

February 2023

London Luton Airport Expansion

Planning Inspectorate Scheme Ref: TR020001

Volume 5 Environmental Statement and Related Documents
5.02 Appendix 19.1 Outline Site Waste Management Plan

Application Document Ref: TR020001/APP/5.02
APFP Regulation: 5(2)(a)

The Planning Act 2008

**The Infrastructure Planning (Applications: Prescribed Forms and Procedure)
Regulations 2009**

**London Luton Airport Expansion Development Consent
Order 202x**

**5.02 ENVIRONMENTAL STATEMENT APPENDIX 19.1 OUTLINE SITE
WASTE MANAGEMENT PLAN**

Regulation number:	Regulation 5(2)(a)
Planning Inspectorate Scheme Reference:	TR020001
Document Reference:	TR020001/APP/5.02
Author:	Luton Rising

Version	Date	Status of Version
Issue 01	February 2023	Application issue

Contents

	Page
1 Introduction	1
1.2 Requirements of a SWMP	2
2 Waste management legislation	3
2.2 Definition of waste	3
2.3 Duty of care	3
2.4 Apply the waste hierarchy	3
2.5 Registration of waste carriers	4
2.6 Environmental permits and exemptions	5
3 Details of the Proposed Development	6
3.2 Description of the Proposed Development	7
4 Estimate of material use and waste arisings	9
4.1 Introduction	9
4.2 Material resources	9
4.3 Earthworks materials (including excavated landfill material)	13
4.4 Waste	14
5 Design decisions	17
6 Management arrangements	19
6.1 Roles and responsibilities	19
6.2 Key performance indicators	20
7 Materials and waste management on site	21
7.2 Waste hierarchy	21
7.3 Waste management routes	21
7.4 Site waste management measures	22
7.5 Waste carriers and facilities	29
7.6 Waste documentation	29
7.7 Fly-tipping	31
7.8 Reporting and auditing	31
7.9 Review of the SWMP	32
7.10 Additional duty of care checks	32
7.11 Site inspections	32
7.12 Closure reporting	32
Glossary and Abbreviations	36
References	38

Tables

Table 3.1: Project details

Table 4.1: Estimated main types and quantities of materials, resources, wastage and potential recycled content for assessment Phase 1 of the Proposed Development

Table 4.2: Estimated main types and quantities of materials, resources, wastage and potential recycled content for assessment Phase 2a of the Proposed Development

Table 4.3: Estimated main types and quantities of materials, resources, wastage and potential recycled content for assessment Phase 2b of the Proposed Development

Table 4.4: Material to be excavated from the landfill and taken offsite by assessment phase

Table 4.5: Construction, demolition and excavation waste summary

Table 4.6: Waste and Resources Action Programme (WRAP) Standard, good and best practice recovery rates by material (Ref.)

Table 5.1: Waste prevention opportunities and decisions

Table 6.1: Responsibilities for producing the SWMP

Table 7.1: Recommended on-site waste management measures to adhere to the waste hierarchy

Table 7.2: Summary of recommended best practice on-site waste management measures

Inset

Inset 1: Waste hierarchy

1 INTRODUCTION

- 1.1.1 Luton Rising (a trading name of London Luton Airport Limited) (hereafter referred to as the 'Applicant') is submitting an application for development consent for the proposed increase in the capacity of London Luton Airport ('the airport') to 32 million passengers per annum (mppa) (hereafter referred to as the 'Proposed Development'). The Proposed Development is located across five administrative boundaries: Luton Borough Council (LBC), Central Bedfordshire Council (CBC), Hertfordshire County Council (HCC), Dacorum Borough Council (DBC), North Hertfordshire District Council (NHDC). This document, which is an appendix to **Chapter 19** Waste and Resources of the Environmental Statement (ES) **[TR020001/APP/5.01]** is the Outline Site Waste Management Plan (OSWMP) (hereafter referred to as the 'Plan').
- 1.1.2 The principal aim of this Plan is to demonstrate how sustainable methods for managing construction, demolition and excavation (CD&E) waste will be taken into account during the CD&E phases of the Proposed Development. Furthermore, with regards to managing CD&E waste associated with the Proposed Development, this Plan has the following aims:
- a. to contribute towards achieving emerging, current and long term, project, national (England), regional (Bedfordshire and Hertfordshire) and Local (LBC, CBC, HCC, DBC and NHDC) targets for waste minimisation, recycling and reuse of CD&E waste arisings;
 - b. to provide a summary of the CD&E works to provide context of anticipated waste arisings and management;
 - c. to assist the lead contractor in complying with all applicable legal requirements for handling CD&E waste; and
 - d. to assist the lead contractor in achieving high standards of waste management performance.
- 1.1.3 The Plan provides a review of the requirements placed upon the Proposed Development under waste management legislation and policy at all levels of government (i.e. national (England), regional (Bedfordshire and Hertfordshire) and local (LBC, CBC, HCC, DBC and NHDC)).
- 1.1.4 For the purpose of this Plan, waste is defined as per the Waste Framework Directive (Waste FD) (2008/98/EC) as *"any substance or object which the holder discards or intends or is required to discard"* (Ref. 1).

In accordance with of Schedule 2 of the draft Development Consent Order (DCO) **[TR020001/APP/2.01]**, the lead contractor will be obliged to carry out the Proposed Development in accordance with the CoCP. One of the requirements of the CoCP is that there must be a SWMP in place and that it must be complied with throughout construction. The requirement also makes it clear that any SWMP produced must be "substantially in accordance with" this Plan. Adherence to the waste and resource targets that are set out in this Plan are therefore secured through the mechanism set out in Schedule 2.

1.2 Requirements of a SWMP

- 1.2.1 Whilst the SWMP Regulations (2008) (Ref. 2) were revoked in December 2013 (Ref. 3), the production of a SWMP for developments is regarded as best practice, and the requirement for a SWMP is reflected in:
- a. Policy W5. Management of wastes at source: Waste Audits of the Bedfordshire and Luton Minerals and Waste Local Plan (2005) (Ref. 4);
 - b. Policy 12. Sustainable design and demolition of the Hertfordshire Waste Core Strategy and Development Management Policies Development Plan Document 2011-2026 (2012) (covers North Hertfordshire) (Ref. 5);
 - c. Policy 11. Sustainable Design and Resource Efficiency of the Hertfordshire Minerals and Waste Local Plan 2040 Draft Plan (Ref. 6);
 - d. Policy LLP 37. Climate change, carbon and waste reduction and sustainable energy of the Luton Local Plan 2011-2031 (2017) (Ref. 7);
 - e. LBC's Planning Application Validation Information Requirements (2020) (Ref. 8); and
 - f. sustainable design and construction section of the Dacorum Adopted Core Strategy (2013) (Ref. 9).
- 1.2.2 This Plan has been developed to act as a guide to those involved in the construction of the Proposed Development on how to manage resources and waste, in accordance with best practice requirements. The lead contractor shall use this Plan as a framework for producing their own SWMP for use throughout the duration of construction.

2 WASTE MANAGEMENT LEGISLATION

2.1.1 This section summarises the key legal requirements with regards to waste management and control within England.

2.2 Definition of waste

2.2.1 Waste is defined by Article 1(a) of the Waste FD (Ref. 1) as *“any substance or object (in the categories set out in Annex I) which the holder discards or intends to discard or is required to discard”*.

2.2.2 The legal definition of waste also covers substances or objects, which fall outside of the commercial cycle or out of the chain of utility. Most items that are sold or taken off-site for recycling are wastes, as they require treatment before they can be resold or reused.

