



HODKINSON



**Sustainability
Statement**

Peabody Trust, Catalyst by Design
and Hill Residential Limited

St Ann's New Neighborhood

Final

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BSc (Hons)

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We are able to advise at all stages of projects from planning applications to handover.

Our emphasis is to provide innovative and cost-effective solutions that respond to increasing demands for quality and construction efficiency.

This report has been prepared by Hodkinson Consultancy using all reasonable skill, care and diligence and using evidence supplied by the design team, client and where relevant through desktop research.

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Executive Summary

The purpose of this Sustainability Statement is to demonstrate that the proposed Reserved Matters Application for Phases 1B and 2 of the St Ann's New Neighbourhood by Peabody Trust, Catalyst by Design and Hill Residential Limited is considered sustainable, as measured against relevant local and national planning policies.

Through the incorporation of sustainable design and construction methods, energy and water saving measures, waste reduction techniques as well as measures to enhance the ecological value of the site, a good quality and sustainable development is proposed. One Planet Living framework and its ten principles have been used to develop and communicate the sustainability objectives of St Ann's New Neighbourhood, and measures proposed by the design team to meet these objectives. These are as follows:

- > **Energy and CO₂ Reduction** – The site will achieve a 79% CO₂ reduction over Part L 2021 through a 100% air source heat pump led network, PV panel provision and an enhanced fabric specification.
- > **Water Reduction** – Flow control devices and water efficient fixtures and fittings will be installed in all dwellings to target a maximum internal daily water consumption of 105 litres/person/day. The site lies in a low flood risk zone and will benefit from SUDs such as a green roof, permeable paving, and swales.
- > **Waste Management and Circular Economy** – Adequate facilities will be provided for domestic, commercial and construction related waste, including segregated bins for refuse and recycling. The principles of a circular economy shall be incorporated into the development.
- > **Materials** – Where practical, new building materials will be sourced locally to reduce transportation pollution and support the local economy. New materials will be selected based on their environmental impact and responsible suppliers will be used where possible.
- > **Land and Nature** – Enhancements will be implemented through the provision of landscaped areas, play space and additional tree and shrub planting across the Site. The retained, improved and new landscape features will deliver a positive biodiversity net gain baseline score achieved on-site using the Defra Biodiversity Metric 4.0.
- > **Local and Sustainable Food** – An area designated for food growing is proposed and will include 4 allotment-style areas accessible to all which will provide residents with the opportunity for communal food growing.
- > **Travel and Transport** – The site will benefit from a good existing public transport network and sustainable modes will be encouraged through the provision of long stay cycle spaces and short stay cycle spaces. The development includes 58 residential and 1 commercial car parking spaces, 20% with active car charging and the remainder with passive electric charging provision.

- > **Health and Happiness** – The health and wellbeing of future residents will be improved through inclusive design, daylight and sunlight provision, the risk of overheating reduced, secured by design measures promoting community safety and provision of new open space for social interaction.
- > **Equity and Local Community** – St Ann's New Neighbourhood would make a positive contribution towards the London Plan's housing delivery targets by delivering 464 new homes and will create jobs both during construction and operation. A diverse mix of homes also respond to the local and wider market demands with a significant proportion of locally affordable homes ensuring that affordable homes are well integrated and ideally indistinguishable from market housing.
- > **Culture and Community** – The landscape-led approach to the masterplan and the Site's redevelopment, in conjunction with a diverse mix of uses across the scheme, will help establish a positive and coherent sustainable identity that everyone can identify with, including residents and local communities, so contributing towards health and well-being, inclusion and cohesion.

Through the One Planet Living Framework and an extensive collaborative design process, it has been demonstrated that Phases 1B and 2 of the St Ann's New Neighbourhood is an exemplar of modern design quality and sustainable building practice. The use of the One Planet Framework on this project has been used to demonstrate that a person-centred approach has been taken and that the outcomes of this process are central to the ambitions of the design team.

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1. INTRODUCTION

- 1.1** This Sustainability Statement has been prepared by Hodkinson Consultancy, a specialist energy and environmental consultancy for planning and development, appointed by Peabody Trust, Catalyst by Design and Hill Residential Limited.
- 1.2** This Statement sets out the sustainable design and construction measures included in this Reserved Matters Application for the Proposed Development at St Ann's New Neighbourhood in the London Borough of Haringey.

