and conservation and design, and where on-street servicing can operate effectively without impacts on highways safety, capacity or congestion. The servicing and loading arrangements of the existing or previous use will not be taken into account."

In terms of compliance with the DPD, the Development proposals have been produced in accordance with the DMP. The details and layout of the waste container stores and access to these areas is detailed in subsequent sections of this document.

Islington Borough Council - Unitary Development Plan 2002

The Unitary Development Plan (UDP)⁸ has been partly superseded by the Core Strategy (detailed above) but contains a number of "saved" policies which will continue to be used until the adoption of other LDF documents (Development Management Policies) has occurred.

UDP saved policy ENV 37 states:

"For new residential developments of 6 units or less, sufficient space will be required within the unit to allow storage of recyclable material. For residential developments above 6 units sufficient space for communal recycling facilities will be required. Regard should be given to the Council's standards for refuse collection found in the Planning Standards Guidelines."

UDP saved policy D3 states:

"The layout of buildings and spaces on a development site should be logically and efficiently planned to ensure that access, functional, amenity and aesthetic requirements are met. In particular, new development should be designed to:

vii) include adequate refuse storage facilities which are well designed in terms of function and appearance."

UDP saved policy H10 states:

"The Council wishes to ensure that new housing development:

⁸ Islington Borough Council 2002 Unitary Development Plan
http://www.islington.gov.uk/services/planning/planningpol/unit_dev_plan/Pages/default.aspx

ii) where possible, adequate play, amenity and garden space is provided. In all cases adequate off-street refuse storage should be provided.”

In terms of policy compliance, the Development includes dedicated and separate communal recycling facilities; thereby satisfying UDP saved policy ENV37. The Development includes adequate and well-designed waste container storage facilities in terms of function and appearance, thereby satisfying UDP saved policy D3. The Development provides off street waste storage for residential properties thereby satisfying UDP saved policy H10.

Mount Pleasant Supplementary Planning Document 2012

The London Borough of Islington (adopted 7 February 2012) together with the London Borough of Camden (adopted 22 February 2012) have produced a Supplementary Planning Document (SPD) that will be used to guide development on the Mount Pleasant site.

The SPD provides details on the some of the key validation requirements for the planning brief area. *“The Waste Management Plan for the site should indicate:*

- a) the estimated volumes and types of waste produced by the development;*
- b) the size and location of waste and recycling stores and how recyclable material and other waste will be delivered to these stores;*
- c) the equipment specified for containing the waste; and*
- d) the proposed collection point and the method for transferring waste to this location.*

The development must have on-site provision for secure and easily cleaned refuse storage. Waste collection arrangements should accord with Building Regulation H6.”

The Development proposals have been produced in accordance with the Mount Pleasant Supplementary Planning Document and details on the waste storage provisions proposed for Calthorpe Street C1 and C2 Site are detailed in subsequent sections of this document.

Islington Borough Council’s Green Construction Supplementary Planning Guidance (SPG) 2003

Islington Borough Council’s Green Construction Supplementary Planning Guidance (SPG) states that *“at the design stage waste minimisation principles and recycling practices should be integrated into the operational phase of a development. This should include separation of waste and recyclables, and space for separate storage of recyclable materials.”*

The Development will have dedicated waste containers for recyclables thereby satisfying the Council’s Green Construction Supplementary Planning Guidance.

Islington Borough Council's Planning Standards Guidelines 2002

The Planning Standard Guidelines for Islington Borough Council⁹ lists a number of factors that need to be considered when planning a development with regards to refuse, these include:

- *anticipated volume of refuse produced*
- *convenience to user*
- *ease of access for refuse collectors and vehicle*
- *fire risk*
- *separation of waste for recycling*
- *hygiene*
- *appearance*

It also states that refuse emanating from premises containing both commercial and residential premises uses should be stored separately and that all containers and refuse must be stored off the street.

The anticipated number of waste containers required for non-recycling and recycling, the layout of the waste container stores and access to these areas is detailed in subsequent sections of this document.

Islington Borough Council's Refuse and Recycling Storage Requirements Document 2009

Islington Borough Council have produced a document 'Refuse and Recycling Storage Requirements'¹⁰ (RRSR) to assist architects in providing refuse and recycling storage facilities for premises in the London Borough of Islington. It details methods of waste storage and the requirements of Islington Borough Council.