2.2.3 In practical terms, wastes include surplus earthworks materials and soil, scrap, unwanted surplus materials, packaging, recovered spills, office waste, and damaged, worn-out, contaminated or otherwise spoiled plant, equipment and materials.

2.3 Duty of care

2.3.1 The duty of care for waste management is set out under section 34 of the Environmental Protection Act 1990 (Ref. 10) and the Waste (England and Wales) Regulations 2011 (SI 2011 No. 988) (as amended) (Ref. 11). It requires anyone who produces, imports, keeps, stores, transports, treats or disposes of waste to take all reasonable steps to ensure that the waste is managed properly. Anyone in possession of waste must take all reasonable steps to:

- a. prevent unauthorised or harmful deposit, treatment or disposal of waste;
- b. prevent a breach (failure) by any other person to meet the requirement to have an environmental permit, or a breach of a permit condition;
- c. prevent the escape of waste;
- d. ensure that waste is transferred to an authorised person; and
- e. provide an accurate description of the waste when it is transferred to another person, by using a compulsory system of Waste Transfer Notes (WTN) that control the transfer of waste between parties.

2.3.2 The Waste Duty of Care Code of Practice (Ref.12) sets out practical guidance on how to meet waste duty of care requirements. Failure to comply with the duty of care requirements is a criminal offence and could lead to prosecution.

2.4 Apply the waste hierarchy

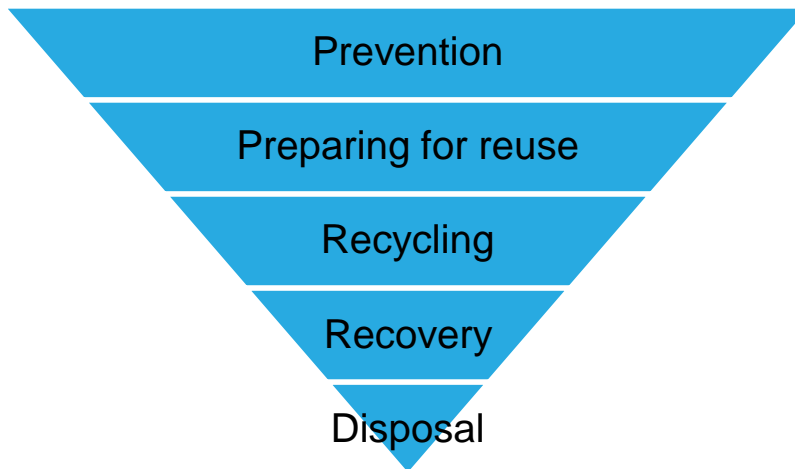
2.4.1 The Waste (England and Wales) Regulations 2011 (as amended) (Ref. 11) transpose the requirements of the Waste FD (Ref. 1), and require:

- a. Those undertaking waste management activities, such as the import, production, collection, transportation, recovery and/or disposal of waste,

to take all reasonable measures to apply the waste hierarchy (Ref.13), in priority order, as follows:

- i. prevention;
 - ii. preparation for reuse;
 - iii. recycling;
 - iv. other recovery, such as energy recovery; and
 - v. disposal.
- b. Those producing waste to confirm that they have applied the waste hierarchy when transferring waste and to include a declaration on their WTN or consignment note.

Inset 1: Waste Hierarchy



2.5 Registration of waste carriers

- 2.5.1 Under the Control of Pollution (Amendment) Act 1989 (Ref. 14) it is a criminal offence for anyone not registered as a waste carrier to transport controlled waste. The Waste (England and Wales) Regulations 2011 (as amended) (Ref.11) updated the system for the registration of waste carriers, including brokers and dealers.
- 2.5.2 Anyone undertaking any of the following activities as part of their business must register as a waste carrier, broker or dealer:
- a. transporting their own waste;
 - b. transporting waste for someone else;
 - c. buying or selling waste; and
 - d. acting as a waste broker (arranging for someone to handle waste produced by someone else).
- 2.5.3 Details of all appointed waste carriers, brokers and contractors shall be included in the lead contactor's SWMP, including copies of appropriate waste carrier licences/registrations. The register of waste carriers, brokers and dealers can be checked using the Environment Agency's Public Registers.

2.6 Environmental permits and exemptions

- 2.6.1 The Environmental Permitting (England and Wales) Regulations 2016 (as amended) (Ref. 15) require sites where waste is processed, treated or disposed of to hold a valid environmental permit issued by the Environment Agency. The Regulations also include a schedule of activities that are exempt from the requirements of permitting. However, to comply with the Regulations, an exempt activity must generally be registered with the Environment Agency before commencing.
- 2.6.2 A permit is not usually required where waste is temporarily stored on the site where it is produced prior to management or disposal. Depending upon the types and quantities of waste to be stored, the duration and place of storage and compliance with other defined conditions:
- a. A non-Waste FD exemption may apply, which does not need to be registered.
 - b. An exemption may need to be registered with the Environment Agency.
- 2.6.3 Information on the limits and conditions for storing waste exemptions and non-waste framework directive exemptions are available online from the Government website (<https://www.gov.uk/guidance/check-if-you-need-an-environmental-permit> , Guidance, Check if you need an environmental permit accessed 2 November 2022).
- 2.6.4 The lead contractor shall be responsible for obtaining the necessary permits and exemptions, where required.
- 2.6.1 Excavated material designated as waste, such as that within the area of the historical Eaton Green landfill as part of the earthworks, will be separated and treated in accordance with the Outline Remediation Strategy (for former Eaton Green Landfill Site Outline Remediation Strategy (**Appendix 17.5** of the ES [TR020001/APP/5.02]) and reused within the Proposed Development under a bespoke Environmental Permit – ‘deposit for recovery’ (DfR) under the Environmental Permitting (England and Wales) Regulations 2016 (Ref.15). The Environmental Permit will be obtained by the lead contractor post application for development consent.

3 DETAILS OF THE PROPOSED DEVELOPMENT

3.1.1 The lead contractor shall complete **Table 3.1** below prior to commencement of construction of the Proposed Development.

Table 3.1: Project details

Project title	Future LuToN					
Project location	Address					
	Town					
	Postcode					
Client (Luton Rising)	Name					
	Address					
	Contact		Email			
	Phone		Mobile			
Lead contractor	Name					
	Address					
	Contact		Email			
	Phone		Mobile			
SWMP Drafter	Name					
	Address					
	Contact		Email			
	Phone		Fax			
Construction cost (estimated)						
Site area (gross area)						
Construction programme:						
Start date	Day		Month		Year	
Completion date	Day		Month		Year	
Waste Management Champion						
Person responsible for SWMP						
Document Controller / Secretary						
Location of SWMP						

