



Kings Meadow View, Reading

Waste Strategy

On behalf of **abrdn**

Project Ref: 332110588 | Rev: Final | Date: May 2023

Registered Office: Buckingham Court Kingsmead Business Park, London Road, High Wycombe, Buckinghamshire, HP11 1JU
Office Address: 10 Queen Square, Bristol, BS1 4NT
T: +44 (0)117 332 7840 E: bristol@stantec.com

Document Control Sheet

Project Name: Kings Meadow View, Reading

Project Ref: 332110588

Report Title: Waste Strategy

Doc Ref: Final for Submission

Date: May 2023

	Name	Position	Signature	Date
Prepared by:	Josie Edwards	Assistant Environmental Consultant	<i>JE</i>	13.04.2023
Reviewed by:	Michael Robinson-Moltke	Principal Waste and Circular Economy Consultant	<i>MRM</i>	13.04.2023
Approved by:	Natalie Maletras	Director Waste and Resources	<i>NJM</i>	14.04.2023
For and on behalf of Stantec UK Limited				

Revision	Date	Description	Prepared	Reviewed	Approved
1.0	May 2023	DRAFT FOR COMMENT	JE	MRM	NM
2.0	May 2023	FINAL FOR SUBMISSION	JE	MRM	NM

This report has been prepared by Stantec UK Limited ('Stantec') on behalf of its client to whom this report is addressed ('Client') in connection with the project described in this report and takes into account the Client's particular instructions and requirements. This report was prepared in accordance with the professional services appointment under which Stantec was appointed by its Client. This report is not intended for and should not be relied on by any third party (i.e. parties other than the Client). Stantec accepts no duty or responsibility (including in negligence) to any party other than the Client and disclaims all liability of any nature whatsoever to any such party in respect of this report.

Contents

1	Introduction	6
1.1	Background	6
1.2	Purpose of the Strategy.....	6
1.3	Consultation.....	6
1.4	Report Structure	6
2	The Site and Proposed Development.....	8
2.1	Introduction	8
2.2	The Site	8
2.3	The Surrounding Area	8
2.4	Development Description	8
2.5	Programme	9
3	Policy and Legislative Background.....	10
3.1	Introduction	10
3.2	European and National Policy Guidance	10
3.3	Local Policy	12
4	Demolition, Enabling Works and Construction Phase.....	14
4.1	Introduction	14
4.2	Waste Management Principles – Demolition, Enabling Works and Construction Phase 14	
4.3	Procurement	15
4.4	Enabling works including excavation.....	15
4.5	Demolition.....	15
4.6	Construction	16
4.7	Monitoring and Reviewing	18
5	Operational Phase.....	19
5.1	Introduction	19
5.2	Targets	19
5.3	Residential Waste.....	19
5.4	Commercial Waste	23
6	Summary	25
6.2	Construction Phase	25
6.3	Operational Phase.....	25
6.4	Next Steps	26

Figures

Figure 3.1: The Waste Hierarchy, Defra 2013.....	11
--	----

Tables

Table 4.1: Estimated Waste Arisings from Construction of the Development	16
Table 4.2: Estimated breakdown of construction waste	17
Table 5.1: RBC Waste Storage Requirements.....	20
Table 5.2: RBC Waste storage requirements.....	20
Table 5.3: Commercial waste estimates across the Development	24

Appendices

Appendix A	Site Location Plan
Appendix B	RBC Consultation
Appendix C	SWMP
Appendix D	Proposed Basement Plan
Appendix E	Proposed Ground Floor Plan
Appendix F	Swept Path Analysis

This page is intentionally blank

1 Introduction

1.1 Background

1.1.1 Stantec UK Limited (Stantec) has been commissioned by abrdn ('the Applicant') to prepare a Waste Strategy in relation to an outline planning application for the redevelopment of land at Forbury Retail Park (hereafter referred to as 'the Site') for a residential-led development in Reading centre (hereafter referred to as the 'Proposed Development').

1.1.2 A Site Location Plan is provided in **Appendix A**.

1.1.3 The description of the Proposed Development is as follows:

"Outline application for comprehensive redevelopment, including demolition of existing structures, comprising a residential-led mixed use scheme of up to 820 units (Class C3) and up to 5,500 sqm (GEA) of commercial uses (Class E) together with ancillary and associated development including new and enhanced pedestrian routes and vehicle access routes, open spaces, hard and soft landscaping, basement, and basement car parking providing up to 200 car parking spaces, and up to 53 car parking spaces serving the commercial uses, up to 860 cycle parking spaces and servicing facilities, sewer diversion and associated works, with details of layout, scale, external appearance and landscaping reserved."

1.1.4 The Site is approximately 2.65 hectares in area and currently comprises of buildings and hardstanding. The current uses on the Site comprise retail stores including Home Sense, Furniture Village and the fast-food chain KFC. On the Site, there is a surface car park with 290 spaces.

1.1.5 The Proposed Development boundary is within the administrative boundary of Reading Borough Council (RBC). RBC is the Local Planning Authority and therefore has responsibility for planning policy and is also the waste collection and disposal authority.

1.2 Purpose of the Strategy

1.2.1 This Strategy examines the relevant waste policy that needs to be considered and estimates the levels of waste expected to be generated, in addition to proposing waste management strategies through the demolition, construction and operation of the Proposed Development.

1.2.2 This Strategy will demonstrate a clear understanding of the expected waste types that will arise and how they will be managed, which will help to reduce both environmental impacts and costs.

1.3 Consultation

1.3.1 Consultation and correspondence with the Waste Operations Supervisor (Environmental and Commercial Services) at RBC has been undertaken and is included within **Appendix B**. This correspondence provided specific guidance regarding waste at the Proposed Development and bin requirements.

1.4 Report Structure

1.4.1 The Strategy is set out in the following format:

- **Section 2: Site in Context** – introduces the Proposed Development context and development proposals;

- **Section 3: Policy and Legislative Background** – details the relevant legislation, policy and guidance required to be considered for both construction and operational -s;
- **Section 4: Demolition, Enabling Works and Construction Phase** – summarises the main principles associated with waste management and identifies the expected waste arisings from construction activities;
- **Section 5: Operational Phase** – identifies the expected waste arisings and servicing from the operational of the Proposed Development, and describes the on-site requirements for the storage and collection of waste from the Proposed Development during its operation; and
- **Section 6: Summary** – summaries the findings and presents the steps required to take waste management forward in the development process.

2 The Site and Proposed Development

2.1 Introduction

- 2.1.1 This section introduces the Site context including explaining the Site location, description and development proposals.

2.2 The Site

- 2.2.1 The Site of the Proposed Development is at Forbury Retail Park, Forbury Road, RG1 3JD in Reading Town Centre and located at grid reference SU720737.
- 2.2.2 A Site Location Plan is provided at **Appendix A**.
- 2.2.3 The existing Site is approximately 2.65 hectares (ha) in area and generally flat at 43.5 m above ordnance datum (AOD). The majority of the Site comprises buildings and hardstanding. Around the Site entrance and car park there are landscaped areas including semi-mature trees and mown grassland. The Site comprises 10 retail stores including Home Sense, Furniture Village and the fast-food chain KFC, as well as a telephone answering company. There are also warehouse servicing areas behind the stores, to the north of the Site. The Site includes a surface car park with 290 spaces.
- 2.2.4 The Site is allocated within the RBC Local Plan, adopted November 2019, and comprises part of the allocation under Policy CR13: Forbury Retail Park. The policy refers to a new residential community with additional retail, leisure and community uses at a scale to serve the Kenavon Drive area and is to include a new area of open space.

2.3 The Surrounding Area

- 2.3.1 To the south of the Site is Forbury Road (A329). To the east of the Site lies Kenavon Drive and the area of Forbury Retail Park which is a separate site to the Proposed Development, which includes retail stores, car parking and a fast-food drive through. Located to the south of the Site is St James Church and the former HM Prison, and further beyond this lies the medieval Abbey Ruins. To the southwest is Forbury Gardens and adjacent to the site to the west lies two office blocks. To the north lies the Great Western Railway behind, and beyond this Napier Road and Kings Meadow from which the development draws its name.
- 2.3.2 The Site is located within Reading town centre which mainly extends to the west and south of the Site and contains a range of services and facilities including supermarkets, shops, restaurants, pharmacies and gyms.

2.4 Development Description

- 2.4.1 The description of development is as follows:

“Outline application for comprehensive redevelopment, including demolition of existing structures, comprising a residential-led mixed use scheme of up to 820 units (Class C3) and up to 5,500 sqm (GEA) of commercial uses (Class E) together with ancillary and associated development including new and enhanced pedestrian routes and vehicle access routes, open spaces, hard and soft landscaping, basement, and basement car parking providing up to 200 car parking spaces, and up to 53 car parking spaces serving the commercial uses, up to 860 cycle parking spaces and servicing facilities, sewer diversion and associated works, with details of layout, scale, external appearance and landscaping reserved.”

- 2.4.2 The Proposed Development will include residential units and commercial space over 12 residential blocks, providing up to 820 units across 1 bed, 2 bed and 3 bed configurations, with up to 200 car parking spaces located in the basement, and retail space.

2.5 Programme

- 2.5.1 Demolition and construction of the Proposed Development is expected to take place over approximately seven and a half years from early-2025 to mid-2032.
- 2.5.2 It is anticipated that the enabling works will take place from approximately January 2025 to March 2025.

3 Policy and Legislative Background

3.1 Introduction

- 3.1.1 This section provides a review of the relevant waste management targets and guidance for the Proposed Development to ensure it is appropriately considered within this Strategy and going forward.

3.2 European and National Policy Guidance

- 3.2.1 **The European Revised Waste Framework Directive** (2008/98/EC) amended May 2018, sets the framework for UK Waste Policy. English and Welsh law was updated on 1 October 2020 to include changes to the Waste Framework Directive made in 2018. This was done through the Waste (Circular Economy) (Amendment) Regulations 2020¹. This therefore transposes (transfers requirements into UK law) the Waste Framework Directive into UK Legislation. The Waste Hierarchy (demonstrated in **Figure 3.1** below) runs throughout this policy and ranks waste management options according to what is best for the environment.
- 3.2.2 **The Waste (England and Wales) (Amendment) Regulations 2014** place a duty on waste producers and all handlers of waste to manage waste in accordance with a hierarchy of options where this achieves the best overall environmental outcome. Therefore, as a producer, the operator/residents of this development must endeavour to reduce, sort and separate waste – for example, by separating the recyclable from the non-recyclable waste - before placing out the residual waste for disposal (or potentially energy recovery).
- 3.2.3 These regulations also aim to improve the quality and quantity of material being collected for recycling. They do this by placing a duty on waste collectors, to enable recyclable material (particularly glass, paper, plastics and metal), to be collected separately, where it is necessary to support the recovery of high-quality recyclables, and where this is technically, environmentally or economically practicable (TEEP). Although this duty is specifically on the collectors of waste, it is important for any new development to consider the logistical impacts of separating out these materials.

¹ [Definition of waste: 2018 Waste Framework Directive amendments - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/consultations/definition-of-waste-2018-waste-framework-directive-amendments)

