THE LANES

PENWORTHAM

Waste Management Strategy

August 2021

Taylor Wimpey

Homes England

The Lanes, Penwortham

Waste Management Strategy

On behalf of **Taylor Wimpey UK Ltd and Homes England**

Project Ref: 332510663 | Rev: V1.0 | Date: August 2021

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: bristolqueensquare@stantec.com

Document Control Sheet

Project Name: **The Lanes, Penwortham**

Project Ref: **332510663**

Report Title: **Waste Management Strategy**

Date: **August 2021**

	Name	Position	Signature	Date
Prepared by:	Michael Robinson-Moltke	Senior Waste Consultant	*MRM*	August 2021
Reviewed by:	Natalie Maletras	Director Waste and Resources	*NJM*	August 2021
Approved by:	Jonny Riggall	Director – Energy and Natural Resources	*JR*	August 2021
For and on behalf of Stantec UK Limited				

Revision	Date	Description	Prepared	Reviewed	Approved

Contents

Figures

Tables

Appendices

1 Introduction

1.1 Background

1.1.1 Stantec has been appointed to produce a Waste Management Strategy (herein the Strategy) to support the two outline planning applications for residential led mixed-use developments at The Lanes, Penwortham (herein 'the Proposed Developments') being submitted by Taylor Wimpey UK Ltd and Homes England (herein the 'Applicants').

1.1.2 The Sites are located within the administrative authority of South Ribble Borough Council (SRBC). SRBC is the Local Planning Authority and therefore has responsibility for planning policy. The Sites are allocated as part of the Major Site for Development in the South Ribble Local Plan (adopted July 2015) under 'Policy C1, Penwortham'.

1.1.3 This Strategy will include details of the measures to be taken in the design, construction, operation and occupation to: minimise the amount of waste generated; re-use or recycle suitable waste materials generated; minimise the pollution potential of unavoidable waste; treat and dispose of the remaining waste in an environmentally acceptable manner; and utilise appropriate secondary construction materials.

1.1.4 The Strategy has been developed through consultation with the waste and transport team at SRBC.

1.2 Purpose of the Report

1.2.1 This Strategy examines the relevant waste policy that the Proposed Developments need to consider and estimates the levels of waste expected to be generated, in addition to proposing waste management strategies from demolition, construction and operation.

1.2.2 This Strategy will demonstrate an understanding of the expected waste types that will arise, and how it will be managed, which will help to reduce both environmental impacts and costs. However, this Strategy has been prepared for the two outline planning applications therefore not all details are known at this stage and will be developed further at the detail design stage.

1.3 Report Structure

1.3.1 The report is set out in the following format:

- **Section 2: Sites in Context** – introduces the site context and development proposals;
- **Section 3: Policy and Legislative Background** – details the relevant legislation, policy and guidance the Proposed Development needs to consider and support for both construction and operational phases;
- **Section 4: Demolition and Construction Phase** – identifies the expected waste arisings from the construction phase (for buildings only); and details the strategy for managing waste arising from the construction of the Proposed Development that should be taken forward;
- **Section 5: Operational Phase –** identifies the expected waste arisings and servicing from the operational phase, 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 Application Sites in Context

2.1 Introduction

2.1.1 This section introduces the sites in context including explaining the location, description and development proposals.

2.2 Site Location and Description

2.2.1 The combined sites are irregular in shape and occupy approximately 51.86 ha to the east of Penwortham Way to the south of the settlement of Penwortham. This is inclusive of both Application A (45.89 ha) and Application B (5.91 ha). The site red line boundary for both applications is shown in **Appendix A**.

2.2.2 Within this report "the Site" refers to land that falls within the application boundaries A and B as identified in the Site Location Plans (**Appendix A**).

2.2.3 The Site currently comprises of a mix of land uses, including agricultural land, a waterway, hedgerows and trees, buildings, stables, a pylon corridor, and roads.