3.2 Description of the Proposed Development

- 3.2.1 The Proposed Development includes all works for which consent is being sought as part of the application for development consent.
- 3.2.2 The Proposed Development is characterised by the retention of the existing passenger terminal and the provision of a new passenger terminal on land owned or controlled by the Applicant and its shareholder to the north east of the runway.
- 3.2.3 The main elements of the Proposed Development are:
- a. extension and remodelling of the existing passenger terminal (Terminal 1) to increase the capacity;
 - b. new passenger terminal building and boarding piers (Terminal 2);
 - c. earthworks to create an extension to the current airfield platform; the vast majority of material for these earthworks would be generated on site;
 - d. airside facilities including new taxiways and aprons, together with relocated engine run-up bay and fire training facility;
 - e. landside facilities, including buildings which support the operational, energy and servicing needs of the airport;
 - f. enhancement of the existing surface access network, including a new dual carriageway road accessed via a new junction on the existing New Airport Way (A1081) to the new passenger terminal along with the provision of forecourt and car parking facilities;
 - g. extension of the Luton Direct Air to Rail Transit (Luton DART) with a station serving the new passenger terminal;
 - h. landscape and ecological improvements, including the replacement of existing open space; and
 - i. Further infrastructure enhancements and initiatives to support the target of achieving zero emission ground operations by 2040¹, with interventions to support carbon neutrality being delivered sooner including facilities for greater public transport usage, improved thermal efficiency, electric vehicle charging, on-site energy generation and storage, new aircraft fuel pipeline connection and storage facilities and sustainable surface and foul water management installations.
- 3.2.4 The Proposed Development would be constructed incrementally, delivering the Works described in **Chapter 4** of the ES [TR020001/APP/5.01]. For the purposes of assessment, the Proposed Development is considered in three assessment phases as described in **Chapter 5** of the ES [TR020001/APP/5.01], summarised as:

¹ This is a Government target, for which the precise definition will be subject to further consultation following the Jet Zero Strategy, and which will require further mitigations beyond those secured under the DCO.

- a. Assessment Phase 1: Expansion of existing Terminal 1 (T1) to increase capacity from 18 to 21.5 mppa. It is currently anticipated that Phase 1 works would commence in 2025 and be complete by mid 2027;
- b. Assessment Phase 2a: Construction of Terminal 2 (T2) and associated facilities to increase capacity from 21.5 mppa to 27 mppa upon opening of T2. It is currently anticipated that Phase 2a works would commence in early 2033 ending 2036 and would enable a step up in capacity in the first quarter of 2037; and
- c. Assessment Phase 2b: Expansion of T2 and associated facilities. It is currently anticipated that Phase 2b works would commence in 2037, and would deliver incremental capacity increases from 27 mppa to 32 mppa. T2 would have capacity for 12 mppa once complete. The works would be completed incrementally with the full capacity provided by 2043.

3.2.5 The majority of construction is scheduled to take place during assessment Phase 2a and assessment Phase 2b. Construction will take place over several years, therefore it is anticipated that the lead contractor SWMP will need to be reviewed and updated by the lead contractor as necessary over the operation of the Proposed Development. Details of construction programme assumed for the purposes of assessment are provided in the Construction Method Statement and Programme Report **Appendix 4.1** of the ES [TR020001/APP/5.02] and **Chapter 4** The Proposed Development of the ES [TR020001/APP/5.01].

4 ESTIMATE OF MATERIAL USE AND WASTE ARISING

4.1 Introduction

4.1.1 This Plan provides estimates of:

- a. the likely types and quantities of construction materials required for the construction of the Proposed Development and the likely reused, recycled and secondary content;
- b. the likely types and quantities of earthworks materials arising during construction of the Proposed Development and the likely cut and fill balance and surplus requiring alternative management; and
- c. the likely types and quantities of waste arising during construction of the Proposed Development and the likely management route and resulting recovery rate.

4.1.2 The quantities of waste generated and quantities of aggregates required for the Proposed Development has been split according to the Proposed Development assessment phases.

4.1.3 The lead contractor shall review, update and monitor these estimates throughout the design and construction of the Proposed Development, and incorporate these updates in the SWMP to ensure delivery of the Proposed Development Key Performance Indicators (KPIs) as set out in **paragraph 6.2.2**.

4.2 Material resources

4.2.1 The main types and quantities of construction materials required for each assessment phase have been provided by the design and constructability team. This is shown in **Table 4.1** (assessment Phase 1), **Table 4.2** (assessment Phase 2a) and **Table 4.3** (assessment Phase 2b), along with the recycled content that is expected to be achievable by adopting good practice approaches. Steel is measured in tonnes only.

4.2.2 For all assessment phases, the lead contractor shall ensure that reused, recycled and secondary aggregates imported to site comply with all relevant technical and regulatory requirements.

Table 4.1: Estimated main types and quantities of materials, resources, wastage and potential recycled content for assessment Phase 1 of the Proposed Development

Material Category	Material density	Quantity to be used in construction		Wastage rate	Wastage		Potential recycled content (% by weight)	Potential recycled content (tonnes)
	(tonnes/m ³)	m ³	tonnes	%	m ³	tonnes		
Concrete	2.4	46,373	111,295	5	2,319	5,565	16	17,807
Asphalt	2.4	57,505	138,013	2.5	1,438	3,450	25	34,503
Steel – Structural	7.85	not applicable (n/a)	301	0	n/a	0	60	181
Steel – Rebar	7.85	n/a	123	2	n/a	2	100	123
Aggregate	1.9	33,708	64,046	5	1,685	3,202	50	32,023
Earthworks material (granular) – imported	1.9	72,000	136,800	5	3,600	6,840	50	68,400
Total		209,587	450,578				Total recycled content all materials (tonnes)	153,037
							%	34

Table 4.2: Estimated main types and quantities of materials, resources, wastage and potential recycled content for assessment Phase 2a of the Proposed Development

Material Category	Material density (tonnes/m ³)	Quantity to be used in construction		Wastage rate %	Wastage		Potential recycled content (% by weight)	Potential recycled content (tonnes)
		m ³	tonnes		m ³	tonnes		
Concrete	2.4	393,509	944,421	5	19,675	47,221	16	151,107
Asphalt	2.4	104,866	251,678	2.5	2,622	6,292	25	62,919
Steel – Structural	7.85	1,139	8,941	0	-	-	60	5,365
Steel – Rebar	7.85	789	6,197	2	16	124	100	6,197
Aggregate	1.9	461,384	876,629	5	23,069	43,831	50	438,315
Earthworks material – imported	1.9	72,000	136,800	5	3,600	6,840	50	68,400
Total		1,033,687	2,224,666				Total recycled content all materials (tonnes)	732,303
							%	33

Table 4.3: Estimated main types and quantities of materials, resources, wastage and potential recycled content for assessment Phase 2b of the Proposed Development

Material Category	Material density (tonnes/m ³)	Quantity to be used in construction		Wastage rate %	Wastage		Potential recycled content (% by weight)	Potential recycled content (tonnes)
		m ³	tonnes		m ³	tonnes		
Concrete	2.4	85,882	206,117	5	4,294	10,306	16	32,979
Asphalt	2.4	63,126	151,503	2.5	1,578	3,788	25	37,876
Steel – Structural	7.85	584	4,585	0	-	-	60	2,751
Steel – Rebar	7.85	296	2,324	2	6	46	100	2,324
Aggregate	1.9	137,087	260,466	5	6,854	13,023	50	130,233
Earthworks material – imported	1.9	179,000	340,100	5	8,950	17,005	50	170,050
Total		465,975	965,094				Total recycled content all materials (tonnes)	376,212
							%	39

4.3 Earthworks materials (including excavated landfill material)

- 4.3.1 Over all assessment phases it is estimated that 2,839,000m³ of non-hazardous material (excluding the material excavated during the landfill works) would be excavated, and it is anticipated that all of this material would be reused on site and incorporated into the landform, thus achieving a cut and fill balance. Therefore, it is anticipated that this material would be managed onsite.
- 4.3.2 It is anticipated that the use of excavated materials (excluding the material excavated during the landfill works) within the Proposed Development will be undertaken in accordance with a Materials Management Plan (MMP) prepared under the CL:AIRE Definition of Waste: Code of Practice (CL:AIRE DoW CoP) (Ref. 16) and these materials would not be classified as waste. The lead contractor will produce an MMP as described in the CoCP (**Appendix 4.2** of the ES [TR020001/APP/5.02]).
- 4.3.3 Overall, in all three assessment phases 350,000 m³ of material would be excavated during the landfill works. Of this 313,000 m³ would be reused or recycled on site and incorporated into the landform. Therefore, it is anticipated that the majority of this material would be managed onsite.
- 4.3.4 Table 4.4 presents the quantities of waste to be taken offsite for recycling or recovery. The majority of waste will be diverted from landfill with the remaining hazardous waste to be sent to hazardous waste landfill or for incineration.
- 4.3.5 It is anticipated that the use of excavated materials from the landfill works will be undertaken in accordance with an environmental permit.