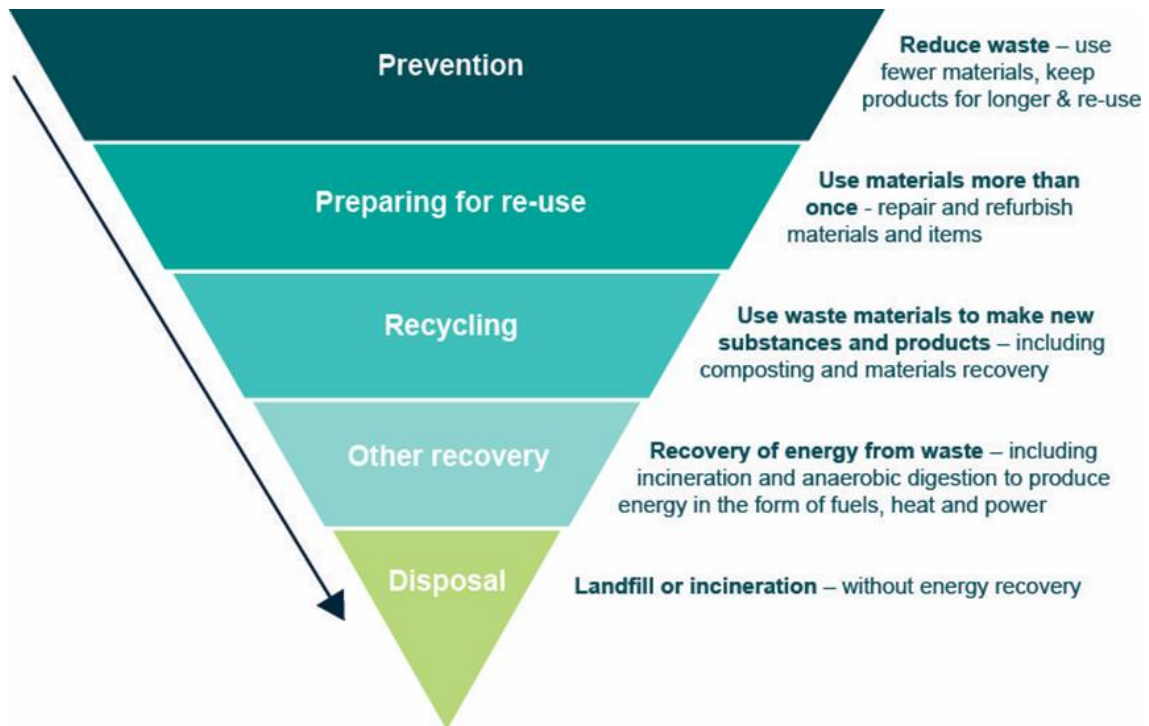


Figure 3.1: The Waste Hierarchy, Defra 2013

- 3.2.4 **Our Waste, Our Resources: A Strategy for England (2018)** assists the Government's commitment set out in the 25 Year Environment Plan, to leave the environment in a better condition for the next generation. This Strategy reaffirms the UK's commitment to the waste hierarchy and introduces the circular economy concept in relation to waste. The circular economy model encourages the recycling of resources through recovering and regenerating products and materials to keep resources in use for longer.
- 3.2.1 This Strategy highlights the Government's ambitious plans in relation to food waste. Households produce approximately 7 million tonnes of food waste annually, of which 5 million tonnes is categorised as edible. *'Reducing greenhouse gas emissions from landfill by ensuring that every householder and appropriate businesses have a weekly separate food waste collection.'*
- 3.2.2 **Waste Management Plan for England (2021)** – The Plan serves to review the Waste (England and Wales) Regulations and together with waste local plans ensures that waste management plans are in place for the whole of the UK (inclusive of plans produced by the devolved administrations).
- 3.2.3 The focus of the Plan is on the management of waste arisings within England, with targets to ensure that a minimum of 65% of municipal waste is reused or recycled by 2035. A maximum of 10% of generated municipal waste can be disposed of in landfill by 2035.
- 3.2.4 The Plan provides an update of the latest compositional analysis of household waste, commercial and industrial waste, and construction, demolition and excavation waste (CDE). This information helps to inform national, regional and local waste management needs.
- 3.2.5 There continues to be a focus on all stakeholders to recognise waste as a resource and drive towards higher levels of higher quality recycling. The national government seeks to support local authorities in this by encouraging further segregation of recyclables wherever practicable. This includes proposals for mandatory food waste collections.

3.3 Local Policy

3.3.1 The relevant local policy and guidance set by RBC includes:

RBC Local Plan (November, 2019)

3.3.2 The RBC Local Plan was adopted in November 2019. The policies of relevance to the Proposed Development related to waste include:

CC5: Waste Minimisation and Storage

3.3.3 This policy requires developers to identify measures to minimise the generation of waste and to handle waste appropriately during the lifetime of a development. It will help to achieve the aims of the Council's Waste Minimisation Strategy, as well as to comply with national policy.

3.3.4 *"Development should demonstrate measures to minimise the generation of waste in the construction, use and life of buildings and promote more sustainable approaches to waste management, including the reuse and recycling of construction waste and the promotion of layouts and designs that provide adequate, well-designed space to facilitate waste storage, reuse, recycling and composting."*

3.3.5 As identified in Policy CC5, there are two aspects to minimising the generation of waste; firstly reducing waste during construction to include re-use and recycling of construction waste, and secondly minimising the generation of waste during the use and life of buildings to include the provision of adequate facilities for waste storage.

H10: Private and Communal Outdoor Space

3.3.6 *"Dwellings will be provided with functional private or communal open space, including green space wherever possible, that allows for suitable sitting-out areas, children's play areas, home food production, green waste composting, refuse storage, general outdoor storage and drying space. Houses will be provided with private outdoor space whereas flats may be provided with communal outdoor space, balconies and/or roof gardens."*

RBC Sustainable Design and Construction Supplementary Planning Document (December, 2019)

3.3.7 The SPD, adopted December 2019, sets out the Council's commitment to producing sustainable buildings. It also interprets existing policy on topics such as climate change, energy efficiency and renewable energy.

3.3.8 The SPD contains more detail on waste minimisation measures, and this document continues to be relevant in supporting the development plan policies set out in the Local Plan (2019).

3.3.9 Measures that the Proposed Development should consider to achieve the requirements of policy CC5 could include:

- A SWMP should be developed at the pre-application stage to inform the adoption of good practice waste minimisation in design;
- Re-use and refurbish building materials where possible.
- Plans should illustrate adequate space to facilitate waste storage, re-use, recycling and composting; and
- Development proposals should align with RBC requirements for waste storage space for residential units.

- 3.3.10 This Strategy outlines how the development will minimise its waste impact from construction through to operation. **Section 4** sets out the construction waste management strategy and **Section 5** sets out the operational waste management strategy, with detail on requirements for waste storage.

RBC Waste Management Guidelines for Property Developers, Architects, Planners and Contractors (December, 2019)

- 3.3.11 This document provides architects, developers, landlords and managing agents with guidance and information about RBC's requirements for the management of waste in developments.
- 3.3.12 It encourages developers to consider waste management and minimisation at the design concept stage. This will ensure that the correct capacity and type of waste bins are located in the right place in new residential property developments, conversions of offices to flats under permitted development rights, commercial and mixed-use units in the Borough.
- 3.3.13 Guidance on waste storage and collection requirements for purpose-built blocks of flats, where residents share communal waste facilities, is provided.
- 3.3.14 These guidelines do not cover the requirements for managing construction or industrial waste.

RBC Planning Applications Validation Checklist (2016)

- 3.3.15 This outlines informational requirements for the submission of planning applications and specifies that planning applications should include:

"A plan indicating the location of bin store and details of the materials; design and type of enclosure to be used. The plan should include elevations with dimensions."

RE3 Waste Partnership Strategy (2018)

- 3.3.16 RE3 Waste Partnership was established in 1999 between Bracknell Forest Borough Council, Wokingham Borough Council and Reading Borough Council with the purpose of working together to develop long-term facilities for managing and disposing of the area's waste. The three re3 councils' area covers 33,000 hectares.
- 3.3.17 The partnership developed, built and operates the Household Waste Recycling Centre (HWRC) transfer station and Materials Recycling Facility (MRF) at Smallmead in Reading, and operating the HWRC at Longshot Lane in Bracknell.
- 3.3.18 The current objectives and plans are set out in the RE3 Joint Municipal Waste Management Strategy, which was signed in 2008. RE3 will help the three councils to meet or exceed Government targets for waste reduction and recycling.
- 3.3.19 The RE3 Waste Strategy covered the period 2018-2020 and set out the objective to 'Recycle 50% of waste by 2020'. Additionally, the partnership analyses waste data to identify where improvements are required and how to target those. The partnership is particularly focusing on reduction of single use plastics within the three boroughs.

4 Demolition, Enabling Works and Construction Phase

4.1 Introduction

- 4.1.1 During demolition, enabling works and construction, materials recovered from on-site works may be suitable for reuse on site, reducing the costs of transportation and procurement of virgin materials. This, combined with considerate design practice, will help to minimise construction waste in line with the Waste Hierarchy.
- 4.1.2 This section:
- Outlines the key principles for the management of demolition, enabling works and construction waste;
 - Gives an indicative estimate of the overall waste arising during construction;
 - Sets out proposed principles of waste management to align with the Waste Hierarchy; and
 - Outlines how this will be managed by the Developer going forward.
- 4.1.3 Further detail outlining the steps and measures taken in regard to the management of materials and waste will be provided within a Demolition Construction Environmental Management Plan (DCEMP). This will be secured by a suitably worded planning condition and will set out the environmental issues and management procedures to be adopted during the demolition and construction works on Site.
- 4.1.4 A Site Waste Management Plan (SWMP) will be produced for each Reserved Matters application. This plan will ensure that the waste management principles set out in **Section 4.2** are followed appropriately.
- 4.1.5 An outline SWMP is provided in **Appendix C** and can guide the preparation of the SWMP. This is to be taken forward by the Principal Contractor.

4.2 Waste Management Principles – Demolition, Enabling Works and Construction

- 4.2.1 This section of the Strategy introduces the principles of 'best practice' waste management. These should be applied to the Proposed Development.
- 4.2.2 Overall, the hierarchy of waste management will be adopted, in accordance with national and local policy requirements. The waste management methods in order of preference are as follows:
- **Waste Prevention** – Through good design and procurement mechanisms.
 - **Preparation for Reuse** – To provide design features to the Proposed Development to use materials in their current state and form, this can occur either on or off site.
 - **Material Recovery** – By using waste materials found on site and recycling / recovering them into an alternative form that can be used for construction purposes.
 - **Other Recovery** – Energy recovery from biodegradable or combustible materials.

- **Disposal** – The least preferred option where the waste stream would be subject to a final disposal route, such as landfill.

4.3 Procurement

- 4.3.1 For each stage of construction, the procurement and delivery of materials will be managed by a Principal Contractor, as necessary, to support material usage optimisation and minimisation of waste quantities.
- 4.3.2 Once the Principal Contractor is appointed, a Sustainable Procurement Plan could be developed. A Sustainable Procurement Plan sets out a framework for responsible sourcing of materials to guide procurement throughout a project. It is generally prepared and adopted at an organisational level by a Principal Contractor prior to construction.
- 4.3.3 The Principal Contractor will evaluate the use of materials required throughout the construction process and identify where there is the potential for returning unused materials to the supplier under a buy-back scheme, as necessary. An example of a method to reduce over-ordering is to focus on accurate ordering (accurate material requirements, realistic wastage rates).

4.4 Enabling works including excavation

- 4.4.1 Site cut and fill including site remediation and sheet piling for the creation of site levels will be conducted.
- 4.4.2 For the avoidance of doubt, 'cut' is where land is excavated and the levels reduced and 'fill' is where land is added to and the levels increased. Cut and fill balance calculations will be undertaken and will be submitted within the Reserved Matters application.
- 4.4.3 Excavated material and soil will either be reused on Site as fill or will be sent off Site and reused / managed appropriately.
- 4.4.4 Excavated material generated by the enabling works will be subject to waste regulatory controls and permits. If the soil is reused on site, the appropriate and relevant environmental permit considerations will need to be explored.
- 4.4.5 If contaminated soils are excavated, where appropriate, a solution will be sought to treat and reuse within the Site.
- 4.4.6 Levels of excavation are not considered further within this Strategy but should be recorded within the live SWMP as the Proposed Development progresses.

4.5 Demolition

- 4.5.1 Demolition of all buildings on Site will be undertaken as part of the enabling works to create a cleared development platform for the Proposed Development.
- 4.5.2 Any waste generated during demolition will be managed in line with the principles of the waste hierarchy (**Figure 3.1**) as detailed within this Strategy.
- 4.5.3 A demolition audit should be conducted at the Reserved Matters stage prior to strip-out or demolition works for the Proposed Development.
- 4.5.4 The material generated through the demolition is expected to be reused on site where possible in a number of ways, some of which are as follows:
 - Concrete – crushed on site and reused for fill, road base and construction as appropriate;

- Bricks – saved and reused in construction or recycled;
- Steel – separated and prepared on site to be sent for recycling;
- Timber and other suitable waste streams sent for energy recovery; and
- Soils – separated and stored for use as fill or in landscaping features.

4.6 Construction

- 4.6.1 By quantifying the waste predicted to be generated, it is possible to assess quantities of waste that can potentially be reused and recycled, and benchmarks set to reduce or eliminate volumes of waste entering landfill.
- 4.6.2 Up to 820 units (Class C3) and commercial floorspace (Class E) are expected to be constructed as part of the Proposed Development.
- 4.6.3 However, due to the outline nature of the application, at this stage it is only possible to provide high-level estimates of the expected volumes of construction waste arising through the construction process, as shown in **Table 4.1**.
- 4.6.4 The estimated waste arising from the construction of buildings at the Proposed Development has been calculated using established national SmartWaste benchmarks based on the Building Research Establishment's (BRE) Smart Waste Benchmark Data (BRE, 2017)².
- 4.6.5 For the purpose of this Strategy, the anticipated maximum floorspace for each use (Gross Internal Area (GIA)) has been used throughout. These are illustrative numbers and are subject to change at the Reserved Matters stage.

Table 4.1: Estimated Waste Arisings from Construction of the Development

Development Type	Total Area (GIA m ²)	Estimated Waste Volume (t)*
Residential	71,375	10,920
Commercial	4,343	912

**differences occur due to rounding and excludes waste arisings related to earthworks and strategic infrastructure.*

- 4.6.6 Waste from the construction of the Proposed Development is estimated to be a total of approximately 11,832 tonnes.
- 4.6.7 Construction is anticipated to be conducted over an eight year period, resulting in per annum construction waste of approximately 1,479 tonnes.
- 4.6.8 An estimated breakdown of construction waste types based on the residential composition and non-residential composition are shown in **Table 4.2**.