Sustainability Statement Structure and Methodology

- 1.3** The formulation of the Sustainability Strategy for the Proposed Development has taken into account several important objectives, including:
- > To address all national and local planning policies and requirements.
 - > To achieve a viable reduction in CO₂ emissions with an affordable, deliverable and technically appropriate strategy.
 - > To provide a high quality development that is adaptable to future changes in climate.
 - > To minimise the negative impact of the Proposed Development on both the local and wider climate and environment.
 - > To achieve the highest viable levels of sustainable design and construction.
 - > To minimise emissions of pollutants such as oxides of nitrogen and particulate matter; and
 - > To create a pleasant, safe and friendly working and living environment that will be flexible to its occupants' needs.
- 1.4** This Sustainability Statement does not duplicate the work of the technical reports prepared in support of the Application but presents the findings in the overall context of sustainability.
- 1.5** **Chapter 2** provides an introduction to the Site and the Proposed Development.
- 1.6** **Chapter 3** sets out the relevant national and local policy documents which have been used to guide and inform the sustainability strategy for the Proposed Development.
- 1.7** **Chapters 4 to 16** outline the sustainability strategy of the Proposed Development in relation to the policy documents and One Planet Framework.

- 1.8** **Chapter 17** provides a summary of the key sustainability features associated with the Proposed Development.

2. DEVELOPMENT OVERVIEW

Site Location

- 2.1** The development site is located at St Ann's Hospital in the London Borough of Haringey. The location is shown in Figure 1 below.

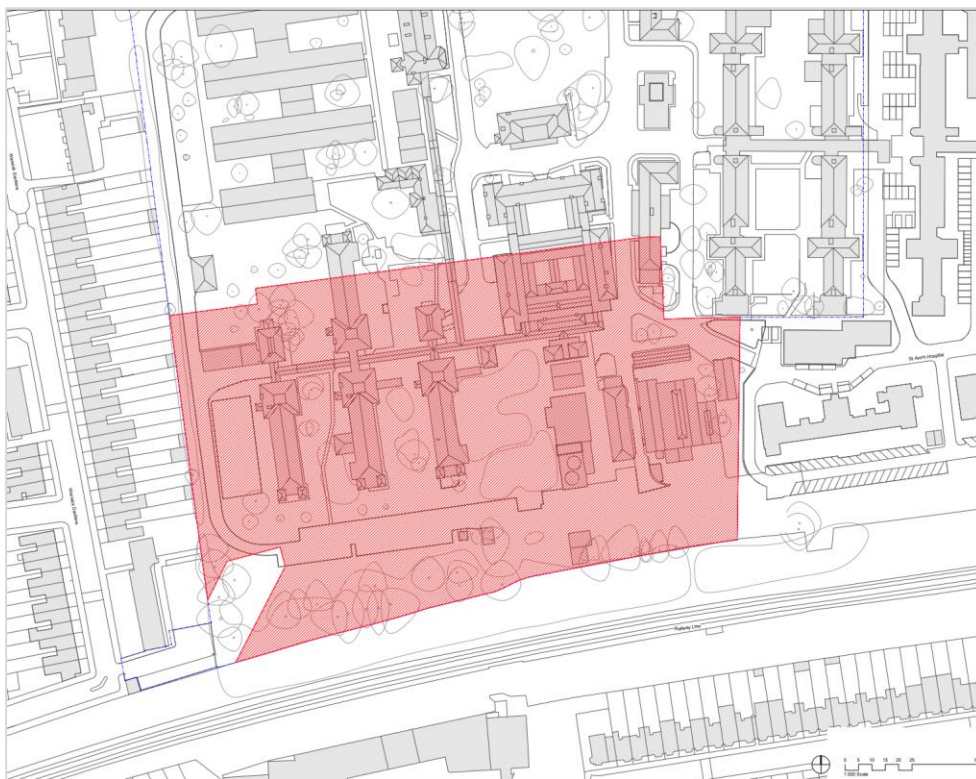


Figure 1: Site Location – Karakusevic Carson Architects (July 2023)