Table 4.4: Material to be excavated from the landfill and taken offsite by assessment phase

	Waste management route	Assessment Phase 1 (m ³)	Assessment Phase 2a (m ³)	Assessment Phase 2b (m ³)
Total excavated material to be taken offsite		3,000	32,000	2,000
Total hazardous waste		1,500	16,000	1,000
Hazardous - asbestos (25% of hazardous waste)	Non-hazardous landfill (Stable non-reactive hazardous waste (SNRHW) cell)	375	4,000	250
Hazardous - soil (60% of hazardous waste)	Soil treatment (recycling/recovery)	900	9,600	600

Hazardous - other (15% of hazardous waste)	Hazardous waste landfill or incineration	225	2,400	150
Non-hazardous	Recycling/recovery	1,500	16,000	1,000

4.3.6 For all assessment phases, the lead contractor shall be responsible for the management of surplus excavated materials and should apply the waste hierarchy in determining the most suitable options.

4.4 Waste

4.4.1 The main types and quantities of waste expected to arise during all three assessment phases have been estimated based on information provided by the design and constructability team (**Table 4.5**). Potential waste recovery rates are shown in **Table 4.6**.

4.4.2 The lead contractor shall be responsible for the management of waste and should apply the waste hierarchy in determining the most suitable waste management route.

4.4.3 Where waste is reused or recycled for use in the Proposed Development, the lead contractor shall ensure compliance with all relevant technical and regulatory requirements.

Table 4.5: Construction, demolition and excavation waste summary

Construction, demolition and excavation waste	Waste type	Waste management route	Assessment phase 1		Assessment phase 2a		Assessment phase 2b	
			m ³	tonnes	m ³	tonnes	m ³	tonnes
Construction waste – material wastage	Inert	Recycling	9,042	19,057	48,966	104,184	21,677	44,122
Construction waste – material wastage	Non-hazardous	Recycling /recovery	-	2	16	124	52	46
Construction waste – buildings	Inert	Recycling	747	239	9,332	2,986	6,002	1,921
Construction waste – buildings	Non-hazardous	Recycling /recovery	747	239	9,332	2,986	6,002	1,921
Demolition waste	Inert	Recycling	87,433	200,454	196,372	327,213	200,063	213,396
Demolition waste	Non-hazardous	Recycling	388	124	24,588	8,024	42,749	13,680
Vegetation clearance	Non-hazardous	Recycling /recovery	1,128	777	2,346	1,637	811	558
Excavated waste (historic landfill excavation only)	Non-hazardous	Recycling /recovery	1,500	Excavated materials quantified in m ³ only	16,000	Excavated materials quantified in m ³ only	1,000	Excavated materials quantified in m ³ only
Hazardous waste (destined for landfill only)	Hazardous	Landfill	225	Excavated materials quantified in m ³ only	2,400	Excavated materials quantified in m ³ only	150	Excavated materials quantified in m ³ only

Table 4.6: Waste and Resources Action Programme (WRAP) Standard, good and best practice recovery rates by material (Ref. 17)

Material	Standard practice recovery (%)	Good practice quick win (%)	Best practice recovery (%)
Timber	57	90	95
Metals	95	100	100
Plasterboard (excludes demolition)	30	90	95
Packaging	60	85	95
Ceramics/masonry	75	85	100
Concrete	75	95	100
Inert	75	95	100
Plastics	60	80	95
Miscellaneous	12	50	75
Electrical equipment	Limited information	70*	95
Furniture	0-15	25	50
Insulation	12	50	75
Cement	Limited information	75	95
Liquids and oils	100	100	100
Hazardous	50	Limited information, this cannot be 100% as much hazardous waste (e.g. asbestos) must be landfilled.	
* This is a required recovery target for the type of Waste Electrical and Electronic Equipment (WEEE) likely to be produced from construction sites, e.g. lighting (WEEE Regulations, 2013 (Ref. 18))			

5 DESIGN DECISIONS

- 5.1.1 Decisions made during the design stages (pre-application and post consent) of the Proposed Development will impact on the quantity and types of materials used and waste arising and the management of waste.
- 5.1.2 This section describes the design decisions made to-date related to materials and waste, sets out general design considerations for detailed design and provides a table (**Table 5.1**) which should be completed by the lead contractor to document further opportunities for waste prevention and decisions taken regarding material resource use and waste management.
- 5.1.3 A designing out waste workshop was completed on 4 June 2019 and opportunities have been discussed further with the design team throughout the design process at follow up discussions. The following WRAP designing out waste principles have been explored:
- a. design for reuse and recovery;
 - b. design for off-site construction;
 - c. design for material optimisation;
 - d. design for waste efficient procurement; and
 - e. design for deconstruction and flexibility.
- 5.1.4 The Proposed Development design team have to date identified a number of designing out waste opportunities, which have been prioritised, investigated and implemented where appropriate. The designing out waste opportunities to be investigated further during subsequent design stages and construction are summarised as follows:
- a. recycling of demolition waste on-site;
 - b. recycling and use on-site of existing landfill material;
 - c. balancing the cut (excavation) and fill (material placement) (earthworks excluding landfill material);
 - d. clearing vegetation in winter;
 - e. using materials with recycled content;
 - f. off-site manufacture of design elements;
 - g. working platform (temporary geotechnical structure, consisting of compacted granular fill, installed to allow construction plant and vehicles to travel and/or operate on-site) incorporated into final structure; and
 - h. setting waste targets in line with the ANPS.
- 5.1.5 In general, the following good practice measures would be implemented during the design and construction stages of the Proposed Development, where practicable:
- a. manage waste in accordance with the waste hierarchy;
 - b. design-out and prevent waste arising;

- c. reuse excavated earthworks materials within the Proposed Development;
- d. recycle demolition materials arising from Proposed Development within the construction of the Proposed Development;
- e. divert waste from landfill through offsite recycling and recovery; and
- f. use recycled and secondary materials in the construction of the Proposed Development.

5.1.6 At all stages of design and construction, the lead contractor shall record, in the SWMP (**Table 5.1**):

- a. all opportunities for waste prevention; and
- b. decisions taken regarding material resource use and waste management

Table 5.1: Waste prevention opportunities and decisions

Material / waste	Estimated reduction in waste arising tonnes m ³	Approach by which reduction achieved	Are any additional consents/permits/licences required for the change?	Estimated cost saving (£)	Persons responsible for completing action

6 MANAGEMENT ARRANGEMENTS

6.1 Roles and responsibilities

6.1.1 The main contract personnel responsible for producing the SWMP are shown in **Table 6.1** below.

Table 6.1: Responsibilities for producing the SWMP

Position	Name	Contact details	SWMP responsibility
Main Contract personnel			
The Client Project Manager			a. Monitor the lead contractor' performance against the contract including any environmental commitments and targets agreed for the Proposed Development.
Project Manager (lead contractor)			a. Approval of the SWMP for the relevant phase of works. b. Ensure that all controls specified within the SWMP are implemented by employees and sub-contractors.
Environment Manager /Environmental Clerk of Works (lead contractor)			a. Undertake site inspections to monitor compliance with the environmental licences/consents for the works and the measures within the SWMP. b. Ensure that the Proposed Development complies with all environmental legislation, consents, objectives, targets and other environmental commitments, including those arising from the Environmental Statement throughout the relevant project phase.
Site Materials and Waste Manager (lead contractor)			a. Prepare the SWMP. b. Implement the SWMP throughout the construction of the Proposed Development and ensure that waste is disposed of legally, economically and safely in line with the SWMP and all relevant legislation. c. Provide appropriate professional and practical advice to lead contractor, consultants and project team members associated with materials and waste issues.