2.2.4 The surrounding area comprises a mix of agricultural land to the east and south beyond Penwortham Way and Cootes Lane/Chain House Lane, the settlement of Penwortham to the north and Tardy Gate to the east beyond the railway.

2.3 Development Proposals

2.3.1 The planning application proposes:

The planning applications (referred to as Application A and Application B) are submitted in outline with all matters reserved (including scale, layout, appearance and landscaping) except for the principal means of access. It proposes the demolition of certain existing buildings and a residential led mixed-use development comprising:

- *Up to 1,100 dwellings (use class C3 and C2) (split between the two applications, 920 for Application A and 180 for Application B);*
- *A local centre including retail, employment and community uses (use classes F1, F2 and E);*
- *A primary school (use class F1);*
- *Green infrastructure;*
- *Associated infrastructure; and*
- *Means of access.*

The wider site is allocated in the South Ribble Local Plan (adopted in July 2015) as a Major Site for Development (under Policy C1) for 1,350 residential dwellings.

2.3.2 The red line boundaries are shown in **Appendix A**.

2.4 Phasing

2.4.1 The sequencing of the delivery of the indicative phases is currently unknown. Should the application be approved, the local Planning Authority is invited to impose a condition which requites a detailed phasing plan to be submitted to SRBC as part of the first reserved matters application.

2.4.2 It is anticipated that an overall phasing Strategy for the developments would seek to deliver the Proposed Developments over an 8-year construction period.

3 Policy and Legislative Background

3.1 Introduction

3.1.1 This section provides a review of relevant policy and guidance in relation to waste to allow it to be appropriately considered within this Strategy.

3.1.2 The Site is located within the administrative authority of SRBC. SRBC is responsible for waste collection in the area and Lancashire County Council is responsible for waste planning policy and waste disposal.

3.2 European Policy

3.2.1 The **European Revised Waste Framework Directive** (2008/98/EC) sets the framework for UK Waste Policy. The Waste Hierarchy (**Figure 3.1**) runs throughout this policy and ranks waste management options according to what is best for the environment.