Development Description

- 2.2** RMA 1 seeks detailed approval of the appearance, landscaping, layout and scale of Phases 1b and 2 of the outline components of the hybrid application at St Ann's Hospital, which covers Plots E-J on the illustrative masterplan.
- 2.3** The proposed development is described as follows:

Application for the approval of reserved matters respect of appearance, landscaping, layout and scale relating to Phases 1b and 2 associated with the outline component of planning permission HGY/2022/1833 for "Outline planning permission (with all matters reserved except for access) for Phases 1B, 2 and 3, for: (a) the erection of new buildings for residential development (Use Class C3) and a flexible range of non-residential uses within Use Class E, F1/F2; (b) provision of associated pedestrian and cycle accesses; (c) landscaping including enhancements to the St Ann's Hospital Wood and Tottenham Railsides Site of Importance for Nature Conservation (SINC); and, (d) car and cycle parking spaces and servicing spaces."

2.4 Figure 2 below indicates the proposed site plan.



Figure 1: Proposed Site Layout – Lambert Smith Hampton (June 2023)

3. PLANNING HISTORY

- 3.1 The St Ann's New Neighbourhood was granted hybrid planning permission in July 2023 (ref. HGY/2022/1833).

Sustainability Statement Document Purpose

- 3.2 This statement seeks to demonstrate that the Reserved Matters Application (RMA) complies with the sustainability commitments set out in the consented Sustainability Strategy (2022) (reference: HGY/2022/1833).
- 3.3 It confirms that the principles of sustainable design and construction referenced in the original Hybrid application are continuing to be addressed and explains how the commercial elements of the site will be seeking BREEAM Excellent certification.

4. RELEVANT PLANNING POLICY

- 4.1 The following planning policies and requirements have informed the sustainable design of the Proposed Development.

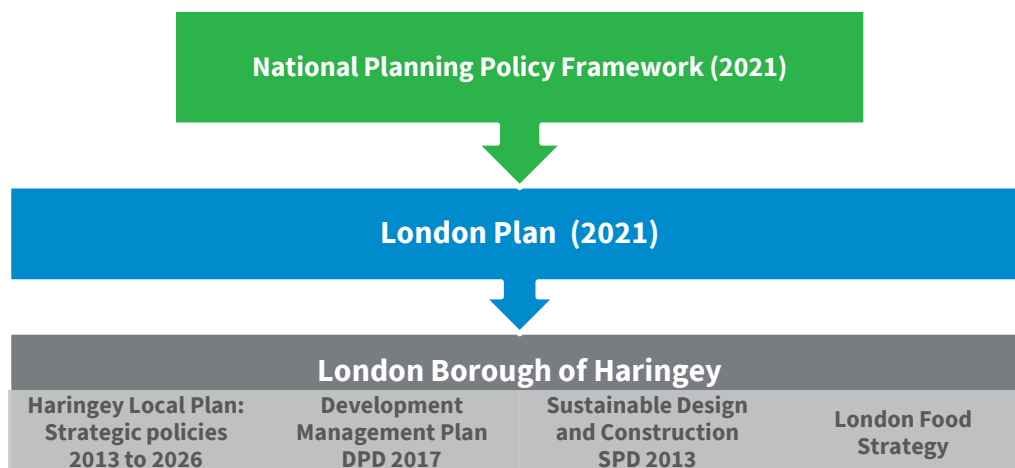


Figure 3: Relevant Planning Policy Documents

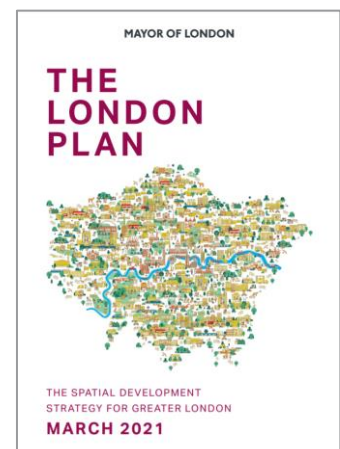
National Policy: National Planning Policy Framework (2021)

- 4.2 The revised National Planning Policy Framework (NPPF) was published on the 20th July 2021 and updated on the 1st September 2023 and sets out the Government's planning policies for England.
- 4.3 The NPPF provides a framework for achieving sustainable development, which has been summarised as "*meeting the needs of the present without compromising the ability of future generations to meet their own needs*" (Resolution 42/187 of the United National General Assembly). At the heart of the framework is a **presumption in favour of sustainable development**.
- 4.4 Paragraph 8 of the document states that the planning system has three overarching objectives which are interdependent and need to be pursued in mutually supportive ways:
- a) **An economic objective** – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;
 - b) **A social objective** – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering a well-designed, beautiful and safe places, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and
 - c) **An environmental objective** – to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.