Position	Name	Contact details	SWMP responsibility
Sub-contractor details			
Individual Sub-contractor(s), as appointed			<ul style="list-style-type: none"> a. Read through, familiarise and understand the requirements of the SWMP. b. Produce waste documentation and comply with the requirements set out in the SWMP.

6.2 Key performance indicators

6.2.1 The environmental assessment of the Proposed Development is based on the Proposed Development achieving certain performance standards with respect to the use of recycled and secondary content in key construction materials and the recovery of construction and demolition waste and diversion from landfill.

6.2.2 In order to achieve these performance standards, the lead contractor shall adopt the following KPIs for the Proposed Development and shall record the necessary data to confirm compliance with these KPIs:

- a. Achieve at least 90% (by weight) material recovery of non-hazardous construction and demolition waste. Uncontaminated excavated soil and stones (European Waste Catalogue/List of Wastes code 17 05 04) are specifically excluded from this target. Recovery is deemed to include reuse, recycling and recovery (e.g. energy recovery).
- b. Achieve a minimum of 25% recycled or secondary content in key construction materials (e.g. concrete and steel).
- c. Achieve at least 50% preparation for reuse, reuse and recycling of municipal waste (waste materials such as at least paper, metal, as far as these waste streams are similar to waste from households).

7 MATERIALS AND WASTE MANAGEMENT ON SITE

- 7.1.1 This section of the Plan details the likely waste management measures and procedures to be implemented on-site during the CD&E phases. Detailed information will be provided in the SWMP prepared by the lead contractor, once details and methods associated with the CD&E activities are known.
- 7.1.2 All waste management methods to be implemented on-site shall be in accordance with the waste hierarchy, discussed below.

7.2 Waste hierarchy

- 7.2.1 Those generating waste have a legal duty of care to comply with the waste hierarchy. The waste hierarchy is a concept that encourages the management and reduction of waste material. The aim is to recover the maximum value from projects/developments by reducing financial losses through material loss during the CD&E phases.
- 7.2.2 The waste hierarchy is a complex process influenced by the optimal management of any given product/waste material. A basic representation of the waste hierarchy is provided in Inset 1 and the lead contractor shall use the hierarchy as a guide to encourage the prevention of waste, followed by reuse and recycling.
- 7.2.3 When considering waste management options for the Proposed Development, the lead contractor shall take account of the site's location, natural environment and available infrastructure. The lead contractor shall consider the options in **Section 7.3** when determining the preferred waste management option for each waste stream.

7.3 Waste management routes

Preparing for reuse

- 7.3.1 The aim is to provide design features on the Proposed Development to use site-won materials in their current state and form. Reuse can be undertaken either onsite or offsite.
- 7.3.2 Where possible, excavated earthworks materials and soils arising from the Proposed Development will be stockpiled on site and reused within the Proposed Development.

Recycling

- 7.3.3 The aim is to reuse site-won materials by recycling them into an alternative form that can be used for construction purposes (for example crushing concrete, brick or other inert wastes to produce aggregate material). By recycling on site, as far as practicable, the quantity of waste requiring offsite management is reduced and carbon emissions associated with transportation are eliminated.
- 7.3.4 Recycling may also be achieved by utilising materials with a recycled content, such as recycled aggregates produced offsite.

Recovery

- 7.3.5 This generally aims to recover energy from waste which cannot otherwise be reused or recycled. This may include waste materials such as hazardous liquids or solids that can be sent to energy from waste facilities.
- 7.3.6 Recovery may also include the beneficial use of materials on land for restoration (e.g. deposit for recovery).

Disposal

- 7.3.7 The least preferred option in the waste hierarchy is a final disposal route such as landfill or incineration without energy recovery. Some waste streams would inevitably end up with such a solution.
- 7.3.8 When placing waste disposal contracts, the lead contractor shall consider the implications of long distance travel in terms of health and safety risk, commercial terms and increased emissions from vehicles.
- 7.3.9 The lead contractor shall ensure the pre-treatment of all hazardous and non-hazardous wastes prior to disposal to landfill. The methods of pre-treatment would enable the waste to meet the 'three-point test':
- a. it must be a physical, thermal, chemical or biological process including sorting;
 - b. it must change the characteristics of the waste; and
 - c. it must do so in order to:
 - i. reduce its volume; or
 - ii. reduce its hazardous nature; or
 - iii. facilitate its handling; or
 - iv. enhance its recovery.
- 7.3.10 Source segregation can be seen as a pre-treatment option and as such can be applied to waste generation on site including general waste and arisings, and would take place on the Proposed Development.
- 7.3.11 The lead contractor shall ensure that a declaration stating the pre-treatment method applied to the waste is appended to any WTN for non-hazardous waste being sent for disposal.

7.4 Site waste management measures

- 7.4.1 Where it is necessary to transport waste to and from the site, this will be undertaken in compliance with the Waste (England and Wales) Regulations 2011 (as amended) (Ref. 11) including: transporting waste via registered carrier, disposal to appropriately licensed sites and maintenance of appropriate waste transfer documentation. All contractors will be required to apply the principles of the waste hierarchy and investigate opportunities to minimise waste generation.
- 7.4.2 The disposal of all waste or other materials removed from the site would be undertaken in accordance with legal requirements. Any waste effluent (including

to be discharged into the local sewerage network) would be tested and where necessary treated and disposed of at an appropriately licensed facility by a licensed specialist contractor.

7.4.3 The risk of infestation by pests or vermin on site would be minimised by making adequate arrangements for the disposal of food and other material potentially attracting pests. Where there is a local infestation, the relevant local authorities would be consulted.

7.4.4 The lead contractor shall adopt best practice measures set out in construction industry guidance to reduce the potential impacts from material resources and waste. This may include, for example, guidance from Considerate Constructors Scheme (CCS), WRAP and Construction Industry Research and Information Association (CIRIA). Recommended on-site waste management measures to adhere to the waste hierarchy, and best practice which should be employed on site, are presented in **Table 7.1** and

7.4.5 **Table 7.2** respectively.