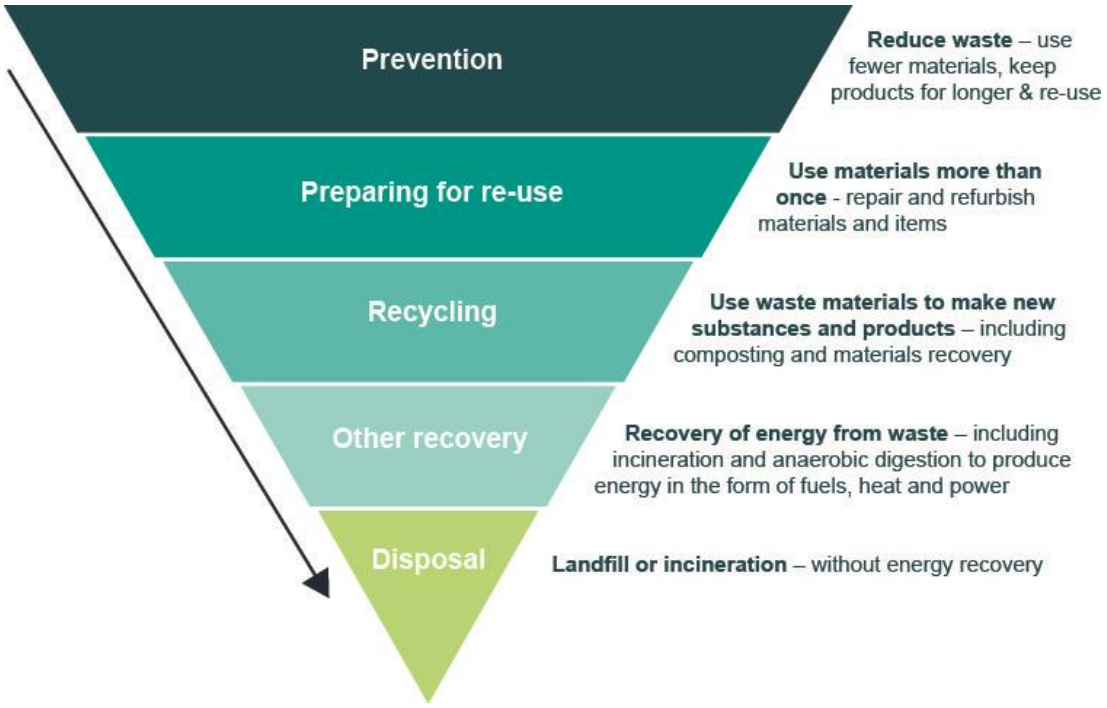

Figure 3.1: The Waste Hierarchy, Defra 2011

3.3 National Policy

3.3.1 **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.

3.3.2 This Strategy highlights the Government's ambitious plans in relation to food waste. Households produce approximately 7 million tonnes of food waste is produced 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'.*

3.3.3 **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).

3.3.4 These regulations also aim to improve the quality and quantity of material being collected for recycling 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.

3.4 Local Policy and Guidance

3.4.1 The local policy and guidance which relates to waste includes policies set by SRBC, the Central Lancashire authorities and Lancashire County Council. This section explains the relevant local policies in relation to the Proposed Development.

3.4.2 SRBC is the waste collection authority for the area and Lancashire County Council is the waste disposal authority. The 15 local authorities in Lancashire have formed the Lancashire Waste Partnership to facilitate the most efficient handling and waste service.

Central Lancashire Core Strategy Development Plan Document (DPD) (2012)

3.4.3 The Central Lancashire authorities consists of Preston City Council, South Ribble Borough Council and Chorley Council with the assistance from Lancashire County Council and aims to encourage sustainable managed growth. The Joint Lancashire Minerals and Waste Local Plan guides minerals and waste development in the area, however, this DPD includes the relevant policy:

Policy 27: Sustainable Resources and New Developments

3.4.4 In new developments *"appropriate storage space is to be provided for recyclable waste materials and composting"*

Central Lancashire Design Guide Supplementary Planning Document (SPD) (2012)

3.4.5 This SPD provides an overview of the design principles that the Central Lancashire authorities employ when considering planning proposals. This SPD refers to both residential and commercial developments within Central Lancashire and provides sustainable design guidance to Applicants. The following relevant design principle includes:

Design Principle 5: Resources and Efficiency

3.4.6 *"Development should use resources efficiently in construction and operation. The 4 R's principles are useful to follow – Reduce, Reuse, Recycle and Recover"* and as part of this principle, recycling and both operational and construction waste minimisation should be promoted.

Lancashire Waste Partnership Waste Management Strategy (2008)

3.4.7 This strategy covers the period between 2008 and 2020 and looks to build upon the previous strategy "A Greener Strategy for a Greener Future" and sets out a Municipal Waste Management Strategy with targets and key actions.

2020/21 Targets

- Reduce and stabilise waste to 0% growth each year
- Recover 88% of all municipal waste
- Send only 12% of waste to landfill

Lancashire County Council Minerals and Waste Core Strategy (2009)

3.4.8 This strategy covers the period up to 2021 and makes up part of Lancashire's Local Development Framework. This Strategy has a number of relevant waste policies:

Policy CS2: Minimising the need for Mineral Extraction

3.4.9 All new developments will be expected to maximise the use of recycled and secondary materials by including measures to:

i. "reduce, reuse, recycle and recover the waste they produce during construction and demolition, where possible on-site;

ii. maximise the use of recycled and secondary materials, and the reuse of other building materials, within the development; and

iii. maximise the potential for recovering and recycling construction materials at the end of the development's life, through the design of, and specification of materials used in, the development"

3.4.10 This strategy also sets the following target:

"25% of construction aggregates used in the Plan area will comprise recycled and secondary materials by 2021."