Regional Policy: The London Plan

The London Plan (2021)

- 4.5 The London Plan sets out an integrated economic, environmental, transport and social framework for the development of London. The following policies are considered relevant to the proposed development and this Statement:
- 4.6 **Policy G5 Urban Greening** states that urban greening should be included as a fundamental element of site and building design by incorporating measures such as landscaping, green roofs, green walls and nature-based sustainable drainage. Boroughs should develop an Urban Greening Factor and in the interim, the Mayor recommends a



target score of 0.4 for residential development 0.3 for commercial development.

- 4.7 Policy G8 Food Growing** states that space should be provided in new developments for urban agriculture/community gardening as well as identify potential sites that could be used for food production.
- 4.8 Policy SI 1 Improving Air Quality** states that development should seek opportunities to identify and deliver further improvements to air quality. Where emissions need to be reduced to meet the requirements of Air Quality Neutral or to make the impact of development on local air quality acceptable, this is done on-site.
- 4.9 Policy SI 2 Minimising Greenhouse Gas Emissions** states that major development should be net zero-carbon. This means reducing greenhouse gas emissions in operation and minimising both annual and peak energy demand.
- 4.10 Policy SI 3 Energy Infrastructure** states that energy masterplans should be developed for large-scale development locations which establish the most effective energy supply options.
- 4.11 Policy SI 4 Managing Heat Risk** states that major development proposals should demonstrate through an energy strategy how they will reduce the potential for internal overheating and reliance on air conditioning systems in accordance with the cooling hierarchy.
- 4.12 Policy SI 5 Water Infrastructure** states that in order to minimise the use of mains water, water supplies and resources should be protected and conserved in a sustainable manner. Development proposals should minimise the use of mains water in line with the Optional Requirement of the Building Regulations (residential development) achieving mains water consumption of 105 litres or less per head per day (excluding allowance of up to five litres for external water consumption). Commercial development should achieve at least the BREEAM excellent standard for the 'Wat 01' category.
- 4.13 Policy SI 7 Reducing Waste and Supporting the Circular Economy** states that referable applications should promote circular economy outcomes and aim to be net zero-waste.
- 4.14 Policy SI 12 Flood Risk Management** states that Flood Risk Assessments and strategies should be developed in order to ensure flood risk is minimised and mitigated and that residual risk is addressed.
- 4.15 Policy SI 13 Sustainable Drainage** states that development proposals should:
- > Achieve greenfield run-off rates and ensure surface run-off is managed as close to source as possible.
 - > Follow the Drainage Hierarchy with preference to green over grey features.
 - > Resist impermeable paving where possible.

- > Drainage proposals are to promote multiple benefits including increased water use efficiency, improved water quality, enhance biodiversity, urban greening, amenity, and recreation.

Local Policy: London Borough of Haringey

Strategic Policies

4.16 The London Borough of Haringey's Local Plan was adopted in 2013. The following policies are considered relevant to this Statement:

4.17 Policy SP4- Working towards a low carbon Haringey indicates that the following measures will be promoted to reduce carbon emissions from new and existing buildings.

- > All new residential development will achieve a minimum 25% reduction in total (regulated) CO₂ emissions. All new residential development shall be zero carbon from 2016 onwards;
- > From 2011 onwards all new non-residential development shall be built to at least BREEAM "very good" standard and should aim to achieve BREEAM "excellent" or the current nationally agreed standard. All new non-residential development shall be zero carbon from 2019;
- > All developments should identify and implement, where viable, site-wide and area-wide decentralised energy facilities including the potential to link into a wider network;
- > Establish local networks of decentralised heat and energy facilities by requiring developers to prioritise connection to existing or planned networks where feasible;
- > All new developments are required, where viable, to achieve a reduction in predicted carbon dioxide emissions of 20% from on-site renewable energy regeneration, which can include connections to local sources of decentralised renewable energy.