Table 7.1: Recommended on-site waste management measures to adhere to the waste hierarchy

Site waste management measure	Waste hierarchy principle	Phase	Waste stream	Description
Supplier take-back	Reduce/prevention	Construction	Construction Materials	Agreements with material suppliers to reduce the amount of packaging or to participate in a packaging take-back scheme. The lead contractor could set up a take-back arrangement with suppliers in order to prevent packets and packaging being broken up and placed in skips.
Just in time deliveries	Reduce/prevention	Construction	Construction Materials	The lead contractor should implement a just-in-time delivery system in order to try and avoid the over-ordering of materials and stockpiling. This will prevent surplus materials from risk of damage and disposal as waste.
Standardisation	Reduce/prevention	Construction	Construction Materials	Use of standard size components in design to eliminate waste at source

Site waste management measure	Waste hierarchy principle	Phase	Waste stream	Description
				<p>where possible to do so. The lead contractor should implement standard sizes for most items ordered in order to avoid cutting on-site; materials are to be ordered in size in order to allow for minimum waste production.</p>
<p>Pre-assembly and pre-fabrication</p>	<p>Reduce/prevention</p>	<p>Demolition and construction</p>	<p>Construction Materials</p>	<p>Throughout the design and construction phases of the Proposed Development, emphasis should be on pre-assembly and pre-fabrication of elements wherever practicable to minimise on-site waste generation and packaging waste.</p>
<p>Re-use of materials on site wherever feasible</p>	<p>Reuse</p>	<p>Demolition and construction</p>	<p>Multiple</p>	<p>For example, the Government has set broad targets for the use of recycled and secondary aggregates, and in keeping with best practise, lead contractor will be required to maximise the proportion of materials recycled.</p>
<p>Concrete crushing</p>	<p>Reuse</p>	<p>Demolition and construction</p>	<p>Concrete and brick</p>	<p>In keeping with guidelines set out by the Government for reclaiming aggregates, deconstructed concrete (if appropriate) will be taken off-site for crushing and re-use. Where practicable, all concrete and brick elements will pass through crushing machines and the residual material will be</p>

Site waste management measure	Waste hierarchy principle	Phase	Waste stream	Description
				recycled for use on-site in line with best practice.
Wheel washers and rainwater harvesting systems	Reuse	All	Liquids	The use of recycling water systems such as wheel washers and rainwater harvesting systems for use in equipment and vehicle washing will be investigated in order to maximise reuse and to reduce energy consumption.
Re-use and recycling of materials off site	Reuse	All	All	Where re-use on-site is not practical (for example through use of an off-site waste segregation facility and re-sale for direct re-use or re-processing).
Segregation of waste at source	Recycling	All	All	Waste segregation strategies will be developed and implemented in-line with the overarching plan for logistics for the site. Substances hazardous to health, for example gypsum/plasterboard and liquid waste will be segregated.
Colour coding and signage	Recycling	All	All	Skips to be colour coded and signposted to reduce risk of cross contamination and covered to prevent dust and debris blowing around the site, these will be cleared on a regular basis.
Staff training	All	All	n/a	All staff on-site will be appropriately trained on how to reuse materials,

Site waste management measure	Waste hierarchy principle	Phase	Waste stream	Description
				prevent and recycle waste.

Table 7.2: Summary of recommended best practice on-site waste management measures

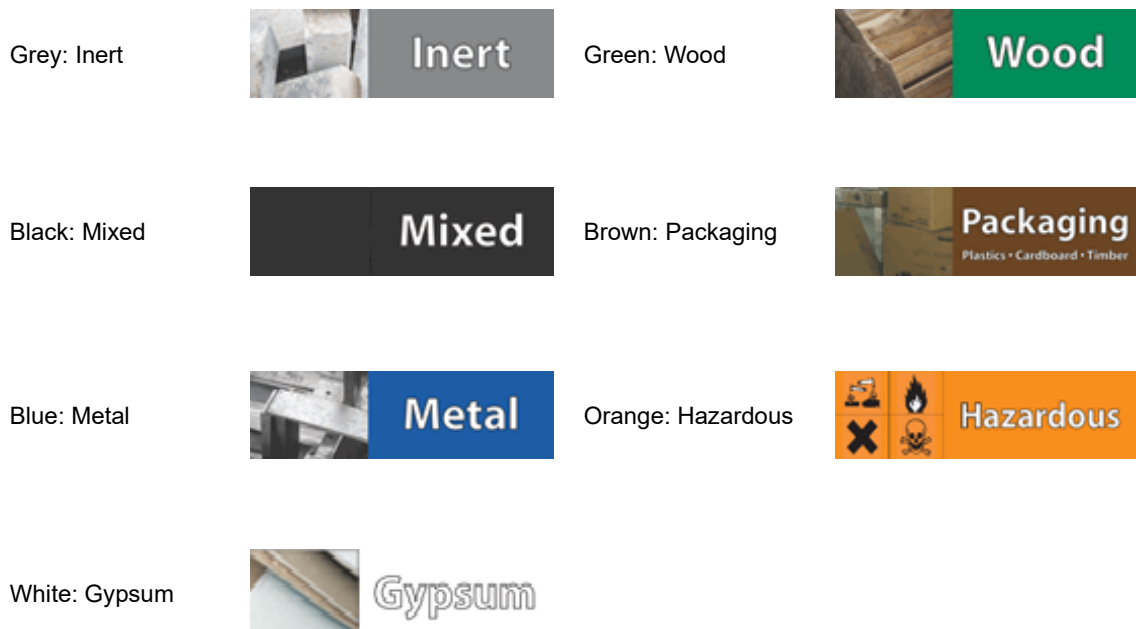
Waste management measures	Waste stream	Description
Appropriate concrete storage used to minimise dust and reduce vehicle movement	Concrete	Any processed concrete material should be stockpiled, and any dust generated shall be controlled with covers or dampened with water.
Surface drainage, ground waste seepage and dewatering of the Site	Liquid waste	All surface drainage and dewatering of the Site should pass through a settlement tank prior to entering the foul water sewer. Discharge arrangements into the foul water sewer will be agreed with the local sewerage company.
Liquid disposal	Liquid waste	The lead contractor will check that any water, which may have come into contact with contaminated materials will be disposed of in accordance with the Water Resources Act 1991 (Ref. 19), and to the satisfaction of the Environment Agency or the local sewerage company.
Clearing of Containing Materials (ACMs)	Asbestos Containing Materials	In line with the Control of Asbestos Regulations 2012 (Ref. 20), Asbestos Containing Materials (ACMs) present on-site will be appropriately removed and disposed of prior to the start of the demolition by a suitable qualified contractor.
Sealing of containers	All hazardous materials	All hazardous materials including chemicals, cleaning agents, solvents and solvent containing products will be properly sealed in containers (of 110% volume of the materials stored) at the end of each day prior to storage in appropriately protected and bunded storage areas.
Classification and management of	All hazardous materials	Should any potentially contaminated materials be identified for disposal during the

Waste management measures	Waste stream	Description
potentially contaminated materials		construction phases, this waste will be classified in accordance with the Waste Classification Technical Guidance (WM3) (Ref. 21).
Audit trail: Transportation and disposal	All waste streams	The lead contractor will dispose of all waste or other materials removed from the Site in accordance with regulatory requirements and provide evidence that all waste has been deposited or transferred to the correct place and by appropriately licensed contractors (i.e. an audit trail). WTNs will be used to document waste production within the confines of the site and movement to external facilities. These WTNs will detail the type of waste, waste volume, waste classification, contractor, ultimate disposal route and other necessary information. Records will be updated documenting that all waste transferred or disposed of has been correctly processed with evidence of signed WTNs that will be kept on-site for inspection whenever requested by the Environment Agency.
Storage	All waste streams	The storage of potentially polluting plant and materials will be limited as far as possible. For example, the plant could be re-fuelled from visiting fuel trucks rather than from on-site fuel bowsers. All spoil will also be stored on impermeable surface areas, with bunding, in order to prevent potential contaminated material coming into contact with flora or fauna. The bunded areas will also prevent contact with water, which could allow contaminants to seep into the local drainage network, or leach to groundwater, and have damaging effects on both humans and wildlife.
Dampening down of surfaces	All waste streams	Dampening down of surfaces during spells of dry weather and brushing/water spraying of heavily used hard surfaces/access points across the site as required.
Provision of on-site waste burning	All waste streams	Burning of waste or unwanted materials will not be permitted on-site.