Policy CS7: Managing our Waste as a Resource

3.4.11 This policy encourages the adoption of the waste hierarchy and provides the following recycling, composting and recovery targets:

i. "recycle and compost 46% of Municipal Solid Waste (MSW) by 2010, to reach 56% by 2015 and 61% by 2020;

ii. additionally, recover value from 18% of MSW by 2015;

iii. recycle 35% of I&C waste by 2010, 40% by 2015 and 45% by 2020;

iv. additionally, recover value from 30% of Industrial & Commercial (I&C) waste by 2010, falling to 25% by 2020;

v. recycle 50% of Construction & Demolition (C&D) waste by 2010, 55% by 2015 and 60% by 2020; and

vi. additionally, recover value from 42 % of C&D waste by 2010, falling to 35% by 2020".

4 Demolition and Construction Phase

4.1 Introduction

4.1.1 The construction process needs to be managed to accommodate the peak periods of waste generation. Where possible waste reduction strategies and practices will be formulated in advance.

4.1.2 For this phase the estimated waste arisings have been made using liberal estimates. As the design iterations progress, it is likely that the expected construction waste arisings will reduce.

4.1.3 In accordance with the relevant SRBC and LCC objectives, the Proposed Developments will adhere to sustainable waste management principles with the objective of reducing, reusing and recycling materials either on or off site as far as practicable. Where appropriate, in line with 'best practice' recommendations, the Principal Contractor(s) will implement a Site Waste Management Plan (SWMP).

4.1.4 This section:

- Gives an indicative estimate of the overall waste arising during the construction phase (for buildings only);
- Sets out proposed principles of waste management to align with the Waste Hierarchy; and
- Outlines how this will be managed by the Applicants going forward.

4.2 Waste from Demolition

4.2.1 The existing land uses are mixed, including agricultural land, a waterway, hedgerows, trees, a pylon corridor and roads. There are a small number of existing buildings and stables on the Site that will require demolition as part of the enabling works. Demolition audits will be carried out at the detailed stage, where appropriate waste management will be in place to deal with the waste generated in line with the principles as set out within this Strategy (**Section 4.4**).

4.3 Waste from Construction

4.3.1 The overall phasing Strategy for the developments would seek to deliver the Proposed Developments over an 8-year construction period.

4.3.2 An indicative phasing plan will be submitted with the application. Should the application be approved, the planning authority will be invited to condition the need for a detailed phasing plan prior to the first reserved matters application.

Waste Arisings – Construction Phase

4.3.3 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. The waste arising from the construction of the Proposed Developments would be spread across the 8-year timescale of the development.

4.3.4 The estimated waste arising from the construction of buildings at the Proposed Developments have been calculated using established national SmartWaste benchmarks based on the Building Research Establishment's (BRE) Smart Waste Benchmark Data (BRE, 2017)[1]. The

[1]SMARTWaste BRE Benchmark Data – Issued October 2017

indicative mix provided prior to the outline applications has been used to generate the estimates at this point. At the Reserved Matters Application stage this will be updated to accurately reflect the final proposed mix.

Table 4.1. Estimated Waste Arisings from Construction of the Developments

Construction of:	Total Area (m^2)	Estimated Waste Tonnes (t)*
Residential	98,448	15,063
Local Centre[2]	2,500	393
Education[3]	1,200	179
TOTAL		**15,634**

**differences occur due to rounding and excludes waste arisings related to earthworks and strategic infrastructure (including the waterway)*

4.3.5 Waste from the construction of the Proposed Developments are estimated to be a total of approximately 15,600 tonnes. An estimated breakdown of construction waste types based on the residential composition and non-residential composition are shown in **Table 4.2.**