²SMARTWaste BRE Benchmark Data – Issued October 2017

Table 4.2: Estimated breakdown of construction waste

Material / Development	Volume (t)*		
	Residential	Commercial Other	Total
Bricks	851	9	860
Tiles and Ceramics	60	0	60
Concrete	1,204	296	1,499
Inert	3,265	346	3,612
Insulation Materials	51	0	51
Metals	150	11	161
Packaging Materials	295	8	303
Plasterboard / Gypsum	347	7	355
Binders	13	0	13
Plastic (excluding packaging waste)	203	8	211
Timber	931	40	970
Floorcoverings (soft)	6	0	6
Electrical and Electronic Equipment	4	0	4
Furniture	1	0	1
Canteen / Office / Adhoc Waste	94	6	100
Liquids	6	0	6
Oils	1	0	1
Bituminous Mixtures	66	21	88
Hazardous Waste	74	0	74

	Volume (t)*		
Material / Development	Residential	Commercial Other	Total
Other Waste	285	29	314
Mixed Construction and / or Demolition Waste	3,013	131	3,145
TOTAL	10,920	912	11,832

**The estimated waste arising from the construction of buildings at the Proposed Development has been calculated using established national SmartWaste benchmarks based on the Building Research Establishment's (BRE) Smart Waste Benchmark Data (BRE, 2017) .*

- 4.6.9 The waste estimates presented in this section do not account for measures that should be incorporated to reduce waste produced during construction, for example through design and procurement. Waste management principles to reduce and manage waste arisings are proposed in **Section 4.2**.
- 4.6.10 An amount (74t) of hazardous waste material is predicted during construction works. This estimate comes from a standard assumed construction waste composition. It would likely to arise from 'generic' building materials (adhesives etc) that may be classed as hazardous waste. A specific Hazardous Waste Management Plan (HMWP) should be developed by the Principal Contractor/s to ensure this is minimised wherever possible and to ensure it is dealt with in accordance with relevant policy and guidance.

4.7 Monitoring and Reviewing

- 4.7.1 Waste arisings should be monitored and reviewed by the Developer through the mechanisms of the SWMP. The volume/tonnage of waste generated (or sent off site) as well as the percentage or volume/tonnage reused, recycled or disposed will be recorded throughout the construction of the Proposed Development.
- 4.7.2 The Developer and the Principal Contractor are responsible for ensuring that each SWMP produced is reviewed and updated accordingly at regular intervals, and as necessary throughout the construction. The Principal Contractor will provide a monthly report to the Developer (as applicable) on the progress of the Waste Management Strategy.
- 4.7.3 The SWMP is a live document and should properly record all waste arising from the Site and will be a key tool in being able to evidence the sustainable waste management of the Site.

5 Operational Phase

5.1 Introduction

- 5.1.1 This section sets out the estimated waste arisings and storage requirements for the operation of the Proposed Development.
- 5.1.2 The operation of the Proposed Development will result in waste arisings. A considered approach to the operation and servicing of waste will be crucial for effective and efficient design and operation.
- 5.1.3 At this point, with no information on the end users of the commercial elements of the Site, it is not possible to identify the specific composition and quantities of commercial waste likely to be generated. All waste producers will however, through Duty of Care regulations be expected to adhere to the principles of the Waste Hierarchy, ensuring waste minimisation prior to reuse, recycling and recovery.

5.2 Targets

- 5.2.1 The Development should aim to remain in general conformity to support the delivery of local targets. Specifically, these include;
- The RE3 Waste Strategy covered the period 2018-2020 and set out the objective to 'Recycle 50% of waste by 2020'.

5.3 Residential Waste

- 5.3.1 This section details waste management storage and collection requirements that are required for residential waste. This is based on RBC Local Planning Policy Guidance (Waste Management Guidelines) and confirmed through consultation.
- 5.3.2 Consultation and correspondence with the Waste Operations Supervisor (Environmental and Commercial Services) at RBC has been undertaken and is included within **Appendix B**. This correspondence provided specific guidance regarding waste at the Proposed Development and bin requirements. The requirements listed in this consultation are covered within this Waste Strategy and are listed in **Appendix B**.
- 5.3.3 Residential waste covers any potential domestic units on the Site. Engagement with RBC will continue as the design progresses.

Estimated Residential Waste Arisings

- 5.3.4 Estimated volumes of waste generated from the residential elements of the Proposed Development have been considered in the context of RBC.
- 5.3.5 The average household in the RBC area currently produces approximately 0.78 tonnes of waste (including recycling) per year and recycling rates for household waste within RBC are currently ~36.1%³.
- 5.3.6 The Proposed Development will introduce an estimated (up to) 820 additional residential units. This will generate an additional estimated 646 tonnes of residential waste per annum.

³ ENV18 - Local authority collected waste: annual results tables. Available online: <https://www.gov.uk/government/statistical-data-sets/env18-local-authority-collected-waste-annual-results-tables#history>

5.3.7 This represents an estimated overall increase of 1.1% of household waste collected by RBC.

Residential Waste Storage

5.3.8 The waste storage space for residential units will be developed once the project reaches Reserved Matters. This will meet RBC requirements for residential waste highlighted in **Section 3.4**.

5.3.9 All waste produced from the residential properties will be stored separately from any of the commercial element. This can be covered by a planning condition on any planning permission requiring details to be submitted via reserved matter applications for each development parcel.

5.3.10 **Table 5.1** shows the waste streams collected by RBC, the containers provided for disposal and the items that can be disposed of in each bin.

Table 5.1: RBC Waste Storage Requirements

Waste Stream	Items for disposal
General Waste (Refuse)	Non-recyclable plastics, polystyrene, nappies and sanitary waste
Recycling	Paper & Card, Junk mail & flyers, plastic bottles (drinks, toiletries, bleach & detergents – no lids), empty drinks and food cans, empty aerosols, clear plastic food trays, ice cream and margarine tubs, yoghurt, cream, soup and snack pots, cosmetic pots and tubs (no lids), foil trays and clean foil and cartons (no lids)
Food Waste	All forms of cooked and uncooked food including fruit and vegetables, meat and fish, rice, pasta, bread, dairy, eggs and egg shells, plate and bowl scrapings and tea and coffee bags and grounds. Used cooking oil in a sealed plastic bottle can be placed inside the food waste bin.

5.3.11 Residential waste capacity requirements have been determined following the guidance issued by RBC during consultation, and according to the RBC Waste Management Guidelines.

5.3.12 The Proposed Basement Plan in **Appendix D** identifies the location of stores, labelled as 'Refuse Store' within the key.

5.3.13 The number of bins required for each bin store relates to the number of units which it serves. **Table 5.2** illustrates the required bin numbers for the communal bin stores. This has been based on a three times weekly collection regime.

Table 5.2: RBC Waste storage requirements

Block	Units	RBC Standard Requirements		
		Refuse (1100L)	Co-mingled Recycling (1100L)	Food Waste (240L)
		Based on a three times weekly collection regime		
Centre Block 1	60	2	2	1

Block	Units	RBC Standard Requirements		
		Refuse (1100L)	Co-mingled Recycling (1100L)	Food Waste (240L)
		Based on a three times weekly collection regime		
Centre Block 2	59	2	2	1
Centre Block 3	91	2	3	2
Centre Block 4	99	3	3	2
East Block 1	83	2	2	2
East Block 2	63	2	2	1
East Block 3	59	2	2	1
East Block 4	79	2	2	1
West Block 1	56	2	2	1
West Block 2	56	2	2	1
West Block 3	43	1	2	1
West Block 4	38	1	1	1

Internal Storage Capacity

- 5.3.14 As per the RBC Waste Management Guidelines, the need for internal storage is to enable and encourage occupants of new residential units to recycle their waste.
- 5.3.15 Recycling should be encouraged through the provision of internal storage areas that should be designed into each unit of new developments. This will enable occupants to segregate their waste into recycling and general waste before it is transferred to external bins and would contribute towards maximising recycling rates.
- 5.3.16 The size of the units will be sufficient to store a volume of waste that supports the Council's collection system (paper and cardboard, glass, packaging waste such as plastic bottles, pots, trays and tubs, cans, Tetra Pak type-cartons, general waste and food waste).

External Storage Capacity

- 5.3.17 The communal bin stores servicing the residential units within the Proposed Development will be designed to provide sufficient space in accordance with the guidance highlighted in **Section 3.4**.
- 5.3.18 The Proposed Basement Plan in **Appendix D** identifies the location of bin stores, labelled as 'Refuse Store' within the key.

- 5.3.19 All storage receptacles and bins will be labelled clearly and conspicuous to provide information to users about which receptacle to correctly use (all signage must be approved by the council).
- 5.3.20 Bin store areas will comply with the following:
- All bins must be fully accessible from the front face, to allow for easy depositing of waste.
 - Layouts that require bins to be swapped round mid-week are permissible if it is demonstrated that there will be on-site management presence at the development.
 - There must be a minimum of 150mm clearance around and between each bin within a storage area.
 - Where there is more than one bin within a storage area, there must be 2m clearance in front of each bin to enable it to be accessed and safely moved without needing to move any of the other containers.
 - All doors and alleys must be at least 2m wide to allow for safe manoeuvring of bins.
 - The minimum internal height for a bin storage area and any access doorways is 2m.
 - To allow the lids to be opened fully, there should be no other internal fixtures or fittings that reduce the clearance above the bins.
 - The space in the collection area must be sufficient to enable operatives to return emptied bins to a position that does not obstruct the manoeuvring of those containers that are yet to be emptied.
- 5.3.21 RBC Guidance states that residents should not be required to walk further than 30m from their front door (excluding vertical distances) when carrying refuse and recycling. Several bin store areas will be provided across the Proposed Development to ensure an adequate distribution across the Site. The internal floor and unit layouts will be confirmed during Reserved Matters and will seek to be within the 30m distance where possible.

Collection & Servicing – Residential Waste

- 5.3.22 During the operation of the Proposed Development, the residential waste and recycling will be collected by RBC. Residential collections are expected to be three times weekly.
- 5.3.23 Building managing agents will make arrangements for the bins to be presented at a designated collection point and returned to the bin store area after collection. The refuse presentation area is located in the north-west of the Site, as shown on the Proposed Ground Floor Plan in **Appendix E**. This refuse presentation area has capacity for up to 70 bins at one time. Building managing agents will coordinate the movement of bins from their individual bin store up to the Ground Floor refuse presentation area using the goods lifts, as labelled in **Appendix E**.
- 5.3.24 RBC will then collect the bins from this refuse presentation area. The maximum drag distances that operatives should be required to wheel containers, measured from the furthest point within the bin store area to the loading position at the back of the vehicle are:
- 15m for any 2 wheeled containers up to 240-litres; and
 - 10m for any 4 wheeled containers.
- 5.3.25 The drag distances will be considered as part of the Reserved Matters design stage.

- 5.3.26 Access for refuse collection vehicles (RCV) will also be considered as part of the design of the streets and the layout of the buildings, and the dimensions and turning capabilities of collection vehicles will also be considered when designing junctions. This will be in line with the local requirements and is currently illustrated through the swept path analysis provided at **Appendix F**.

Bulky Waste

- 5.3.27 Bulky waste includes large items that cannot fit into a standard bin and must be collected separately. These include things like sofas, fridge/freezers, bicycles and garden furniture.
- 5.3.28 RBC currently provide a free bulky waste collection service as well as a paid collection service.
- 5.3.29 There are two services:
- Free collection service - one collection per property in a 6 month period with up to 3 items or one fridge/freezer.
 - Paid collection service - as many collections as required, for up to 5 items.
- 5.3.30 As per guidance issued by RBC during consultation, it is recommended that residents do not place the bulky items in front of the bins within bin stores, as this can affect the collections.
- 5.3.31 At this outline design stage, residential blocks have not identified specific provision for bulky waste stores. However, the design has not prevented them from being included at the Reserved Matters stage as required.
- 5.3.32 The design and location of the bulky waste storage room(s), if taken forward, will therefore be developed at Reserved Matters and following appropriate guidance and consultation with RBC.

5.4 Commercial Waste

Estimated Waste Arisings

- 5.4.1 For the purpose of this Waste Strategy, the anticipated maximum floorspace for each use (GIA) has been used throughout.
- 5.4.2 The total Commercial floorspace is assumed to be up to 4,343m² GIA based upon the maximum GEA floorspace and will include a mixture of commercial uses (Class E).
- 5.4.3 There are no specific local policies that provide guidance on commercial waste storage and logistics. Therefore, the ADEPT guidance⁴ is used in order to inform the calculations, assuming the following:
- Commercial Retail – 5L per 1 m²
- 5.4.4 For the commercial space, waste volumes have been estimated so that going forward appropriate waste storage areas can be integrated into the design. The amount of storage space required for waste can vary due to the difference in waste output of retail units. This depends on factors such as location (i.e. proximity to a larger unit for the same retailer brand), market niche, products sold and their policies relating to minimising use of packaging material.

⁴ Association of Directors of Environment, Economy, Planning and Transport – Making Space for Waste 2010

- 5.4.5 Therefore, as design progresses the specific requirements for commercial waste bin provision will ultimately be agreed within the contracts for commercial waste collections and be dependent on the nature of the commercial tenants and the agreed collection frequency.
- 5.4.6 The estimated capacities are set out in **Table 5.3** as rounded figures for commercial floor space. The Reserved Matters application will review the collection frequency and storage required for the occupier, and therefore the totals provided below are subject to change.