The document states that "*in major commercial developments the Council require a waste management plan to be submitted with the planning application for the development. This should indicate:*

- *Estimated volumes and types of waste produced by the development;*
- *The size and location of waste and recycling stores and how recyclable material and other waste will be delivered to these stores;*
- *The equipment specified for containing the waste; and*
- *The proposed collection point and the method for transferring waste to this location."*

⁹ Islington Borough Council 2002 Planning Standard Guidelines
http://www.islington.gov.uk/publicrecords/Documents/Environment/Pdf/planningstandardsguidelines_july06a.pdf

The document details the storage capacity requirements for residential and commercial units. The figures should be taken as a guide as individual developments may require specific storage arrangements.

“Residential refuse and recycling storage capacity should generally be assessed in accordance with the following table:

Size of Unit	Total storage capacity required for Refuse and Recycling
<i>Single room units</i>	<i>0.1 cubic metres</i>
<i>Two room units</i>	<i>0.15 cubic metres</i>
<i>Three room units</i>	<i>0.2 cubic metres</i>
<i>Four room units</i>	<i>0.25 cubic metres</i>
<i>Five room units</i>	<i>0.3 cubic metres</i>
<i>Six room units</i>	<i>0.35 cubic metres</i>
<i>Recycling - At least 50% of total storage capacity (calculated using the table above) must be allocated for recycling.</i>	

Commercial and Industrial refuse and recycling storage capacity should generally be assessed in accordance with the following table:

Building Use	Waste Storage Requirements per 1,000 square metres of floor space (gross)	Recycling Storage Requirements
<i>Offices</i>	<i>2.6 cubic metres</i>	<i>50% of this capacity should be retained for the storage of separated waste for recycling”</i>
<i>Restaurants</i>	<i>1.5 cubic metres per 20 dining spaces</i>	
<i>Retail</i>	<i>5 cubic metres</i>	
<i>Hotels</i>	<i>1.5 cubic metres per 20 dining spaces</i>	

The Development proposals have been produced in accordance with the RRSR and details on how each of these requirements are met are detailed in subsequent sections of this document.

Islington Borough Council’s Easi-Guide on Refuse Containment Storage and Collection Document 2009

Islington Borough Council have also produced a document ‘Easi-Guide on Refuse Containment Storage and Collection’ which provides basic information for architects and others concerned with providing refuse storage facilities for premises within the London Borough of Islington.

The Development proposals have been produced in accordance with the Easi-Guide on Refuse Containment Storage and Collection and details on layout of the waste container stores and access to these areas is detailed in subsequent sections of this document.

2.5. Other Guidance

The Building Regulations 2010

The Building Regulations 2010 require the following:

“Solid waste storage

- H6. (1) *Adequate provision shall be made for the storage of solid waste.*
 (2) *Adequate means of access shall be provided:*
- a) *For people in the building to the place of storage and;*
 - b) *From the place of storage to a collection point*

In the Secretary of State’s view the requirements of H6 (above) will be met if the solid waste storage area is:

- a) *Designed and sited so as not to be prejudicial to health;*
- b) *Of sufficient area having regard to the requirements of the waste collection authority for the number and size of receptacles under Sections 46 and 47 of the Environmental Protection Act 1990;*
- c) *Sited so as to be accessible for use by people in the building and of ready access for removal to the collection point specified by the waste collection authority under Sections 46 and 47 of the Environmental Protection Act 1990.”*

Section H6 sets out the general requirements for solid waste storage for domestic and non-domestic developments.

The Development proposals have been produced in accordance with the Building Regulations and details on the layout of the waste container stores and access to these areas is detailed in subsequent sections of this document.

British Standard 5906:2005 Waste Management in Buildings – Code of Practice

This British Standard (BS) document details the codes of practice for methods of storage, collection, segregation for recycling and recovery of waste from residential and non-residential buildings. The standard is applicable to all new developments including but not limited to retail and offices. It details a number of considerations which are required to be made when designing new developments to ensure that waste management storage provision and accessibility, for collection and removal, is appropriate. The waste container stores on the Development will comply with the requirements of BS5906:2005.