Table 4.2. Estimated breakdown of construction waste composition

	Tonnes (t)			
Material / Development	**Residential**	**Local Centre**	**Education**	**Total**
Bricks	1,174	10	17	**1,201**
Tiles and Ceramics	83	1	1	**85**
Concrete	1,660	62	11	**1,732**
Inert	4,504	155	43	**4,702**
Insulation Materials	70	1	2	**73**
Metals	207	13	4	**225**
Packaging Materials	407	3	6	**417**
Plasterboard/Gypsum	479	5	7	**492**
Binders	18	0	0	**18**
Plastic (excluding packaging waste)	280	3	2	**285**
Timber	1,283	17	12	**1,312**
Floorcoverings (soft)	8	0	0	**8**
Electrical and Electronic Equipment	6	0	0	**6**

[2] This covers use classes F1, F2 and E – Assumed to be retail until further splits are available

[3] The school area has been provided by Avis Young – 20/07/21

	Tonnes (t)			
Material / Development	**Residential**	**Local Centre**	**Education**	**Total**
Furniture	1	0	0	**1**
Canteen/Office/Adhoc Waste	130	6	4	**141**
Liquids	8	1	0	**9**
Oils	1	0	0	**1**
Bituminous Mixtures	92	2	12	**105**
Hazardous Waste	103	4	4	**110**
Other Waste	393	9	7	**409**
Mixed Construction and/or Demolition Waste	4,156	100	46	**4,302**
TOTAL	15,063	393	179	**15,634**

4.4 Waste Management Principles

4.4.1 This section introduces the principles of 'best practice' waste management. These principles will be refined and referred to as the strategic infrastructure is delivered by the Applicant.

4.4.2 Overall, the hierarchy of waste management will be adopted, in accordance with national 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; and
- **Disposal** – The least preferred option where the waste stream would be subject to a final disposal route, such as landfill.

4.4.3 During construction, materials recovered from any 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.

4.4.4 A SWMP will be produced for each phase of the Proposed Developments. This plan will ensure that the waste management principles set out in **Section 4.4** are followed appropriately. The production of a SWMP is no longer a legal obligation but is regarded as best practice. The Principal Contractor will be responsible for developing and implementing the plan.

Procurement

4.4.5 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.

4.4.6 Once the Principal Contractor is appointed, A Sustainable Procurement Plan should 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 the construction phase.

4.4.7 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).

Targets

4.4.8 As stated in the Lancashire County Council Minerals and Waste Core Strategy (2009), the following targets relate to recycling, composting and recovery:

> *i. recycle 50% of Construction & Demolition waste by 2010, 55% by 2015 and 60% by 2020; and*
>
> *ii. additionally, recover value from 42 % of C&D waste by 2010, falling to 35% by 2020".*

4.4.9 Whilst these are historic targets they have not yet been updated and are therefore still relevant to this application.

4.4.10 The Proposed Developments will realistically expect to exceed the above targets for levels of recycling during the construction phase.

Monitoring and Reviewing

4.4.11 Waste arisings will be monitored and reviewed by the Applicants through the mechanisms of a 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 phase.

4.4.12 The Applicants are responsible for ensuring that each SWMP produced is reviewed and updated accordingly at regular intervals, and as necessary throughout the construction phase.

5 Operational Phase

5.1 Introduction

5.1.1 This section sets out the estimated waste arisings and storage requirements for the operational phase of the Proposed Developments. Due to the outline nature of the planning applications, as each phase comes forward to the detailed design stage, a more detailed Waste Storage and Servicing Statement will be submitted.

5.1.2 The Proposed Developments will contain both residential and commercial uses and the following section provides the operational waste strategy for the breakdown of these uses.

5.2 Household Waste

5.2.1 This section details waste management storage and collection requirements that are required for household waste. This is based on SRBC's website and confirmed through consultation with SRBC[4]. Engagement with SRBC will continue as the design progresses to ensure the detailed plans reflect the appropriate requirements of the time.

Estimated Household Waste Arisings

5.2.2 Estimated volumes of waste generated from the residential elements of the Proposed Developments have been considered in the context of the waste collection authority, SRBC.