Table 5.3: Commercial waste estimates across the Development

Use	Assumed Commercial Floorspace (GIA m ²)	Total Waste Storage Capacity Required (litres – based on one weekly collection)	No. of 1100L bins required based on one collections per week
Commercial Retail	4,343	21,715	20

- 5.4.7 Waste storage space for the commercial uses on Site will be provided as a separate commercial bin store or will be allocated as shell and core (where commercial uses do not have an allocated bin store, they will store their waste streams within their allocated units). As such the tenants on occupation will be responsible for planning and managing their waste outputs and will be expected to work towards maximising levels of recycling and adhering to the principles of the waste hierarchy.
- 5.4.8 Collection frequencies for commercial waste will be dependent on the space available, the amount of waste being generated, and the contractual arrangements in place. In order to ensure sufficient space, and to give flexibility moving forwards the estimations within **Table 5.3** are based on the provision of one collection per week.
- 5.4.9 Waste and recycling containers within the commercial spaces will be housed securely prior to and after collections have been completed.

Collection and Post-Collection Waste Management

- 5.4.10 Businesses have a duty of care to ensure that their waste is collected and disposed of appropriately and an obligation (through the Waste Regulations as amended 2014) to adhere to the principles of the Waste Hierarchy.
- 5.4.11 Non-residential waste is likely to be collected by private contractors working in the area. Waste generated by the commercial and community tenants will be contracted to commercial operators, ensuring that all permits and licenses are correct for the waste being taken. RBC also offers a commercial waste collection service and will provide a quotation as required.
- 5.4.12 None of the proposed users are anticipated to be major generators of waste and the wastes generated should not significantly affect the capacity of local waste infrastructure.
- 5.4.13 The Proposed Development will provide sufficient storage for both recycling and residual waste and safe access for Refuse Collection Vehicles to enable efficient waste management servicing.

6 Summary

- 6.1.1 The Proposed Development will follow the principles of the Waste Hierarchy – ‘eliminate, reduce, reuse, recycle, other recovery and disposal’ - to allow the environmental, social and economic risks from waste to be minimised and national and local policy aspirations to be supported.

6.2 Construction

- 6.2.1 Due to the outline nature of the application, at this stage it is only possible to provide high-level estimates of the expected volumes of construction waste arising through the construction process.
- 6.2.2 Waste from the construction of the Proposed Development is estimated to be a total of approximately 11,832 tonnes. Construction is anticipated to be conducted over an eight year period, resulting in per annum construction waste of approximately 1,479 tonnes. However, this quantity will be confirmed within the SWMP, once a Principal Contractor has been appointed and phasing is confirmed.
- 6.2.3 Excavated material and soil will either be reused on Site as fill or will be sent off Site and reused / managed appropriately. Excavated material generated by the enabling works will be subject to waste regulatory controls and permits. If the soil is reused on site, the appropriate and relevant environmental permit considerations will need to be explored.

6.3 Operation

Residential

- 6.3.1 The average household in the RBC area currently produces approximately 0.78 tonnes of waste (including recycling) per year and recycling rates for household waste within RBC are currently ~36.1%⁵. The Proposed Development will introduce an estimated (up to) 820 additional residential units. This will generate an additional estimated 646 tonnes of household waste per annum. This represents an estimated overall increase of 1.1% of household waste collected by RBC.
- 6.3.2 Household waste storage space for the Proposed Development will be developed at the Reserved Matters stage and following consultation with RBC.
- 6.3.3 All waste produced from the residential properties will be stored separately from any of the commercial element.
- 6.3.4 The refuse presentation area is located in the north-west of the Site, as shown on the Proposed Ground Floor Plan in **Appendix E**. Building managing agents will coordinate the movement of bins from their individual basement bin store up to the Ground Floor refuse presentation area using the goods lifts.

Commercial

- 6.3.5 Whilst the use end uses of commercial elements on Site are not yet known in detail, initial calculations suggest for the provision of capacity to accommodate up to 20 x 1,100 litre bins across the Proposed Development.

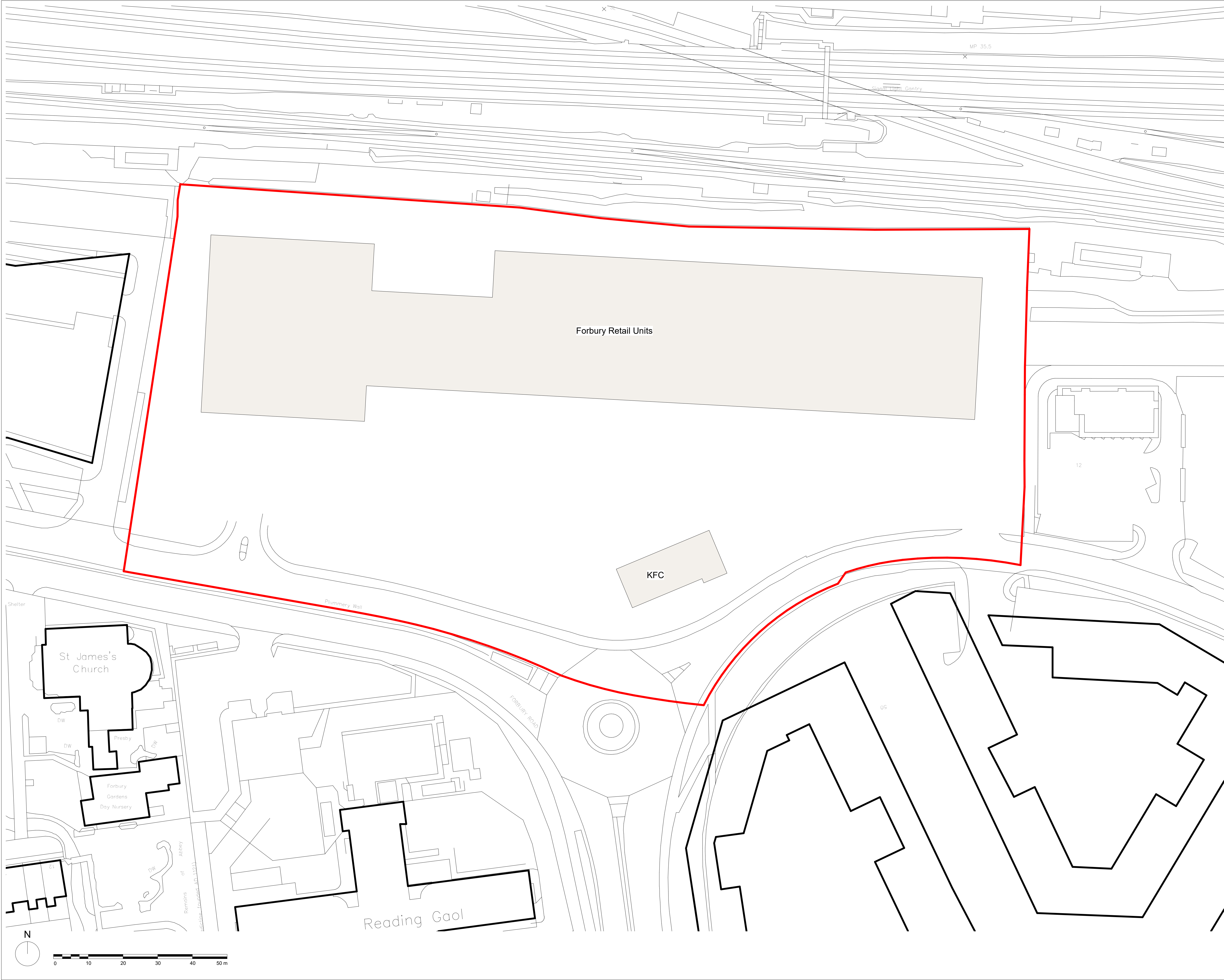
⁵ ENV18 - Local authority collected waste: annual results tables. Available online: <https://www.gov.uk/government/statistical-data-sets/env18-local-authority-collected-waste-annual-results-tables#history>

- 6.3.6 All waste will be stored in an enclosed area with sufficient space to allow for appropriate separation of waste in to different waste streams to maximise recycling levels.
- 6.3.7 The details of collection and servicing arrangements for the commercial waste generated across the Proposed Development will continue to be developed at the Reserved Matters stage and will be confirmed through consultation with RBC.

6.4 Next Steps

- 6.4.1 A Site Waste Management Plan (SWMP) will be produced for the Proposed Development. This plan will support that the waste management principles set out in **Section 4.2** are followed appropriately.
- 6.4.2 An outline SWMP is provided in **Appendix C** and can guide the preparation of the SWMP. This is to be taken forward by the Principal Contractor.
- 6.4.3 Consultation and correspondence with the Waste Operations Supervisor (Environmental and Commercial Services) at RBC has been undertaken and is included within **Appendix B**. Continued engagement and consultation with RBC will continue as the design of the operational waste element develops.

Appendix A Site Location Plan



Do not scale from this drawing. All dimensions to be checked on site. All omissions and discrepancies to be reported to the Architect immediately

This work is copyright and shall not be reproduced or used for any other purpose without the written permission of Squire and Partners.

Key

— Extent of Application Site

Description	Date	Chk	Rev
SQUIRE & PARTNERS			
Squire and Partners LLP The Department Store 248 Ferndale Road, London SW9 8FR T: 020 7278 5555			
info@squireandpartners.com www.squireandpartners.com			
Project			
Kings Meadow View			
Title			
Parameter Plan 01 Site Location			
Status			
S2 - Issued for Information			
Drawn	Date	Scale @ ISO A1	Job Number
SQP	17/05/23	1:500	18111
Drawing Number		Revision	
18111-SQP-ZZ-GF-DR-A-PL00001			

Appendix B RBC Consultation

Harris, Scott

To: Harris
Subject: RE: Waste Management Guidelines - Kings Meadow View

From: Waste Services [REDACTED]
Sent: 11 April 2023 10:19
To: Edwards, Josie [REDACTED]
Cc: Robinson-Moltke, Michael [REDACTED]
Subject: RE: Waste Management Guidelines - Kings Meadow View

Hi Josie,

Thank you for your email.

The figures below are based on a fortnightly collection , weekly in red.
There are no guidelines currently regarding bulky waste but I would recommend ensuring that residents do not place the bulky items in front of the bins, as this can affect the collections . Also if it's an underground car park please consider the height restrictions as they items are collected in a Luton vehicle. If the items are place in an area that involves the team walking to collect, I would advise no more than 10m.

Kind regards

Jonnelle Phoenix-Roach
Waste Operations Supervisor
Environmental and Commercial Services | Economic Growth and Neighbourhoods Directorate

Reading Borough Council
19 Bennet Road
Reading, RG2 0QX

[REDACTED]

[Website](#) | [Facebook](#) | [Twitter](#) | [YouTube](#) | [Instagram](#) | [LinkedIn](#)



From: Edwards, Josie [REDACTED]
Sent: 28 March 2023 09:44
To: Waste Services [REDACTED]
Cc: Robinson-Moltke, Michael [REDACTED]
Subject: Waste Management Guidelines - Kings Meadow View

***** *WARNING - this is an External Email *****

STOP, THINK, before you CLICK links or OPEN attachments or REPLY.

Hi Jonnelle,

A colleague forwarded your details as the correct person to consult with.

I'm drafting the Operational Waste Strategy report for the Proposed Development at Kings Meadow View (Forbury Retail Park).

Grateful if you would be able to populate the below table with the required bin numbers for each waste stream. We will then feedback to the architect to seek the space is provided in line with the RBC guidance. Please note this application is outline and unit numbers below are indicative. The bin stores will be subject to further design development and submission of further detailed applications.

I understand that the current residential collection frequency from here is twice weekly, given the space restrictions it is hoped that this arrangement can be carried over to the new development, please do let us know if that is not the case.

Total Residential Units		General Waste Bin 1,100 L	Recycling Bin 1,100 L	Food Waste 240L
Centre Block 1	60	7/ 4	9	5
Centre Block 2	59	7/4	9	5
Centre Block 3	91	11/5	13	8
Centre Block 4	99	13/7	15	9
East Block 1	83	10/5	12	7
East Block 2	63	8/4	10	6
East Block 3	59	7/4	9	2
East Block 4	79	10/5	12	2
West Block 1	56	7/4	9	5
West Block 2	56	7/4	9	5
West Block 3	43	5/3	7	4
West Block 4	38	4/2	6	3

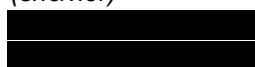
Also, are there any considerations currently in place that must be made for bulky waste, such as furniture and white goods, from flats in new buildings?

Thank you in advance.

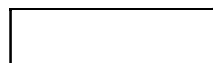
Kind regards,

Josie Edwards

Assistant Environmental Consultant
(she/her)



Caversham Bridge House, Waterman Place, Reading, UK, RG1 8DN



 Proud to support Pride@Stantec



The content of this email is the confidential property of Stantec and should not be copied, modified, retransmitted, or used for any purpose except with Stantec's written authorization. If you are not the intended recipient, please delete all copies and notify us immediately.

Please consider the environment before printing this email.