Code for Sustainable Homes

The Code for Sustainable Homes (CSH) has been developed to enable a step change in sustainable building practice for new homes. CSH measures the sustainability of a home against design categories, rating the 'whole home' as a complete package and includes waste management.

CSH covers nine categories of sustainable design including waste which is a mandatory performance requirement. It is possible to achieve an overall level of between zero and six depending on the mandatory standards and proportion of flexible standards achieved.

“Assessments are carried out in two phases:

- *An initial assessment is carried out at the design stage. This is based on detailed documentary evidence and commitments which results in an interim certificate of compliance.*
- *Final assessment and certification is carried out at the post construction stage. Based on the design stage review, this includes a confirmation of compliance, including site records and visual inspection, and results in a final certificate of compliance.”*

With regards to waste, credits are awarded for the provision of adequate and accessible internal and external facilities for recyclable and non-recyclable household waste.

External Space for Storing Waste

In line with the Code for Sustainable Homes the following would be implemented the Development:

- There will be adequate external space supplied for the storage of both non-recyclable and recyclable waste.
- The waste/recycling storage areas will be of an appropriate capacity to store the predicted volumes of waste that will arise based on a collection frequency of once per week.
- The external space will be compatible for the London Borough of Islington's collection requirements.
- The London Borough of Islington offer a dry commingled collection which includes the collection of paper, cardboard, glass, plastics and metals (tins and cans). A provision for food waste storage has been provided.
- All waste container stores will be hard-standing and containers will not be stacked.
- The waste container stores will be enclosed structures and all waste containers will have lids.

A CSH assessment has been carried out for the Development and is included in the planning application.

3. Calthorpe Street C1 Site – Waste Management

3.1. Development Proposals – C1

As described in the introduction, Calthorpe Street C1 Site consists of 181 mixed tenure residential apartments. This is arranged in nine core access blocks (H, J and K) ranging in height to a maximum of seven storeys above street level. Table 3.1 identifies the total number of residential units that will be provided for Calthorpe Street C1 Site.

Table 3.1 – A summary of the number of residential units¹⁰

Block	1 Bedroom 2P	2 Bedroom 3P	2 Bedroom 4P	3 Bedroom 4P	3 Bedroom 5P	3 Bedroom 6P	4 Bedroom 6P	4 Bedroom 7P	4 Bedroom 8P	Total
H1	1	0	23	0	0	0	0	0	0	24
H2	9	7	8	1	2	1	0	3	0	31
H3	3	0	14	0	0	2	0	0	2	21
H4	3	0	14	0	0	2	0	1	0	20
H5	7	2	10	0	2	0	0	0	0	21
H6	0	1	6	0	0	2	0	0	0	9
H7	9	0	5	0	0	2	2	0	0	18
J1	20	0	12	0	0	1	0	0	0	33
K1	0	0	4	0	0	0	0	0	0	4
TOTAL	52	10	96	1	4	10	2	4	2	181

The proposed C1 site will also have 775m² gross internal floor area (GIA) of flexible commercial space (A1, A2 or A3 use). At this stage of the planning process the final occupiers have not been confirmed for the commercial units for Calthorpe Street C1 Site.

¹⁰ P is the assumed number of occupants in each residential unit

3.2. Residential Waste Management – C1

Internal space for waste and recycling containers within the residential units has been included within the designs. It is envisaged that residents will segregate recyclable materials and non-recycling waste in their dwellings in line with the waste and recycling containers provided in the site's waste container stores. It is assumed that these materials will be kept in residents' containers within the dwellings before being transferred to the separate waste and recycling containers in the designated waste container stores.

The waste container stores for residents in Blocks H1, H2, H3, H4, H5, H6 and H7 will be located in the basement of the building. Residents will access their designated waste container store via lifts. The waste container stores for residents in Blocks J1 and K1 are located on the ground level of the C1 Site.

The C1 Site will be a managed development. A building management company will be appointed that will have responsibility for the management of the waste at the waste container stores but not within the residential properties. One of their responsibilities will include transferring the containers from the basement waste container stores to the basement waste storage room and up onto the ground level via the designated refuse lift on collection days. The building management company will also be responsible for ensuring that any litter that may be spilt is cleared up promptly and effectively in the following situations:

- Waste spilt by residents whilst transferring wastes to the waste container stores
- Wastes spilt by building management company staff when waste containers are transferred to or from the ground level for collection for collection by LBI vehicles and crews.