5.2.3 The average household in the SRBC area currently produces approximately 0.83 tonnes of waste (including recycling) per year and recycling rates for household waste within SRBC are currently ~ 46%[5]. The Proposed Developments will introduce an estimated 1,100 additional households and thus generating an additional estimated 910 tonnes of household waste per annum. This represents an overall increase of 2.22% of household waste managed by SRBC.

Household Waste Storage

5.2.4 Household waste storage space for the Proposed Developments will be developed at the detailed design stage and following consultation with SRBC. All waste produced from the residential properties will be stored separately from any of the commercial elements.

Single Dwellings

5.2.5 SRBC currently provides the followings waste receptacles per household:

- 1 x 240L grey bin for non-recyclable waste;
- 1 x 240L blue bin for glass, cans and plastic bottles;
- A green box for paper and card; and
- 1 x 240L brown bin for garden waste (for properties with a garden). The garden waste service is provided for a fee.

[4] Consultation undertaken with Russell Hutchinson, the Waste and Transport Officer for SRBC

[5] Waste and Recycling Statistics (Department for Environment, Food and Rural Affairs), Local Authority Collected and Household Waste Statistics 2019/20120 England, SRBC and LCC household- Household Total Waste (Tonnes)

Multi-Occupancy Dwellings

5.2.6 Purpose-built multiple-occupancy dwellings such as flats should be provided with a communal waste storage and collection system using large containers housed in one or more enclosed bin storage areas. The bin stores need to have the capacity to contain the required number of 1,100L bins.

5.2.7 The bin stores are required to be located in an area that is accessible to the refuse vehicle, or where this is not possible, the bins must be placed at the kerbside.

Household Waste Collection

5.2.8 Household waste collections of recycling (the blue bin and green box) are collected fortnightly and on alternate weeks to the refuse (the grey bin). All collections from single-occupancy dwellings are kerbside so residents are expected to place bins on the nearest roadside kerb (excluding driveways) before their allotted collection time.

5.3 Commercial Waste

5.3.1 The commercial element of the Proposed Developments comprises a school - 1,200m^2 and up to 2,500m^2 Local Centre with proposed use classes E (a, b, c, e, f and g) and sui generis. No specific local guidance on commercial waste volumes is available and therefore the most appropriate national benchmarks have been used.

Estimated Commercial and School Waste Arisings

Table 5.1: Approximate Required Waste Storage Requirements

Use	Total Area (m^2)	Total Waste Storage Capacity Required (litres – based on weekly collection)	No. of 1100L bins required based on weekly collection
Local Centre[6]	2,500	12,500	12

5.3.2 Estimations for operational waste generated within the primary school has been calculated based on a number of assumptions. With limited detail, as to the expected number of pupils, national average[7] school size has been assumed. This assumption is for a 280-pupil primary school.

5.3.3 Recycle Now provides estimates that a primary school will produce on average 45 kg of waste annually per pupil. On that basis the anticipated waste levels for the school are illustrated in **Table 5.2**.

[6] ADEPT guidance has been utilised, assuming retail uses.

[7] Department of Education – Schools statistics 2019/20

Table 5.2. Approximate Waste volumes produced by the school

Type of School	Estimated Number of Pupils	Waste per pupil per annum[8] (kg)	Total waste produced annually (t)
Primary	280	45	12.6

Storing the Waste Generated

5.3.4 The commercial waste storage space, in line with national benchmarks and guidance, will be developed further at detailed design for each development parcel.

5.3.5 The waste storage space for the local centre and the school will be developed at the detailed design stage. This will incorporate separate storage of recycling and residual waste, with commercial operators encouraged to work towards the national target of achieving recycling and recovery rates for municipal waste of 75% by 2035.

Collection and Post-Collection Waste Management

5.3.6 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. Non-residential waste is likely to be collected by private contractors working in the area. Each business will contract a waste collection service that is appropriate to their needs.