Disclaimer: The content of this email is the confidential property of Stantec and should not be copied, modified, retransmitted, or used for any purpose except with Stantec's written authorization. If you are not the intended recipient, please delete all copies and notify us immediately. This communication may come from a variety of legal entities within or associated with the Stantec group. For a full list of details for these entities please see our website at

Appendix C SWMP



Kings Meadow View, Reading

Outline (pre-construction) Site Waste Management Plan

On behalf of **abrdn**

Project Ref: 332110588 | Rev: Final | Date: May 2023

Registered Office: Buckingham Court Kingsmead Business Park, London Road, High Wycombe, Buckinghamshire, HP11 1JU
Office Address: 10 Queen Square, Bristol, BS1 4NT
T: +44 (0)117 332 7840 E: bristol@stantec.com

Document Control Sheet

Project Name: Kings Meadow View, Reading

Project Ref: 332110588

Report Title: Outline (pre-construction) Site Waste Management Plan

Doc Ref: Final for Submission

Date: May 2023

	Name	Position	Signature	Date
Prepared by:	Josie Edwards	Assistant Environmental Consultant	JE	13.04.2023
	Michael Robinson-Moltke	Principal Waste and Circular Economy Consultant	MRM	
Reviewed and approved by:	Natalie Malettras	Director Waste and Resources	NJM	14.04.2023
For and on behalf of Stantec UK Limited				

Revision	Date	Description	Prepared	Reviewed	Approved
V1	May 2023	Draft for Comment	JE	MRM	NM
V2	May 2023	Final for Submission	JE	MRM	NM

This report has been prepared by Stantec UK Limited ('Stantec') on behalf of its client to whom this report is addressed ('Client') in connection with the project described in this report and takes into account the Client's particular instructions and requirements. This report was prepared in accordance with the professional services appointment under which Stantec was appointed by its Client. This report is not intended for and should not be relied on by any third party (i.e. parties other than the Client). Stantec accepts no duty or responsibility (including in negligence) to any party other than the Client and disclaims all liability of any nature whatsoever to any such party in respect of this report.

Contents

1	Introduction	1
1.1	Background	1
1.2	Purpose of the Site Waste Management Plan	1
2	Site Waste Management Plan Process	3
2.1	Site Waste Management Plan Stages.....	3
3	Construction Waste	4
3.1	Introduction	4
3.3	Waste Arisings & Management	5
4	Roles and Responsibility	7
4.1	Introduction	7
4.2	Roles and Responsibilities	7
5	Monitoring and Reviewing	9
5.1	Monitoring	9
5.2	Reviewing	9

Appendices

Appendix A Example Monitoring Templates

This page is intentionally blank

1 Introduction

1.1 Background

- 1.1.1 Stantec UK Limited (Stantec) have been commissioned by abrdn ('the Applicant') to prepare a to prepare an Outline (pre-construction) Site Waste Management Plan (SWMP) in relation to an outline planning application for the redevelopment of land at Forbury Retail Park (hereafter referred to as 'the Site') for a residential-led development in Reading (hereafter referred to as the 'Proposed Development').
- 1.1.2 This Outline SWMP is appended to the Waste Strategy (Stantec, 2023) for the Proposed Development and as such should be read in conjunction.
- 1.1.3 The legal requirement to prepare a SWMP was removed in 2013. However, preparation of a SWMP is still considered best practice and ensures building materials are managed efficiently; waste is disposed of legally, fly tipping is reduced, and materials reuse, recovery, and recycling is maximised.
- 1.1.4 In the majority of cases, construction, excavation, and demolition (CE&D) waste is recycled and reused on the site of origin, and it is now common for well managed development sites to achieve on site recycling and reuse rates of over 90%.
- 1.1.5 Construction waste can account for up to 5% of a project's value. It is therefore financially prudent to reduce the volume of waste being generated on development projects.
- 1.1.6 The Developer, design team, and Principal Contractor will take responsibility for taking this Outline SWMP and moving it into a 'live document'. They will make sure it is updated and monitored as required throughout the construction of the Proposed Development.
- 1.1.7 The SWMP will help resource efficiency principles to be incorporated where consideration is given to designing out waste, reduce waste generated on-site as well as reuse, recycling, and recovery of CE&D waste.

1.2 Purpose of the Site Waste Management Plan

- 1.2.1 The purpose of this Outline SWMP is to assist in ensuring that:
- The Proposed Development is compliant with all planning and waste management policy requirements relating to waste;
 - Opportunities for designing out waste are considered;
 - Construction, excavation and demolition materials are managed efficiently;
 - Waste generated is disposed of legally and fly tipping is reduced;
 - Materials reduction, reuse, recycling and recovery is maximised; and
 - The Developers' objectives relating to waste are met.
- 1.2.2 Matters relating to operational waste and waste servicing are not considered within the scope of this document and are instead considered within the Waste Strategy.
- 1.2.3 The SWMP will be structured to set out the following:
- The SWMP Process;

- The role and responsibilities of parties which will be involved in the waste management of the Proposed Development;
 - A strategy for the management of waste associated with excavation, demolition and construction of the Proposed Development including:
 - steps taken to minimise use of materials and adopt resource efficient practices;
 - steps that have been taken in the design of the development in order to minimise waste; and
 - measures for how waste can be monitored during excavation, demolition and construction.
- 1.2.4 Waste management principles for the construction phase are set out in the Waste Strategy and would be elaborated in the SWMP.
- 1.2.5 The remainder of this Outline SWMP sets out the process going forward for the construction waste management process, the roles and responsibilities within this process, and how this would be monitored and reviewed going forward.

2 Site Waste Management Plan Process

2.1 Site Waste Management Plan Stages

- 2.1.1 The construction waste management process can be split into three management stages as follows:
- Stage One: Pre-construction;
 - Stage Two: Construction Phase; and
 - Stage Three: Post-Construction Review.
- 2.1.2 Stage One ensures that early consideration is given to the waste management implications and requirements of the Proposed Development. It may also assist in identifying opportunities to further reduce waste through project design ahead of the construction phase. This document provides the Stage One, Outline SWMP for the Proposed Development.
- 2.1.3 During Stage Two, a construction phase SWMP can be further developed as specific details become available, such as any requirements from the contractor in relation to waste, identification of specific building materials to be used and establishment of the construction programme. The principles set out in this pre-construction SWMP will be useful for informing the construction phase SWMP which will be managed and updated as necessary throughout the construction process.
- 2.1.4 Post-construction, at Stage Three, there will be a review exercise to acknowledge adherence, or otherwise, to the principles and strategy as set out in the SWMP.
- 2.1.5 The process detailed herein follows the requirements as were set out in the now revoked regulations; this is however still recommended as best practice to developing a SWMP and therefore will be used for the management of waste associated with the construction of the Proposed Development.

3 Construction Waste

3.1 Introduction

- 3.1.1 During construction, materials recovered from on-site works may be suitable for reuse on site, reducing the costs of transportation and procurement of virgin materials.
- 3.1.2 This, combined with considerate design practice, will help to minimise construction waste in line with the Waste Hierarchy.

3.2 Waste Management Principles

- 3.2.1 This section introduces the principles of 'best practice' waste management. These should be applied to the Proposed Development.
- 3.2.2 Construction waste can account for up to 5% of a project's value. It is therefore financially prudent to reduce the volume of waste being generated on development projects.
- 3.2.3 Overall, the hierarchy of waste management (shown below in **Figure 3.1**) will be adopted, in accordance with national and local policy requirements.
- 3.2.4 The waste management methods in order of preference are as follows:
- **Waste Prevention** – Through good design and procurement mechanisms.
 - **Preparation for Reuse** – To provide design features to the Proposed Development to use materials in their current state and form, this can occur either on or off site.
 - **Material Recovery** – By using waste materials found on site and recycling / recovering them into an alternative form that can be used for construction purposes.
 - **Other Recovery** – Energy recovery from biodegradable or combustible materials.
 - **Disposal** – The least preferred option where the waste stream would be subject to a final disposal route, such as landfill.

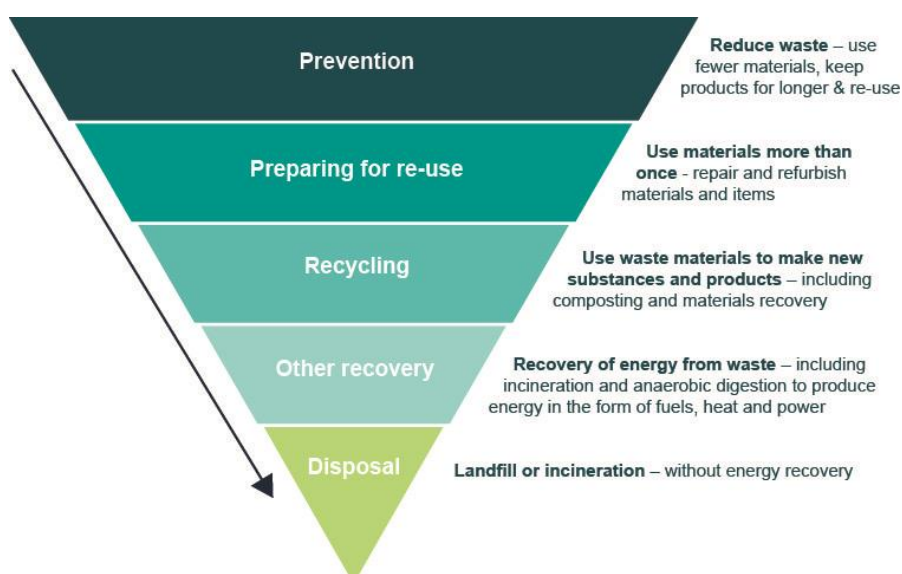


Figure 3.1: The Waste Hierarchy, Defra 2011

3.3 Waste Arisings & Management

- 3.3.1 Consideration should be given throughout the design process to the specification of suitable materials, including their sustainability and environmental implications, to support an environmentally sensitive and high-quality development.
- 3.3.2 By quantifying the waste predicted to be generated, it is possible to assess quantities of waste that can be reused and recycled, and benchmarks set to reduce or eliminate volumes of waste entering landfill.
- 3.3.3 At this stage it is only possible to provide high-level estimates of the expected volumes of construction waste arising through the construction process.
- 3.3.4 The estimated waste arising from the construction of buildings at Proposed Development has been calculated using established national SmartWaste benchmarks based on the Building Research Establishment's (BRE) Smart Waste Benchmark Data (BRE, 2017)¹.
- 3.3.5 Waste from the construction of the Proposed Development is estimated to be a total of approximately **11,832 tonnes**. However, this quantity will be confirmed within the SWMP, once a Principal Contractor has been appointed and detailed designs have been finalised.
- 3.3.6 Construction is anticipated to be conducted over an eight year period, resulting in per annum construction waste of approximately **1,479 tonnes**.
- 3.3.7 A detailed estimated breakdown of construction waste types based on the residential and non-residential composition is shown in **Table 4.2** within the Waste Strategy (Stantec, 2023).
- 3.3.8 The possible composition of construction waste types is listed below:
- Bricks
 - Tiles and Ceramics
 - Concrete
 - Insulation Materials
 - Metals
 - Packaging Materials
 - Plasterboard / Gypsum
 - Binders
 - Plastic (excluding packaging waste)
 - Timber
 - Floorcoverings (soft)
 - Electrical and Electronic Equipment
 - Furniture

¹ SMARTWaste BRE Benchmark Data – Issued October 2017

- Canteen / Office / Adhoc Waste
 - Liquids
 - Oils
 - Bituminous Mixtures
 - Hazardous Waste
 - Other Waste
 - Mixed Construction and / or Demolition Waste
- 3.3.9 The waste estimations presented in this section do not account for measures that should be incorporated to reduce waste produced during construction, for example through design and procurement.
- 3.3.10 Detailed assessments of waste arisings for the construction stage will be undertaken within a separate detailed SWMP, when more details are known on the construction process for each phase prior to works commencing on Site.
- 3.3.11 The SWMP should include a plan of the Site under construction, detailing all material storage areas and related infrastructure. This will identify any stockpiled materials put aside, therefore maximising reuse where possible. The waste collection facilities and location should also be identified where possible.
- 3.3.12 With the implementation of segregation at source it will enable the Proposed Development to reuse both within, and if appropriate outside of, the Site boundary if there is the need to transfer waste off the Site.
- 3.3.13 All waste will be managed by authorised waste contractors and in line with the Waste Hierarchy.

4 Roles and Responsibility

4.1 Introduction

- 4.1.1 This section sets out the roles and responsibilities of the project team members in relation to waste management.
- 4.1.2 The purpose of setting out responsibilities within this Outline SWMP is to identify individuals to deliver certain aspects of the SWMP.

4.2 Roles and Responsibilities

The Applicant

- 4.2.1 abrdn are responsible for developing the overarching construction and operational Waste Strategy for the Proposed Development, and for preparing this Outline SWMP, to accompany the Planning Application.
- 4.2.2 The Applicant will ensure that all contractors engaged in the project have an obligation to reduce the quantity of waste likely to arise from the Proposed Development, and to ensure any waste that does arise is managed in the appropriate manner, under the approach set out in the Waste Strategy.
- 4.2.3 The Applicant is responsible for providing reasonable direction to any contractors and, in collaboration with the Principal Contractor, for the review and revision of the SWMP as necessary.

Design Team

- 4.2.4 The design team will be responsible for reducing the quantity of waste likely to arise from the development through the design process. The design team will consider the Waste Hierarchy, to optimise reuse, recycling and recovery opportunities for the purpose of minimising waste as far as possible.