Waste management measures	Waste stream	Description
Instruction and training	All waste streams	The lead contractor will incorporate the SWMP requirements into the site induction and the lead contractor shall provide on-site instruction of appropriate separation, handling, recycling, reuse and return methods to be used by all parties at all appropriate stages of the Proposed Development. The lead contractor shall ensure that all personnel working on site, including sub-contractors, are inducted.

7.4.6 In addition to the above measures, the lead contractor shall implement the following waste management procedures:

- a. All waste containers shall be secure to ensure that no waste is allowed to escape.
- b. All waste containers shall be clearly labelled using a colour coding system so that users know what wastes can be placed in each container. Waste containers shall be appropriately colour coded using generic colour codes. An example is shown below:



- c. Lockable storage would be provided for all hazardous waste.
- d. All waste containers shall be sited at least 10m away from watercourses, ditches and other areas of environmental sensitivity.

- e. Liquid wastes shall be stored in enclosed/lidded containers and stored within a suitable bunded area, or otherwise provided with secondary containment.
- f. Separate containers shall be provided for each type of hazardous waste.
- g. Sewage from the site offices/compounds would drain to septic tank and be collected by a suitable specialist waste contractor.
- h. Portable toilet facilities on site (Portaloos etc.) shall be emptied by the facility provider as per their service agreement.

7.5 Waste carriers and facilities

- 7.5.1 The lead contractor shall manage all waste generated by the Proposed Development in accordance with legal requirements. The lead contractor shall record details of the proposed waste carrier for each waste stream in the registration table, with registered waste carrier details appended to the SWMP. An example table for demonstrating waste carrier registration is available in Annex A.
- 7.5.2 The lead contractor shall ensure that the following information is recorded for all waste facilities used:
 - a. contractors name;
 - b. date(s) of waste removal;
 - c. type(s) of waste removed (i.e. non-hazardous waste, hazardous waste, inert (specify));
 - d. method of treatment, recovery or disposal (i.e. reuse, recycling, incineration, landfill etc.);
 - e. volume or weight of waste removed;
 - f. recovery rate achieved; and
 - g. costs associated with waste removal, transport and treatment, including Landfill Tax charges where applicable.

7.6 Waste documentation

- 7.6.1 All waste documentation will be retained at the main site compound and, following completion of construction works, at the lead contractor's Head Office. This includes:
 - a. SWMP (to be retained for two years after completion of the relevant construction works);
 - b. waste transfer documentation (to be retained for two years for WTNs and three years for hazardous waste consignment notes (HWCN));
 - c. copies of any exemptions or permits; and
 - d. copies of any waste carrier and disposal site licenses.

Waste transfer notes (WTN)

- 7.6.2 The lead contractor shall ensure that all movements of waste from site are accompanied by a WTN, which will detail specific information. The lead contractor' Site Materials and Waste Manager or other competent person shall check that each WTN contains the following:
- a. the name of the person receiving the waste and what they are authorised to do with that waste (e.g. a Registered Waste Carrier can only transport waste);
 - b. type of waste;
 - c. the Standard Industrial Classification (SIC) code;
 - d. the six-digit European Waste Catalogue (EWC) code;
 - e. address of the producing site and details of the waste producer;
 - f. waste carrier's details including registration number;
 - g. quantity of waste;
 - h. how it is contained (e.g. 8 cubic yard skip);
 - i. address of the receiving site (e.g. landfill) and the environmental permit or exemption no. associated with the receiving site;
 - j. the date to which the WTN applies;
 - k. if the material is non-hazardous waste and it is destined for disposal directly to landfill, pre-treatment must have been applied and a declaration detailing the treatment applied appended to the WTN; and
 - l. a declaration that the waste has been treated in line with the requirements of the waste hierarchy.
- 7.6.3 The lead contractor Site Materials and Waste Manager signing the WTN shall ensure all WTNs are kept for a minimum period of two years (for non-hazardous waste).
- 7.6.4 By signing a WTN the lead contractor Site Materials and Waste Manager is confirming that all the details are correct and that the material is to be sent by a registered waste carrier to a suitably licensed receiving site, permitted to receive that type of waste. The signature is binding of this fact and completes the WTN as a legal document.
- 7.6.5 The lead contractor Site Materials and Waste Manager or other competent person signing the WTN shall additionally ensure that the registered waste carrier is using a suitable vehicle with adequate, covered containment for the waste.
- ## Hazardous waste consignment notes (HWCN)
- 7.6.6 The lead contractor shall ensure that a HWCN is completed for every movement of hazardous waste. Prior to signing, the Site Materials and Waste Manager or another competent person shall ensure that the HWCN includes:

- a. HWCN code;
- b. SIC Code;
- c. name and address of the site from which the waste is being moved;
- d. date of removal;
- e. type of waste produced, including the quantity and the EWC code;
- f. the name of the person who is receiving the waste and what they are authorised to do with that waste e.g. Registered Waste Carrier can only transport waste;
- g. the final disposal site that is authorised to accept the waste; and
- h. retention period for hazardous waste.

7.6.7 The lead contractor shall retain a copy of the HWCN for a minimum of three years.

7.7 Fly-tipping

7.7.1 Fly-tipping of waste on or adjacent to ongoing construction projects can be a significant issue.

7.7.2 Should waste be fly-tipped on the site, the lead contractor shall have a duty of care to ensure it is dealt with safely and disposed of correctly, even though not the producer of the waste. The lead contractor shall report any instance of fly-tipping to the relevant authorities.

7.8 Reporting and auditing

7.8.1 The effectiveness of the SWMP will depend upon the enforcement of its requirements on site by the nominated Site Materials and Waste Manager and Project Manager. Responsibility for the formal recording of waste movements lies with the Site Materials and Waste Manager or Project Manager.

7.8.2 The lead contractor shall maintain a record of all materials that come on to site. The quantity of reused, recycled and secondary aggregate shall be recorded, alongside details of the supplier, the producing facility and records that demonstrate that the material meets all relevant technical and regulatory requirements. An example table for recording materials imported to site is available in Annex B.

7.8.3 The lead contractor shall maintain a record of all wastes that are removed from the site and their management route. Each waste management contractor shall provide details of the types and quantities of waste removed from the site, the receiving waste management facility and the associated recycling, recovery and disposal rates for each waste stream. An example table for recording waste management is available in Annex C.

7.8.4 The lead contractor shall monitor, and record details of the wastes placed in all waste receptacles to ensure that contamination has not occurred.

- 7.8.5 The lead contractor shall continually review the types of surplus materials and waste being produced and change the site set up to minimise wastage rates and maximise reuse or recycling.
- 7.8.6 The Client or its representatives may carry out 'spot checks' in relation to the completeness of any WTNs and any HWCNs.
- 7.8.7 If any problems are identified during the construction of the Proposed Development in relation to exceeding the expected SWMP waste stream quantities, failure to meet stated KPI targets, or issues relating to the cost effective and legal transfer of waste, then the lead contractor site representative shall escalate these to the Project Manager for further discussion on the best solution. This may trigger a review of the SWMP.

7.9 Review of the SWMP

- 7.9.1 The lead contractor shall review the SWMP at least once every six months during the construction of the Proposed Development to ensure that KPI targets are being achieved and that realistic solutions are provided for unplanned events or abnormal wastes. The lead contractor shall also review the SWMP if there is any significant change in the Proposed Development. These reviews will involve the completion and submission of a monitoring report to the Client (or its representative) in an agreed format.