Waste collection vehicles will enter the development from Calthorpe Street and empty the waste containers off the public highway.

It is assumed that all waste streams (including non-recycling, recycling and food waste) generated from the residential units will be collected on a weekly basis.

All residential dwellings are located so that the occupiers will not be required to carry waste more than 30 metres in accordance with LBI's Refuse and Recycling Storage Requirements guidance.

Currently LBI offer a dry commingled collection of recyclable materials to residents in flats including aerosols, aluminium foil, cans, cardboard, cartons (food and drink), glass bottles and jars, paper, plastic bags, plastic bottles and other mixed plastics.

At present it is understood that LBI offer a food waste collection service to a limited number of flats and it is envisaged that this could be offered to the C1 Site. Therefore, the provision of food waste containers has been included in the residential waste container stores.

3.3. Residential Waste Container Storage Requirements – C1

The assumptions used to calculate the waste container requirements for Calthorpe Street C1 Site are based on information set out in the LBI's Refuse and Recycling Storage Requirements¹¹ guidance and schedule of accommodation detailed in *12th April 2013 Appraisal Input Data Sheet Rev.xls*. Allies and Morrison provided further information on the core breakdowns.

LBI's guidance identifies the refuse and recycling capacity requirements and how they should be calculated for residential developments, which is summarised in Table 3.2.

Table 3.2 – LBI's guidance waste container provision calculation requirements

Size of Unit	Total storage capacity required for refuse and recycling (m ³)
Single room units	0.1
2 room units	0.15
3 room units	0.2
4 room units	0.25
5 room units	0.3
6 room units	0.35
Rooms comprise of bedrooms and lounges but do not include kitchens and bathrooms.	

LBI's guidance also states that at least 50% of total storage capacity must be allocated for recycling. Table 3.3 below applies these requirements and identifies the number of waste containers required for the storage of general 'mixed' waste and co-mingled recyclables (including paper, cardboard, metal tins and cans, plastic bottles and glass). These material mixes reflect the LBI's current collections services.

The potential future storage requirements for separated food waste from the residential units are also provided below in Table 3.3. This reflects LBI's separate food waste collection service. A 360ltr waste container has been provided in each waste container store for the separate storage of food waste for this purpose.

¹¹ Islington Borough Council's Refuse and Recycling Storage Requirements
[http://www.islington.gov.uk/publicrecords/library/Environmental-protection/Information/Guidance/2011-2012/\(2012-03-03\)-Refuse-and-Recycling-Storage-Guidance.pdf](http://www.islington.gov.uk/publicrecords/library/Environmental-protection/Information/Guidance/2011-2012/(2012-03-03)-Refuse-and-Recycling-Storage-Guidance.pdf)

Table 3.3 –The estimated number of waste containers required in each waste container store at Calthorpe Street C1 Site

Waste container stores	Number of 1,100ltr waste containers required for non-recycling waste	Number of 1,100ltr waste containers required for recycling	Number of 360ltr waste containers required for food waste
Block H1	3	3	1
Block H2	3	3	1
Block H3	2	2	1
Block H4	2	2	1
Block H5	2	2	1
Block H6	1	1	1
Block H7	2	2	1
Block J1	3	3	1
Block K1	1	1	1

Basement Waste Storage Room – C1

There is a waste storage room in the basement of the C1 site which will be used as a holding area for waste containers prior to them being moved to the ground level on collection days and after collections before they go back to the individual waste container stores.

At times of collection the building management company will be responsible for moving the waste containers from the individual waste container stores in each block to the basement waste storage room before they are moved via the designated refuse lift to the ground level for collection.

LBI offers a free bulky waste collection service to all its residents. Following discussions with LBI they have identified that the storage of bulky waste items (e.g. waste furniture) can be a problem for flats. Therefore, LBI have recommended the inclusion of a storage space for these discarded items. A room in the basement has been allocated for storing bulky waste items. This room will be enclosed and lockable.

Waste Container Holding Area on the Ground Level – C1

There is a designated area on the ground level to hold waste containers when they are moved out of the refuse lift before collection by the waste contractor and after collections before they are

moved into the lift to the basement. The holding area is sized to hold approximately twelve 1,100ltr waste containers.