Principal Contractor

- 4.2.5 The Principal Contractor (once appointed), will be responsible for the following:
 - a. Identifying specific individual(s) (by name or job title) responsible for implementing the SWMP;
 - b. Implementing the SWMP during the construction phase of the Proposed Development. This includes responsibility for co-ordinating the management of all onsite waste streams, and the overall segregation, storage and collection of waste;
 - c. Ensuring that waste produced during construction is reused, recycled, and recovered, as far as reasonably practicable;
 - d. Keeping all waste management duty of care documentation and, in collaboration with the developer, for making any necessary updates to the SWMP and associated records;
 - e. Fulfilling waste management duty of care requirements and ensuring the lawful disposal of 'Directive Waste' (along with the appointed waste transfer company(ies) and the receiving waste site).

- f. Ensuring that any sub-contractors are aware of and follow the procedures necessary to be compliant with the SWMP.
- g. Ensuring that all onsite employees, including those of sub-contractors, are provided with appropriate training to understand the requirements of the SWMP.
- h. Appointing a person(s) responsible for regularly checking compliance with the SWMP – this may be The Waste Champion or an Environmental Clerks of Works.

Procurement

- 4.2.6 The person(s) responsible for the procurement of materials (who may be an employee of the Principal Contractor) will be responsible for, where possible, procuring materials that contain recycled content, have low or no packaging, and are purchased from suppliers that have a “buy-back” strategy for unused material.
- 4.2.7 All material suppliers should, where possible, have certified environmental standards.
- 4.2.8 The person(s) responsible for the procurement of services (who may be an employee of the Principal Contractor) will be responsible for appointing waste management contractors that are suitably licenced and are compliant with duty of care obligations.

Sub-contractors

- 4.2.9 Any sub-contractors will be responsible for compliance with the SWMP in use by the Principal Contractor and may be required to produce their own waste management documentation as necessary.

5 Monitoring and Reviewing

5.1 Monitoring

- 5.1.1 The waste generated during the project should be recorded and monitored by the Principal Contractor. The example template provided in **Appendix A** can be used, although alternative compliant formats are acceptable.
- 5.1.2 The volume/tonnage of waste generated (or sent off-site), as well as the percentage or volume/tonnage reused, recycled or disposed will be recorded throughout the construction phase.
- 5.1.3 Duty of Care documents will be retained and kept with the SWMP documentation on-site by the Principal Contractor.
- 5.1.4 Where waste data is obtained from licensed external waste contractors, the data needs to be reliable and verifiable.

5.2 Reviewing

- 5.2.1 Both the Client and the Principal Contractor are responsible for ensuring that the SWMP is reviewed and updated accordingly at regular intervals, and as necessary throughout the construction phase. The Principal Contractor will provide a monthly report to the Client on the progress of the SWMP.

Appendix A Example Monitoring Templates

Duty of Care Documentation

Waste Type in Skip	EWC Code	Inert/Non-Hazardous/Hazardous	Waste Carrier Name (and/or broker name)	Waste Carrier License Number	License Expiry Date	Name of End Destination	Landfill License or Waste Transfer Station Registration Details	Volume Sent	Confirmation that Registered Landfill received Waste and Date
Waste Activity License/Exemption			Details of License/Exemption (including expiry date and limitations to license)				Comments		

Waste Collation Data Information

[illegible]

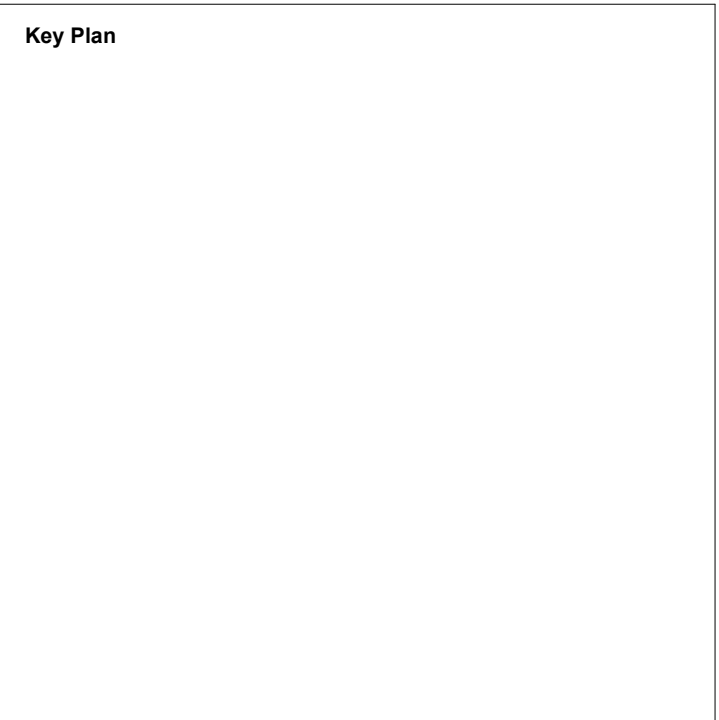
Useful Waste Catalogue Codes

Waste Material	EWC
Bricks	17-01-02
Concrete	07-01-01
Contaminated rags/cloths/wipes	15-02-02*
Contaminated spill materials	15-02-02*
Fluorescent Tubes (FT)	20-01-21*
Mixed Municipal Waste	20-03-01
Glass	17-02-02
Mixed Metals	17-04-07
Paper and Cardboard	20-01-01
Plasterboard	17-08-02
Plastics	17-02-03
Soil & Sands not containing dangerous substances	17-05-04
Wood	17-02-01

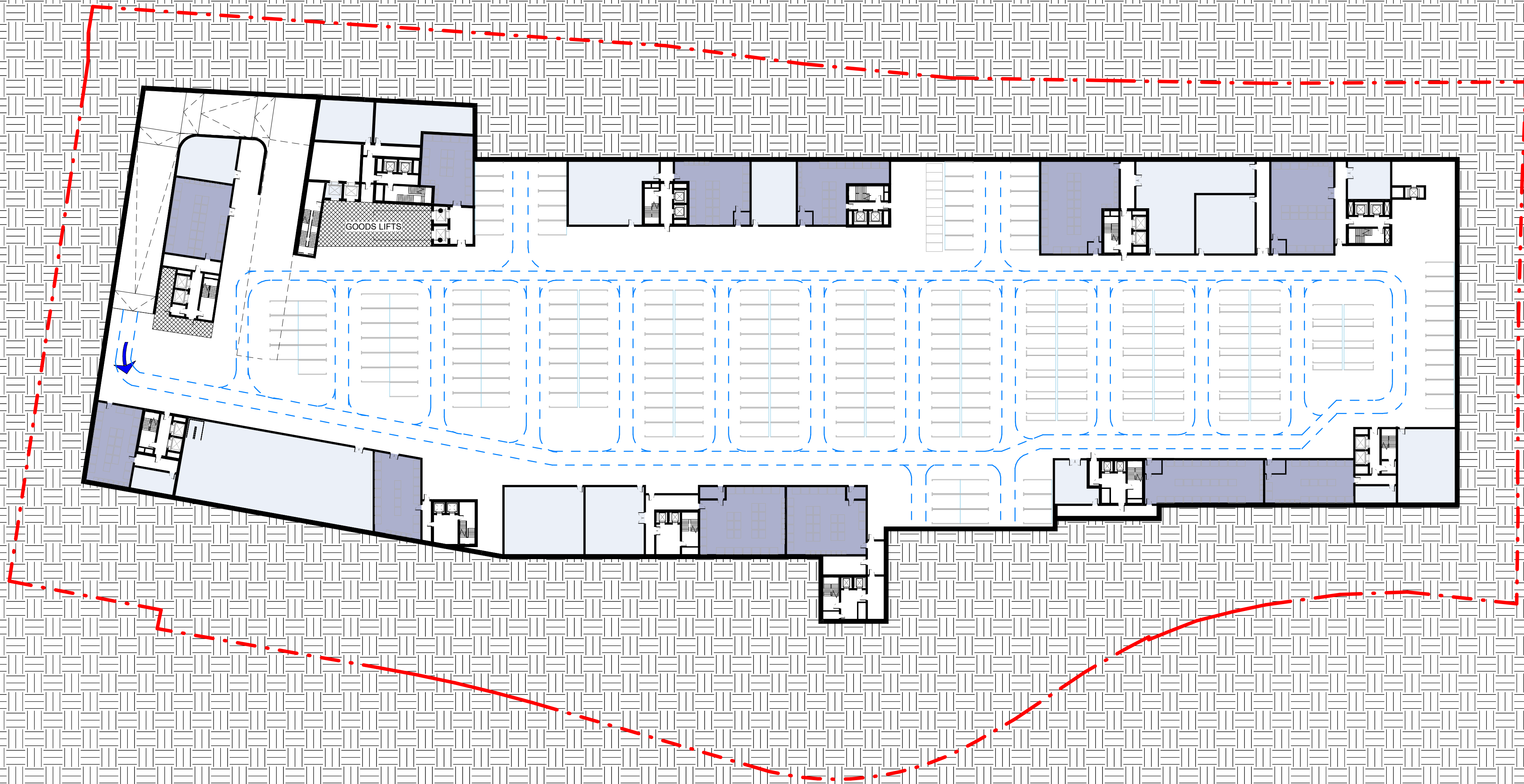
Appendix D Proposed Basement Plan

Do not scale from this drawing. All dimensions to be checked on site. All omissions and discrepancies to be reported to the Architect immediately

This work is copyright and shall not be reproduced or used for any other purpose without the written permission of Squire and Partners.



- Key
- 1 Bed Apartment
 - 2 Bed Apartment
 - 3 Bed Apartment
 - Entrance Lobby
 - Retail
 - Car Park
 - Cycle Store
 - Refuse Store
 - Plant
 - Reduced Clear Height
 - Loading Area



Description	Date	Chk	Rev
-------------	------	-----	-----

SQUIRE & PARTNERS

Squire and Partners LLP
The Department Store
248 Ferndale Road, London SW9 8FR
T: 020 7278 5555

info@squireandpartners.com
www.squireandpartners.com

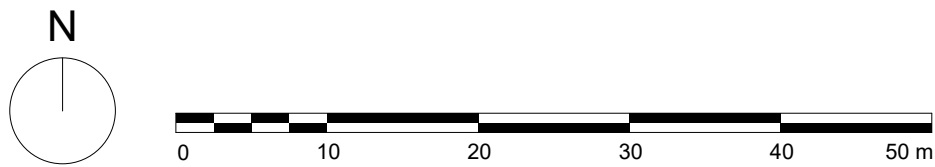
Project
Kings Meadow View

Title
Floor plan- Basement

Status
Concept Sketch

Drawn	Date	Scale @ ISO A1	Job Number
SQP	19/05/23	1:500	18111

Drawing Number	Revision
18111-SQP-ZZ-B1-DR-A-PP20104	



Appendix E Proposed Ground Floor Plan

Do not scale from this drawing. All dimensions to be checked on site. All omissions and discrepancies to be reported to the Architect immediately

This work is copyright and shall not be reproduced or used for any other purpose without the written permission of Squire and Partners.

Key Plan

Key

- 1 Bed Apartment / Studio
- 2 Bed Apartment
- 3 Bed Apartment
- Entrance Lobby
- Retail
- BOH Retail
- Car Park
- Cycle Store
- Refuse Store / Presentation Area
- Plant
- Reduced Clear Height
- Loading Area

Description	Date	Chk	Rev
-------------	------	-----	-----

SQUIRE & PARTNERS

Squire and Partners LLP
The Department Store
248 Ferndale Road, London SW9 8FR
T: 020 7278 5555

info@squireandpartners.com
www.squireandpartners.com

Project

Kings Meadow View

Title

Proposed
Ground Floor Plan

Status

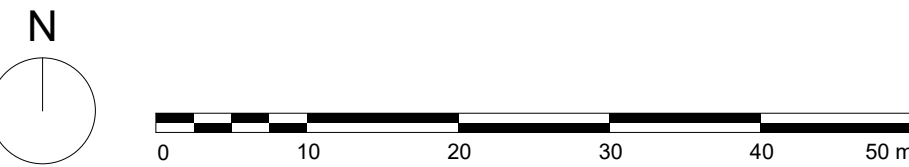
Concept sketch

Drawn	Date	Scale @ ISO A1	Job Number
-------	------	----------------	------------

SQP 19/05/23 1:500 18111

Drawing Number	Revision
----------------	----------

18111-SQP-ZZ-GF-DR-A-PP20105



Appendix F Swept Path Analysis

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.
The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

UTILITIES NOTE: The position of any existing public or private sewers, utility services, plant or apparatus shown on this drawing is believed to be correct, but no warranty to this is expressed or implied. Other such plant or apparatus may also be present but not shown. The Contractor is therefore advised to undertake their own investigation where the presence of any existing sewers, services, plant or apparatus may affect their operations.

P01	UPDATED MASTERPLAN	CE	RH	2023.05.17
Issued/Revision		By	Appd	YYYY.MM.DD
		AL	-	SS
		Dwn.	Dsgn.	Chkd.
				2023.05.17
				YYYY.MM.DD

FOR PLANNING

This document is suitable only for the purpose noted above.
Use of this document for any other purpose is not permitted.