7.10 Additional duty of care checks

- 7.10.1 The lead contractor shall periodically, at intervals to be determined, follow waste loads to confirm that the waste has been transferred to the place stated on the WTN, with any irregularities investigated immediately, and reported as an environmental incident. Action may involve termination of contract and/or notification to the Environment Agency.

7.11 Site inspections

- 7.11.1 The Site Manager or nominated deputy shall undertake a daily inspection of the construction areas including all areas used for waste management. Any issues shall be recorded in the daily log along with any corrective action taken.

7.12 Closure reporting

- 7.12.1 Within three months of the completion of works under a contract, the lead contractor shall submit a Waste Management Closure Report to the Client (or its representative) to demonstrate the effective implementation, management and monitoring of construction materials and waste during the construction lifetime of the Proposed Development.

Annex A – Waste carriers

Waste type(s)	EWC code	Waste carrier name	Contact details	Waste carriers registration number	Expiry date	Date checked with Environment Agency (dd/mm/yyyy)

Annex B – Construction materials imported to site

Client Name:		Key Performance Indicator: Achieve a minimum of 25% recycled or secondary content in key construction materials (e.g. concrete and steel).
Project:		
Lead contractor:		

Material / aggregate	Material density (tonnes/m ³)	Quantity required for construction (tonnes)	Quantity to be imported to site (tonnes)	Supplier	Supplier facility	Facility permit / licence / exemption number	Evidence of compliance with specification/protocol	Recycled content (% by weight)
Overall proportion of reused, recycled and secondary content (% (by weight))								

Annex C – Waste management

Client name		Key Performance Indicators: a. Achieve at least 90% (by weight) material recovery of non-hazardous construction and demolition waste. Uncontaminated excavated soil and stones (European Waste Catalogue/List of Wastes code 17 05 04) are specifically excluded from this target. Recovery is deemed to include reuse, recycling and recovery (e.g. energy recovery). b. Achieve at least 50% preparation for reuse, reuse and recycling of municipal waste (waste materials such as at least paper, metal, as far as these waste streams are similar to waste from households).
Project:		
Lead contractor:		

Waste type	EWC Code	Quantity (tonnes)	Onsite		Offsite			Waste carrier	Offsite waste management facility
			Reused on site	Recycled onsite	Reused offsite	Recycled offsite	Recovered offsite		

Non-hazardous construction and demolition waste recovered	% (by weight)
--	----------------------

GLOSSARY AND ABBREVIATIONS

Term	Definition
ACM	Asbestos Containing Materials
CBC	Central Bedfordshire Council
CCS	The Considerate Constructors Scheme – a non-profit making, independent organisation founded in 1997 by the construction industry to improve its image
C&D waste	Construction and demolition waste
CD&E waste	Construction, demolition and excavation waste
C&I	Commercial and industrial waste
CIRIA	Construction Industry Research and Information Association – a member-based research and information organisation dedicated to improvement in all aspects of the construction industry
CL:AIRE DoW CoP	Contaminated Land Applications in Real Environments Definition of Waste: Code of Practice
Client	Luton Rising
CoCP	Construction Code of Practice
Controlled waste	Household, industrial and commercial waste (not agricultural waste, waste from mines or quarries and most radioactive waste)
Luton DART	Luton Direct Air to Rail Transit
DCO	Development Consent Order
Duty of Care	Legal responsibility to prevent waste from being mismanaged by any person who holds it and from escaping their control
Duty of Care checks	Checks to ensure that only authorised persons transfer waste, and that the waste is managed legitimately, including checks on: <ul style="list-style-type: none"> a. the waste carrier’s registration certificate; b. the waste broker’s registration certificate (if used); and c. the environmental permits for waste management facilities or proof of permit exemption.
Environment Agency (EA)	The main environmental regulatory body in England
European Waste Catalogue (EWC) code	A six-digit number used to classify a particular waste stream
Exempt activities	Activities not requiring an environmental permit (an exemption will require registration)

Term	Definition
Hazardous Waste Consignment Note (HWTN)	A document that accompanies the movement of any hazardous waste from production (cradle) to disposal (grave)
Hazardous waste	Waste with hazardous properties
HMSO	His Majesty's Stationary Office
KPI	Key Performance Indicator
LBC	Luton Borough Council
NHDC	North Hertfordshire District Council
Non-hazardous waste	Waste which does not display any of the hazardous properties listed in Annex III of The Hazardous Waste (England and Wales) Regulations 2005 (as amended)
MMP	Materials Management Plan
mppa	Million passengers per annum
OSWMP	Outline Site Waste Management Plan
Lead contractor	The lead contractor appointed to deliver the Proposed Development by the Client
Registered Waste Carrier	A person who holds a registration certificate from the Environment Agency to transport waste
SNRHW	Stable Non-Reactive Hazardous Waste
SIC	Standard Industry Code
SWMP	Site Waste Management Plan - a SWMP sets out how material resources and waste will be managed and controlled at all stages during a construction project
WEEE	Waste Electrical and Electronic Equipment
WRAP	Waste and Resources Action Programme
WTN	Waste Transfer Note

REFERENCES

- Ref. 1 Directive 2008/98/EC of European Parliament and of the Council of 19 November 2008 on Waste and repealing certain Directives (Waste Framework Directive).
- Ref. 2 HMSO, (2008); Site Waste Management Plan Regulations 2008.
- Ref. 3 HMSO, (2013); The Environmental Noise, Site Waste Management Plans and Spreadable Fats etc. (Revocations and Amendments) Regulations 2013.
- Ref. 4 Bedfordshire County Council (BCC), (2005); Bedfordshire and Luton Minerals and Waste Local Plan.
- Ref. 5 Hertfordshire County Council (HCC), (2012); Waste Core Strategy & Development Management Policies.
- Ref. 6 Hertfordshire County Council (HCC), (2022); Hertfordshire Minerals and Waste Local Plan 2040 Draft Plan.
- Ref. 7 Luton Borough Council, (2017); Luton Local Plan 2011 – 2031.
- Ref. 8 London Borough Council (LBC), (2020); Planning Application Validation Information Requirements.
- Ref. 9 Dacorum Borough Council, (2013); Adopted Core Strategy 2006-2031.
- Ref. 10 HMSO, (1990); Environmental Protection Act 1990.
- Ref. 11 HMSO, (2011); The Waste (England and Wales) Regulations 2011 (as amended).
- Ref. 12 Department for Environment, Food and Rural Affairs (DEFRA), (2018) Waste Duty of Care Code of Practice.
- Ref. 13 DEFRA, Guidance on applying the Waste Hierarchy, 2012.
- Ref. 14 HMSO, (1989); Control of Pollution (Amendment) Act 1989.
- Ref. 15 HMSO, (2015); The Environmental Permitting (England and Wales) (Amendment) Regulations 2012.
- Ref. 16 CL:AIRE, (2011); Definition of Waste: Code of Practice, Version 2.
- Ref. 17 WRAP, (2007); Waste Recovery Quick Wins (not available online)
- Ref. 18 HMSO, (2013); The Waste Electrical and Electronic Equipment Regulations 2013
- Ref. 19 HMSO, (1991); Water Resources Act 1991.
- Ref. 20 HMSO, (2012); Control of Asbestos Regulations 2012.
- Ref. 21 Environment Agency, Scottish Environment Protection Agency, Natural Resources Wales, (2021); Guidance of the Classification and Assessment of Waste (1st Edition v1.2 GB) Technical Guidance (WM3).