The waste containers contained within the waste container stores located in Blocks J1 and K1 will not be stored in the waste container holding area and will be collected directly from the waste container

3.4. Retail Units' Waste Storage – C1

It is envisaged that waste will be segregated by tenants in the commercial units located in Blocks H7 and J1. Waste generated by the retail units on the ground level of the Calthorpe Street C1 Site will be stored within the units and collected from outside the units, potentially using planned collections at agreed times. This strategy has been discussed and agreed with the Street Environment Manager at the LBI.

The provision of waste and recycling storage containers within the commercial units will be dependent on the waste collection contractor's requirements. It is recommended that colour coded waste containers or bags are used. Using LBI's guidance which requires approximately 5 cubic metres storage space for every 1,000m² of commercial space Table 3.4 provides an indication of the amount of space that may be required for commercial waste storage.

Table 3.4 - The estimated number of waste containers required for the commercial units at Calthorpe Street C1 Site.

Commercial unit location	Storage requirements per 1,000m ² of floor space (m ³)	Total GIA at C1 for commercial units m ²	Storage requirements (m ³)	Capacity of a 1,100ltr waste container (m ³)	Number of 1,100ltr waste containers required
Block H7	5	420	2.1	1.1	2
Block J1	5	168	0.84	1.1	1

LBI's guidance also states that at least 50% of total storage capacity must be allocated for recycling. Space will be allocated in the commercial units for recycling storage. It is anticipated that all retail waste from the C1 site will be collected on a daily basis or depending on the retail units requirements it might be collected less frequently if appropriate. Given that final occupiers have not been confirmed for the commercial units, it is unknown at this stage whether the LBI's trade waste collection service or a private waste contractor will be used to collect the waste generated by the commercial units. However, appropriate collection contractual arrangements will be put in place to ensure adequate collections are made.

Block K1 ('the Pavilion') of the C1 Site will include 4 residential units across the first and second floor. These will be provided with a dedicated waste container store on the ground floor of the Pavilion.

The ground level of the Pavilion building (187m² GIA) will be used for A1, A2 or A3 use. At this stage, the final occupiers of the Pavilion have not been confirmed. Waste generated by the retail activities will need to be kept separate from waste generated by the residential units located on the first and second floors of the building. This is due to the likely application of a collection charge by the London Borough of Islington for these wastes which will, therefore, need separate waste containers and separate store.

It is anticipated that the retail use in the Pavilion will generate large volumes of waste. It is estimated that 1 1,100ltr waste container will be required for general waste and 1 1,100ltr waste container for recyclable waste. This will provide flexibility given that the occupiers and uses of the Pavilion building are currently unknown.

4. Calthorpe Street C2 Site – Waste Management

4.1. Development Proposals – C2

As described in the introduction, Calthorpe Street C2 Site consists of 155 mixed tenure residential units. This is arranged in 4 core access blocks (E to G) ranging in height to a maximum of ten storeys above street level. Table 4.1 identifies the total number of units that will be provided for Calthorpe Street C2 Site, including details of blocks and unit size.

Table 4.1 – A summary of the number of residential units¹²

Block	1 Bedroom 2P	2 Bedroom 4P	2 Bedroom U&O ¹³	3 Bedroom 5P	3 Bedroom 6P	4 Bedroom 6P	Total
E1	7	17	0	0	15	0	39
F1	6	22	7	4	3	0	42
F2	12	9	14	0	4	0	39
F3	8	8	6	0	0	13	35
TOTAL	33	56	27	4	22	13	155

The proposed C2 Site will also have 4,914m² gross internal floor area (GIA) of commercial space. This includes:

- 4,260m² gross internal floor area (GIA) of B1 office space; and
- 654m² gross internal floor area (GIA) of A1,A2 or A3 retail space

At this stage of the planning process, final occupiers for the commercial units have not been confirmed.

4.2. Residential Waste Management – C2

Internal space for waste and recycling containers within the residential units has been included within the designs. It is envisaged that residents will segregate recyclable materials and non-recycling waste in their dwellings in line with the waste and recycling containers provided in the site's waste container stores. It is assumed that these materials will be kept in residents' containers

¹² P is the assumed number of occupants in each residential unit

¹³ Use and occupancy

within the dwellings before being transferred to the separate waste and recycling containers in the designated waste container stores. All waste container stores will be located on the ground level of the C2 site.