Client/Project
ABERDEEN STANDARD INVESTMENTS

KINGS MEADOW VIEW

READING, UNITED KINGDOM

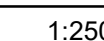
Title
MASTERPLAN SERVICE ACCESS

Project No. 50582	Scale 1:250
Revision P01	Drawing No. 50582/550



The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.
The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

NOTES



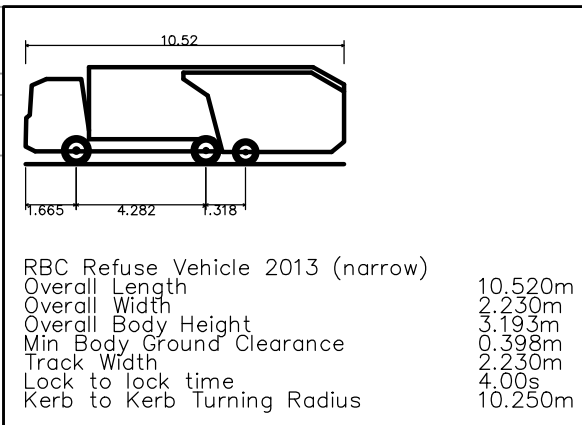
Project No. 50582	Scale 1:250
Revision P01	Drawing No. 50582/5501/SK016

Copyright Reserved
The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing
- any errors or omissions shall be reported to Stantec without delay.
The Copyrights to all designs and drawings are the property of Stantec. Reproduction or
use for any purpose other than that authorized by Stantec is forbidden.

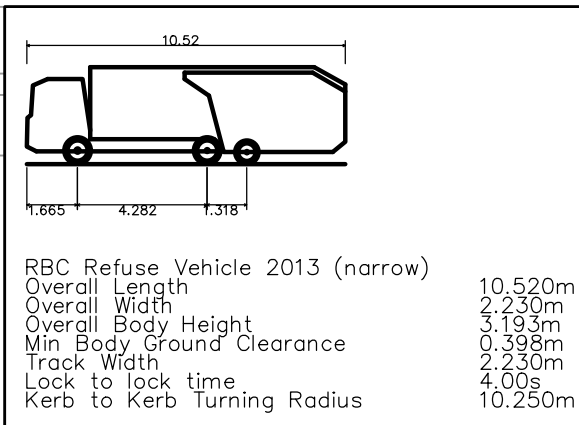
- Notes
1. THIS SKETCH IS INTENDED FOR DISCUSSION PURPOSES ONLY IS SUBJECT TO
FURTHER REVIEW TO CONFIRM ARRANGEMENT IS SUITABLE.
 2. SWEEP PATHS HAVE BEEN UNDERTAKEN AT SLOW SPEED (5kph) TO REFLECT
OPERATIONS
 3. ACCESS SWEEP PATHS TO NETWORK RAIL GATE ARE SUBJECT TO
CONFIRMATION AND AGREEMENT WITH NETWORK RAIL



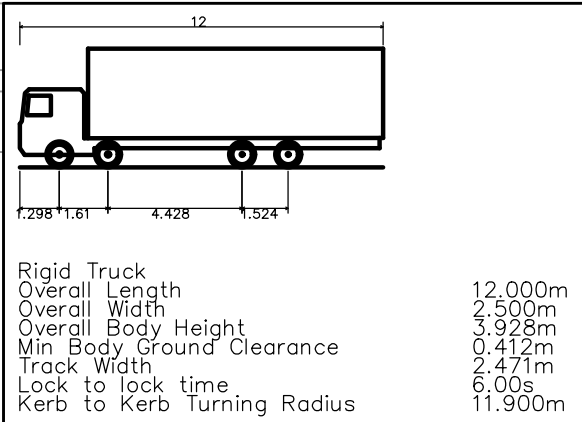
MULTI-POINT TURN
REQUIRES WHEELS TO BE
TURNED WHILST
STATIONARY



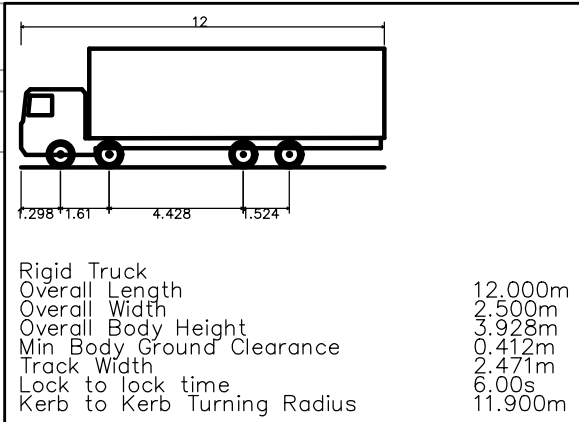
RBC REFUSE VEHICLE - INBOUND SWEEP PATH
KINGS VIEW MEADOW SERVICING AREA



RBC REFUSE VEHICLE - OUTBOUND SWEEP PATH
KINGS VIEW MEADOW SERVICING AREA



12m RIGID VEHICLE - INBOUND SWEEP PATH
KINGS VIEW MEADOW SERVICING AREA



12m RIGID VEHICLE - OUTBOUND SWEEP PATH
KINGS VIEW MEADOW SERVICING AREA

BH	SS	SS	2023.05.19
Dwn.	Dsgn.	Chkd.	YYYY.MM.DD

Issue Status

FOR PLANNING

This document is suitable only for the
purpose noted above.
Use of this document for any other
purpose is not permitted.

Client/Project Logo

Client/Project
ABERDEEN STANDARD INVESTMENTS

KINGS MEADOW VIEW

READING, UK

Title
RESIDENTIAL SERVICING AREA

Project No.
50582

Scale
AS SHOWN

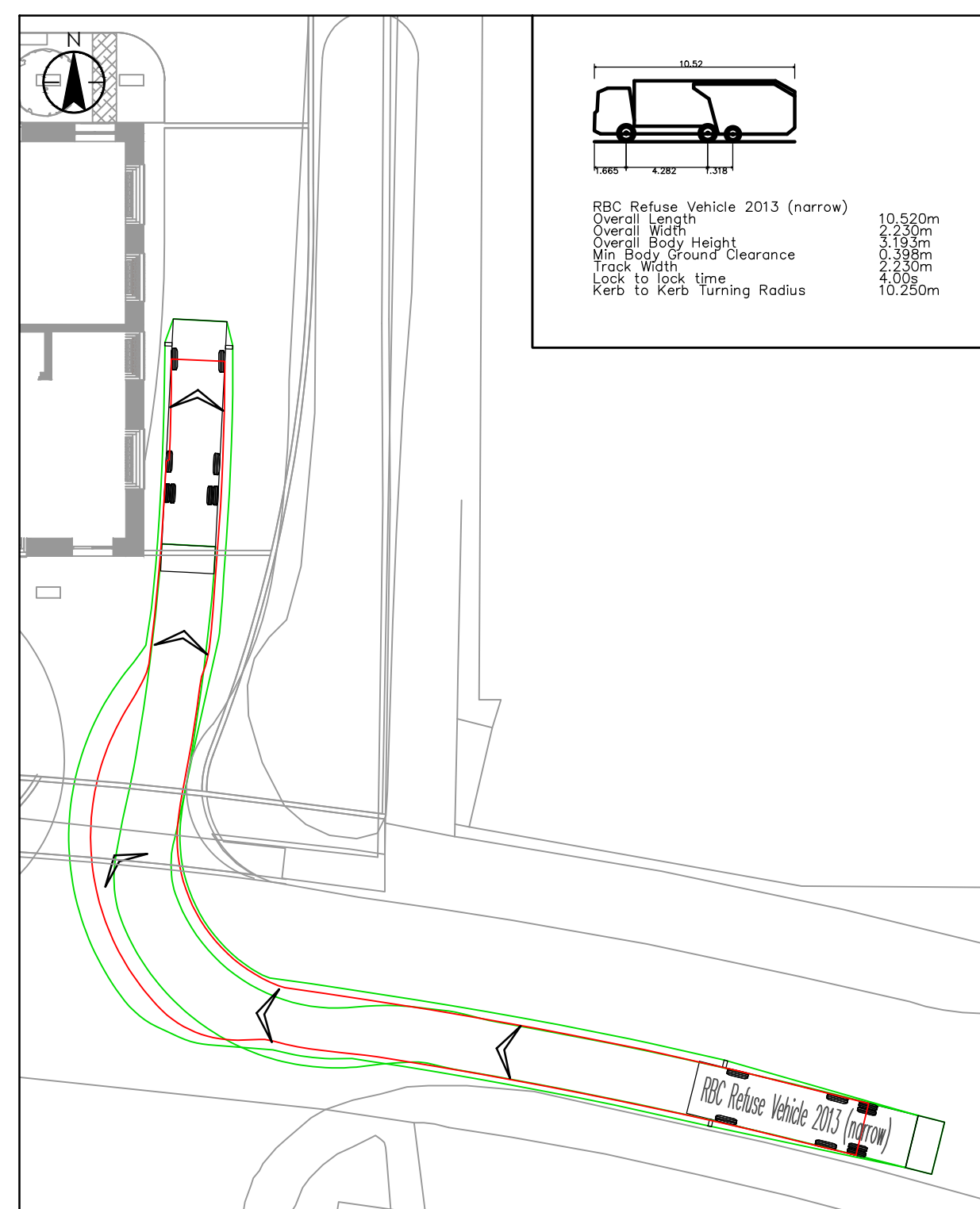
Revision
P01

Drawing No.
50582/5501/SK020

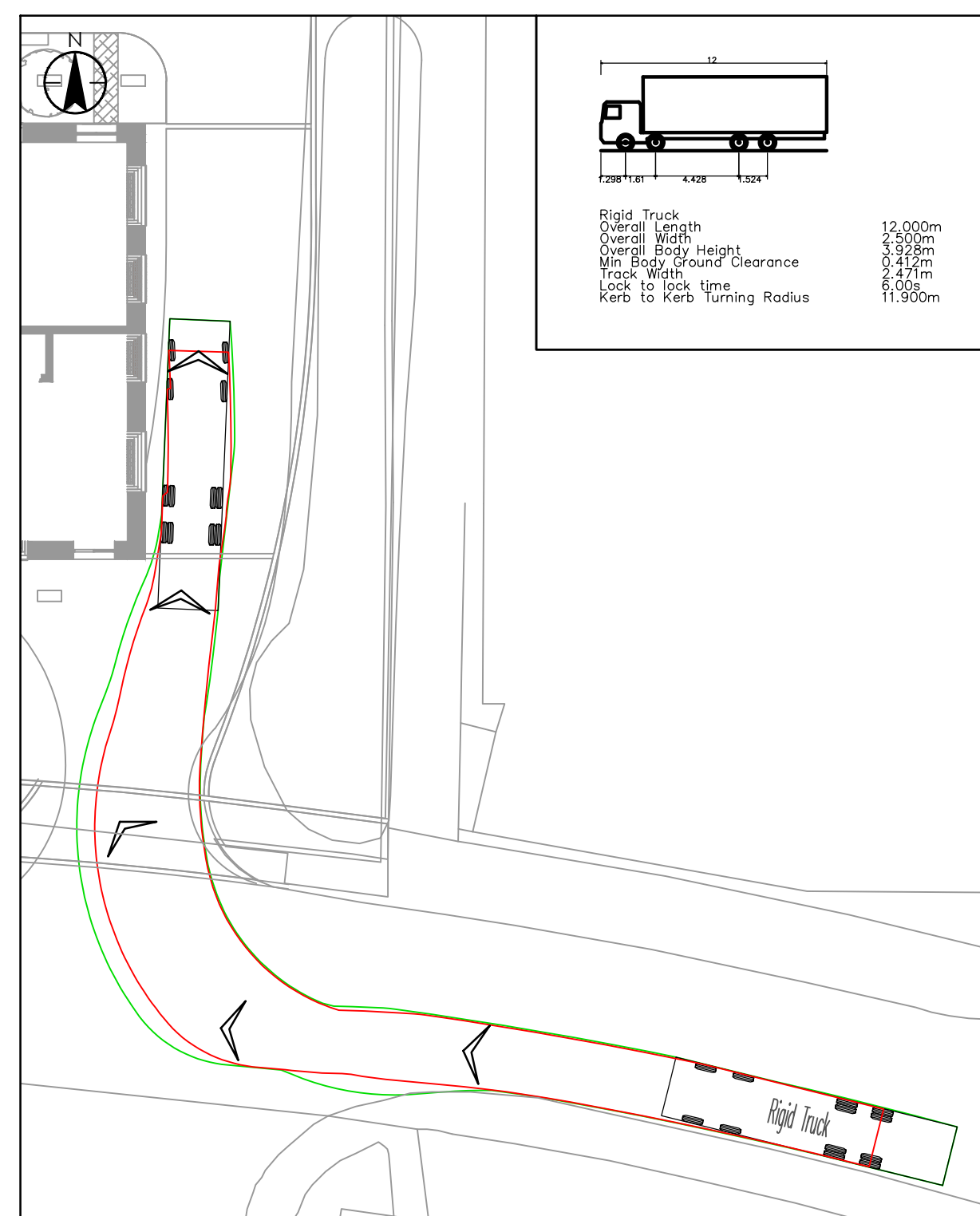
The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.
The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