5.3.7 The Proposed Developments will provide sufficient storage for both recycling and residual waste and safe access for Refuse Collection Vehicles to enable an efficient waste management schedule.

[8] WRAP school waste report (2007/8)

6 Summary

6.1 Introduction

6.1.1 The Proposed Developments 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 Phase

Demolition

6.2.1 The existing land use is agricultural land and there are a small number of existing buildings on the Site that will require demolition as part of the enabling works. However, because this Strategy is supporting an outline planning application demolition waste will therefore be considered further at detailed design.

Construction

6.2.2 Waste from the construction of the Proposed Developments is estimated to total 15,600 tonnes over a 8-year development period. This figure excludes waste arisings associated with earthworks and strategic infrastructure (including the waterway). Construction waste will be managed and monitored by the Principal Contractor through the following key strategies and reports, where appropriate:

- **Hazardous Waste Management Plan –** If hazardous waste materials are expected or identified, a specific Hazardous Waste Management Plan would need to be developed, including ensuring that it is minimised;
- **Site Waste Management Plan –** Where appropriate, SWMPs will be produced and updated. Each SWMP will follow the waste management principles as set out in **Section 4.4**; and
- **Sustainable Procurement Plan** – This could be developed by the Principle Contractor and will set out a framework for responsible sourcing of materials to guide procurement throughout the project. A proportion of potential waste generation can be designed out through good design and specifying materials that can be recycled.

6.3 Operational Phase

Household

6.3.1 The average household in the SRBC area currently produces approximately 0.9 tonnes of waste (including recycling) per year and recycling rates for household waste within SRBC are currently ~ 46%[9]. The Proposed Developments will introduce an estimated 1,100 additional households and thus generating an additional estimated 964 tonnes of household waste per annum. This represents an overall increase of 2.22% of household waste managed by SRBC.

6.3.2 The local guidance will be followed as the detailed design is developed to ensure that all residential units conform to the requirements as agreed in consultation with SRBC.

[9] Waste and Recycling Statistics (Department for Environment, Food and Rural Affairs), Local Authority Collected and Household Waste Statistics 2016/2017 England, SRBC and LCC household- Household Total Waste (Tonnes)

Commercial

6.3.3 The commercial element of the Proposed Developments comprises a school - 1,200m^2 and up to 2,500m^2 Local Centre with proposed use classes E (a, b, c, e, f and g) and sui generis. No specific local guidance on commercial waste volumes is available and therefore the most appropriate national benchmarks have been used.

6.3.4 The expected waste storage capacity required for the Proposed Developments, if weekly collections are undertaken, is 12 x 1,100L bins for the Local Centre.

6.3.5 The Proposed Developments will provide sufficient storage for both recycling and residual waste and safe access for Refuse Collection Vehicles to enable an efficient waste management schedule. However, the waste storage space for the commercial waste storage will be developed at detailed design for each development parcel.

6.3.6 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 2013) to adhere to the principles of the Waste Hierarchy. Non-residential waste is likely to be collected by private contractors working in the area. Each business will contract a waste collection service that is appropriate to their needs.

Appendix A Application Site Boundaries

KEY PLAN:

Application Site Boundary

100 05/07/21 Issued for Information

REV:	DATE:	DETAILS:

5plus architects

Manchester. 0161 228 0211
Fourth Floor, The Hive, 47 Lever Street, Manchester M1 1FN

London. 0207 253 7644
Third Floor, 25 Chart Street, London N1 6FA

5plusarchitects.com

PROJECT:
The Lanes, Penwortham

TITLE:
Parameter Plan - Red Line Boundary Application A + B

SCALE:	ORIGIN DATE:	DRAWN:	CHECKED:
1:2500@A1	05/07/21	AB	AT

STATUS:

PROJECT	DRAWING NO:	REV:
05745	MP_00_3000	100