The C2 Site will be a managed development. A building management company will be appointed that will have responsibility for the management of the waste at the waste container stores but not within the residential properties. One of their responsibilities will include ensuring that the waste containers are presented for collection by the collection contractor and returned correctly to the waste container store. The building management company will also be responsible for ensuring that any litter that may be spilt is cleared up promptly and effectively in the following situations:

- Waste spilt by residents whilst transferring wastes to the waste container stores
- Waste spilt by building management company staff when waste containers are transferred for collection by LBI vehicles and crews.

It is assumed that all waste streams (including residual, recycling and food waste) generated from the residential units will be collected on a weekly basis.

Waste collection vehicles will enter the development from Calthorpe Street and collect waste containers from the waste container stores located in Block F1, F2 and F3. The waste containers located in Block E's waste container store will be collected from Phoenix Place as discussed and agreed with the LBI's Highways Department.

All residential dwellings will be located so that the occupiers will not be required to carry waste more than 30 metres in accordance with LBI's Refuse and Recycling Storage Requirements guidance.

Currently LBI offer a dry commingled collection of recyclable materials to residents in flats including aerosols, aluminium foil, cans, cardboard, cartons (food and drink), glass bottles and jars, paper, plastic bags, plastic bottles and other mixed plastics.

It is understood that LBI also offer a food waste collection service to a limited number of flats and it is envisaged that this could be offered to the C2 Site. Therefore, provision for food waste containers has been included in the residential waste container stores.

Residential Waste Container Storage Requirements – C2

The assumptions used to calculate the waste container requirements are based on information set out in the LBI's Refuse and Recycling Storage Requirements¹⁴ guidance and schedule of accommodation detailed in *12th April 2013 Appraisal Input Data Sheet Rev.xls*. Wilkinson Eyre provided further information on the core breakdowns.

¹⁴ Islington Borough Council's Refuse and Recycling Storage Requirements
[http://www.islington.gov.uk/publicrecords/library/Environmental-protection/Information/Guidance/2011-2012/\(2012-03-03\)-Refuse-and-Recycling-Storage-Guidance.pdf](http://www.islington.gov.uk/publicrecords/library/Environmental-protection/Information/Guidance/2011-2012/(2012-03-03)-Refuse-and-Recycling-Storage-Guidance.pdf)

LBI's guidance identifies external refuse and recycling capacity requirements and how they should be calculated for residential developments, which is summarised in Table 4.2.

Table 4.2 – Islington's guidance waste container provision calculation requirements

Size of residential units	Total storage capacity required for refuse and recycling (m ³)
Single room units	0.1
2 room units	0.15
3 room units	0.2
4 room units	0.25
5 room units	0.3
6 room units	0.35
Rooms are comprised of bedrooms and lounges but do not include kitchens and bathrooms.	

LBI's guidance states that at least 50% of total storage capacity must be allocated for recycling. Table 4.3 below applies these requirements and identifies the number of waste containers required for the storage of general 'mixed' waste and co-mingled recyclables (including paper, cardboard, metal tins and cans, plastic bottles and glass). These material mixes reflect the LBI's current collections services.

The potential future storage requirements for separated food waste from the residential units are also provided below in Table 4.3. This reflects LBI's separate food waste collection service. A 360ltr waste container has been provided in each waste container store for the separate storage of food waste to for this purpose.

Table 4.3 – A summary of the number waste containers required in each waste container store at Calthorpe Street C2 Site

Waste container stores	Number of 1,100ltr waste containers required for non-recycling waste	Number of 1,100ltr waste containers required for recycling	Number of 360ltr waste containers required for food waste
Block E1	4	4	1
Block F1	4	4	1

Block F2	4	4	1
Block F3	4	4	1

4.3. Retail Units Waste Storage – C2

It is envisaged that retail waste will be segregated by tenants in the commercial units. Waste generated by the retail units will be stored within the units and collected from outside the units, potentially using planned collections at agreed times.