VEHICLE TRACKING UNDERTAKEN AT 5 km/h

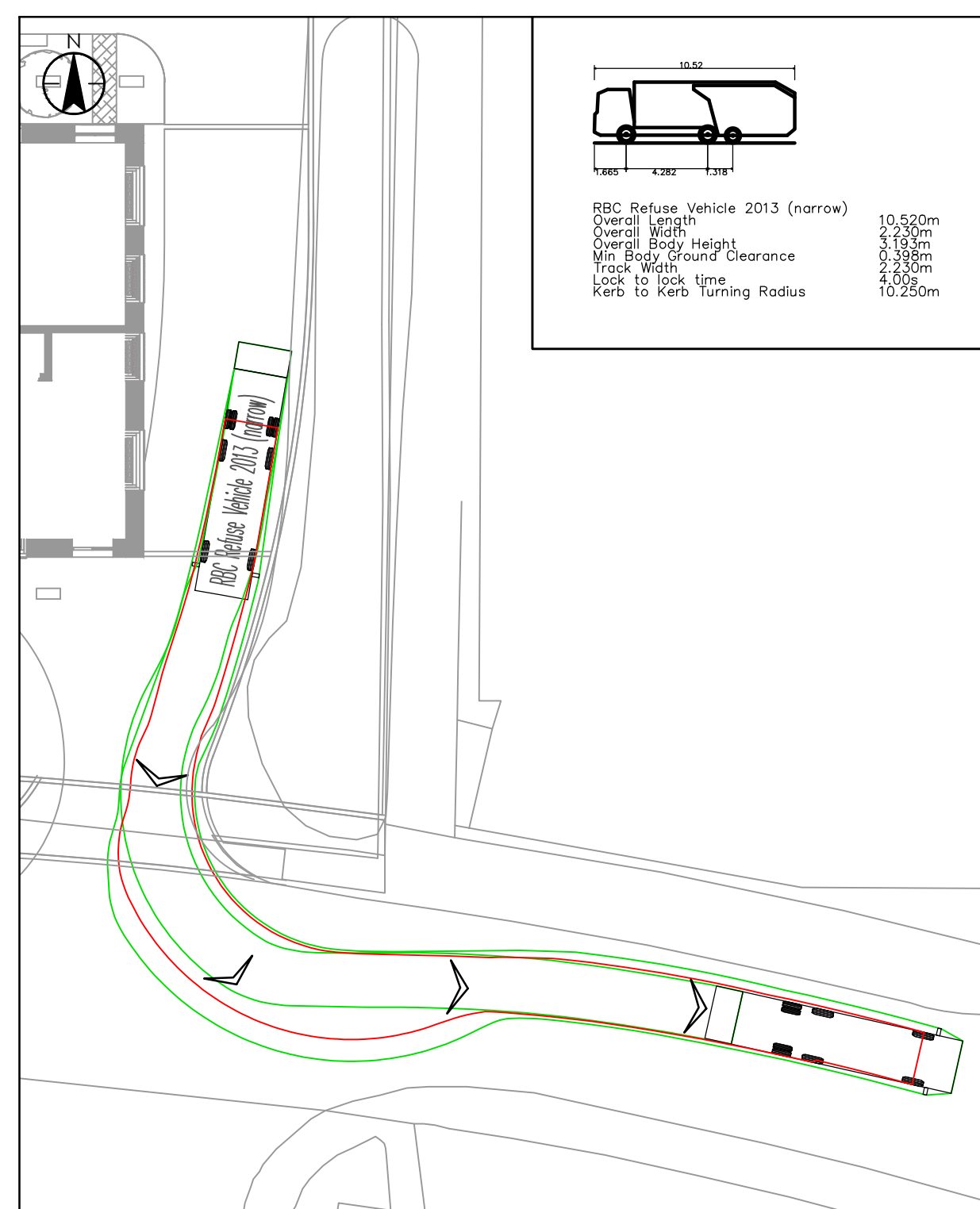
12.0m RIGID TRUCK IS NOT ANTICIPATED TO SERVICE DEVELOPMENT ON A REGULAR BASIS AS VEHICLE TYPE IS GENERALLY ONLY USED FOR LARGER DELIVERIES



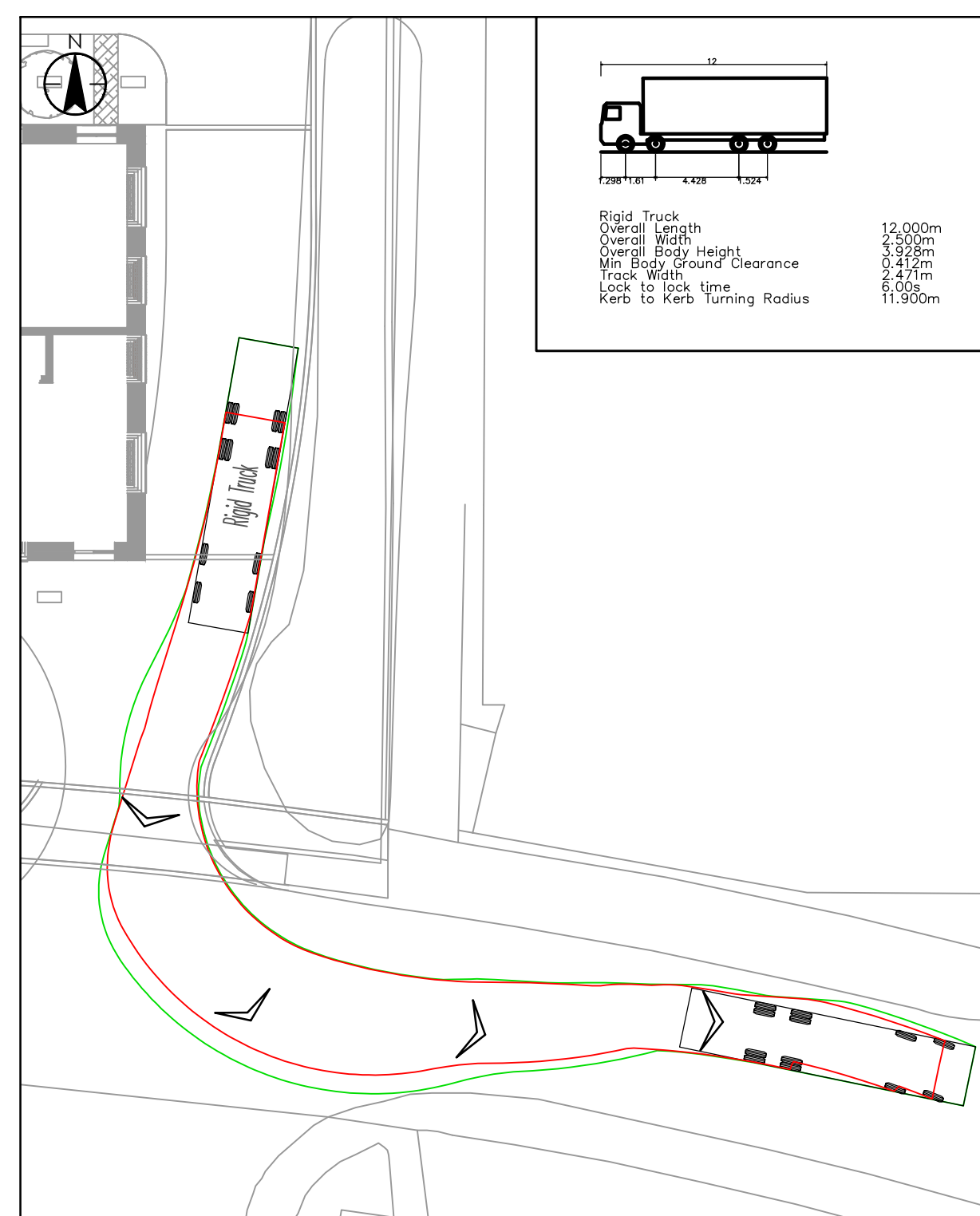
RBC REFUSE VEHICLE SWEEP PATH
INBOUND
KINGS VIEW MEADOW ACCESS
1:250



12m RIGID HGV SWEEP PATH
INBOUND
KINGS VIEW MEADOW ACCESS



RBC REFUSE VEHICLE SWEEP PATH
OUTBOUND
KINGS VIEW MEADOW ACCESS
1:250



12m RIGID HGV SWEEP PATH
OUTBOUND
KINGS VIEW MEADOW ACCESS
1:250

P01 UPDATED MASTERPLAN	CE	RH	2023.05.16
Issued/Revision	By	Appd	YYYY.MM.DD
	BS	BS	2022.03.16
	Dwn.	Dsgn.	Chkd.
			YYYY.MM.DD

Issue Status

FOR PLANNING

This document is suitable only for the purpose noted above.
Use of this document for any other purpose is not permitted.

Client/Project Logo

Client/Project
ABERDEEN STANDARD INVESTMENTS

KINGS MEADOW VIEW

READING, UNITED KINGDOM

Title
RESIDENTIAL SERVICING ACCESS
SWEPT PATH ANALYSIS

Project No. 50582	Scale 1:250
Revision P01	Drawing No. 50582 5501 SK026

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.

The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Notes

	CE	-	RH	2023.05.17
	Dwn.	Dsgn.	Chkd.	YYYY.MM.DD

Issue Status

FOR PLANNING

This document is suitable only for the purpose noted above. Use of this document for any other purpose is not permitted.

Client/Project Logo

Client/Project
ABERDEEN STANDARD INVESTMENTS

KINGS MEADOW VIEW

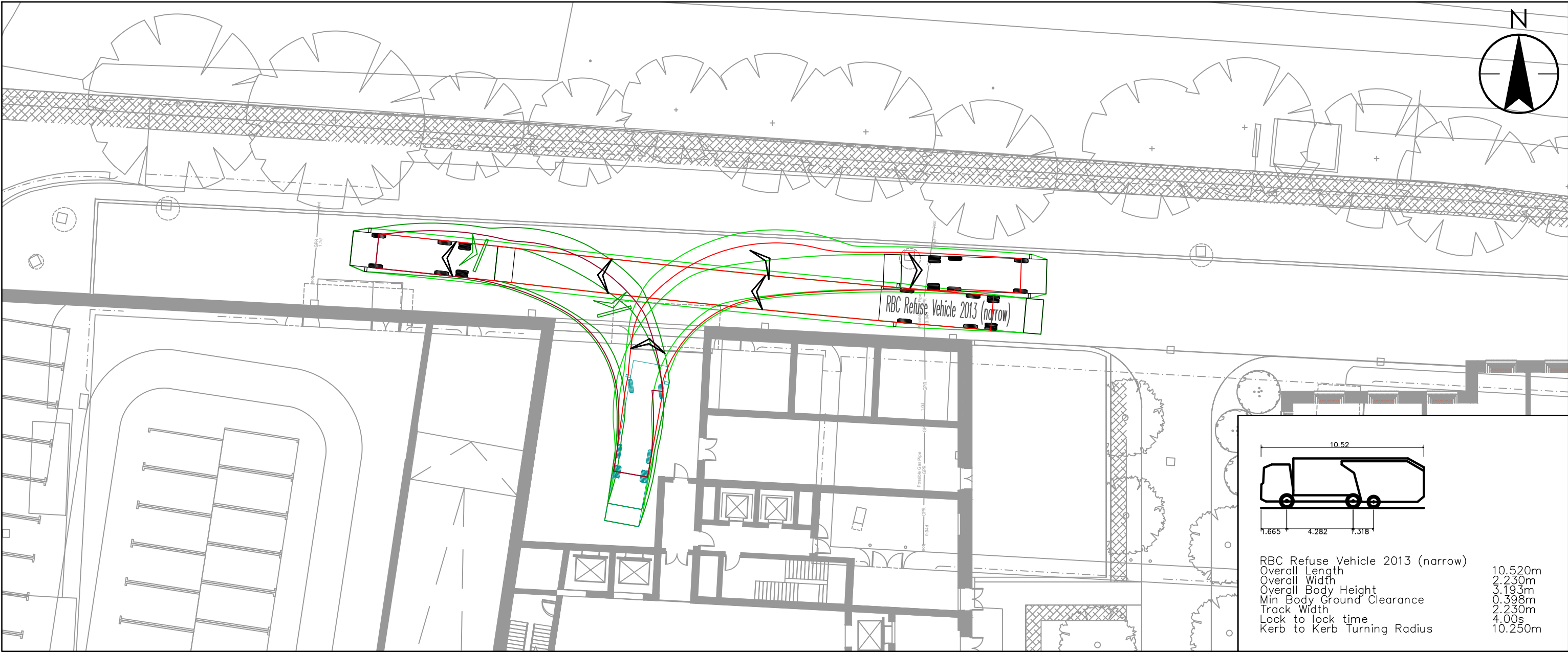
READING, UK

Title
SERVICING AREA SWEPT PATH ANALYSIS

Project No. 50582	Scale 1:250
----------------------	----------------

Revision Drawing No.

50582/5501/SK028



REFUSE VEHICLE SWEPT PATH
GROUND FLOOR



12m RIGID HGV
GROUND FLOOR