The provision of waste and recycling storage containers within the commercial units will be dependent on the waste collection contractor's requirements. It is recommended that colour coded containers or bags are used. Islington's guidance has been used to calculate the storage requirements for the commercial units and requires approximately 5 cubic metres storage space for every 1,000m² of commercial space. LBI's guidance also states that at least 50% of total storage capacity must be allocated for recycling.

There are a number of commercial units located throughout the C2 Site ranging from 42m² to 131m² in size. Table 4.4 gives an indication of the total amount of space that may be required for commercial waste storage.

Table 4.4 - The estimated number of waste containers required for the commercial units at Calthorpe Street C2 Site.

Commercial unit location	Storage requirements per 1,000m ² of floor space (m ³)	Total GIA at C2 for commercial units (A1, A2, A3) m ²	Storage requirements (m ³)	Capacity of a 1,100ltr waste container (m ³)	Total number of 1,100ltr waste containers required
A number of small commercial units located throughout the Blocks	5	654	3.27	1.1	3

LBI's guidance also states that at least 50% of total storage capacity must be allocated for recycling. Space will be allocated in the commercial units for recycling storage. It is anticipated that all retail waste from the C2 site will be collected on a daily basis. Depending on the retail unit's requirements, it might be collected less frequently if appropriate. Given that the final occupiers have not been confirmed for the commercial units, it is unknown at this stage whether the LBI's trade waste collection service or a private waste contractor will be used to collect the waste

generated by the commercial units. However appropriate collection contractual arrangements will be put in place to ensure adequate collections are made.

4.4. Office Waste Storage – C2

The frontage of the office block is on Farringdon Road. Waste collection cannot occur on Farringdon Road because it is a red route. It is not suitable to locate a waste container store for the offices within the office block. Therefore, a secure designated waste container store for the offices will be provided on the ground level of Block F3.

It is envisaged that waste will be segregated by the tenants in the offices. Either cleaners or the building management company staff will collect the waste and recycling from the office floors and take it to the designated waste container store for the offices in Block F3. The office block and Block F3 are connected internally from the second floor upwards. The staff will transfer the separate waste streams in bags, trolleys or other containers as appropriate from the office block via the second floor using a lift to access the designated office waste container store in Block F3.

These wastes need to be kept separate from the wastes generated by the residential properties. This is due to the application of a charge for these wastes by the LBI or a private contractor.

Using the information set out in the LBI's Refuse and Recycling Storage Requirements guidance, the offices will require a waste container store for ten 1,100ltr waste containers. This is detailed in Table 4.5.

Table 4.5 – A summary of the number waste containers required in the office waste container store at Calthorpe Street C2 Site

Activity	Storage requirements per 1,000m ² of floor space (m ³)	Total GIA m ²	Storage requirements (m ³)	Capacity of a 1,100ltr waste container (m ³)	Number of 1,100ltr waste containers
Office	2.6	4,260	11	1.1	10

LBI's guidance also states that at least 50% of total storage capacity must be allocated for recycling thus 5 1,100ltr waste containers will be used to store non-recycling and 5 1,100ltr waste containers will be used to store recycling.

At this stage, the final occupiers of the offices have not been confirmed for the C2 Site. It is understood that Royal Mail may want to occupy the office building. To ensure flexibility for future potential uses, a separate waste container store will be provided solely for the office block.

5. Waste Container Store Design Requirements

LBI's Refuse and Recycling Storage Requirements guidance provides information on waste containers and dimensions. The dimensions are provided in the Table 5.1.

Table 5.1 – Waste container dimensions

Waste container size	Use	Dimensions (mm)
360ltr	Food waste	660x880x1100
1,100ltr	Recycling and general waste	1270x1000x1380

These dimensions make no allowance for moving or accessing the waste containers. British Standard 5906:2005 states that there needs to be a minimum clear space of 150mm between individual waste containers and between waste containers and surrounding walls.

The waste container stores will be a minimum of 2m high, allowing sufficient height for the waste container lids to be opened for filling. The waste container stores will be ventilated and will have a paved impervious floor. A water connection and drain for washing down purposes will be provided in each waste container store.

Separate waste storage rooms will be provided for the storage of non-recycling and recycled waste. Signage will be provided stating that the area is to be used for non-recycling or recycled waste storage.