4.18 Policy SP5- Water management and flooding states that all developments must be water-efficient during construction and operation and reduce all forms of flood risk. Developments should implement Sustainable Drainage Systems.

4.19 SP6- Waste and recycling indicates that the following should be adhered to:

- > Site Waste Management Plans must identify volume and types of demolition and construction waste and to demonstrate how waste will be minimised and managed during construction and occupation;
- > Development should include integrated, well-designed recycling facilities to be incorporated into all new developments;

4.20 Policy SP7- Transport requires adoption of maximum car parking standards and car free housing wherever possible. In addition, car sharing and car clubs are promoted. Measures to influence behavioural change such as promoting low carbon vehicles are supported.

4.21 Policy SP11- Design requires development to:

- > Ensure impacts on health, climate change, natural resources and biodiversity are minimised by adopting and improving sustainable design and construction techniques;
- > Incorporate solutions to reduce crime and the fear of crime and apply the principles set out in 'Secured by Design' and Safer Places;
- > Promote high quality landscaping on and off site, seek the highest standards of access in all buildings and places, and be designed to be adaptable;
- > Ensure buildings are designed to be flexible and adaptable – and able to integrate services and functions.

4.22 Policy SP13- Open space and biodiversity states that development should contribute to wildlife and ecological habitats and, where possible, include green and brown roofs, rainwater harvesting, green walls, bird and bat nesting/roosting opportunities.

Development Management DPD

4.23 This document gives effect to Haringey's spatial strategy and the key objectives of the Strategic Policies Local Plan by supporting proposals that contribute to the delivery of sustainable development in accordance with the strategy. The following are the relevant policies:

4.24 Policy DM1- Delivering high quality design indicates that all new development and changes of use must achieve a high standard of design. Development proposals shall demonstrate how the landscaping and planting are integrated into the development as a whole. Native species should be prioritised over invasive species for planting. Proposals should also:

- > Provide appropriate sunlight, daylight and open aspects (including private amenity space where required) to all parts of the development and adjacent buildings and land;
- > Address issues of vibration, noise, fumes, odour, light pollution and microclimatic conditions likely to arise from the use and activities of the development.

4.25 Policy DM2- Accessible and safe environments indicates that new developments must be able to be used safely, easily and with dignity by all; protect, improve and create, where appropriate, safe and accessible pedestrian and cycling routes; and have regard to the principles set out in 'Secured by Design'.

- 4.26 Policy DM4 - Provision and design of waste management facilities** states that proposals should consider how to sustainably manage waste arising from the development during the design, construction and occupation phases; and make on-site provision for general waste, the separation of recyclable materials and organic material for composting. In addition, proposals for new multi-storey flatted residential development should provide adequate temporary storage space within each flat, allowing for separate storage of recyclable materials; adequate communal storage for waste; and storage and collection systems at each floor.
- 4.27 Policy DM9: Management of the Historic Environment** requires development to consider the sensitive redevelopment of sites such that they are compatible with and/or complement the special characteristics and significance of the area. The architectural style, scale, proportions, materials and details of heritage buildings or those in conservation areas should not appear overbearing or intrusive.
- 4.28 Policy DM12 - Housing Design and Quality** requires development proposals to include enhanced provision of green infrastructure, including the quantity and quality of landscaped areas and tree provision.
- 4.29 Policy DM21- Sustainable Design, Layout and Construction** states that all new development will be expected to consider and implement sustainable design, layout and construction techniques. Proposal should apply the energy and cooling hierarchies to minimize energy use; maximise opportunities to enhance biodiversity on-site including via SuDS, living roofs and green walls; use building materials with high environmental performance ratings; and seek opportunities for locally sourced labour. Consideration will be given to the use of carbon offset payments.
- 4.30 Policy DM22- Decentralised Energy** states that subject to other policy requirements, proposals that contribute to the provision and use of Decentralised Energy network infrastructure will be supported.
- 4.31 Policy DM23- Environmental Protection**
- > Air quality: Development should consider air quality and be designed to improve or mitigate impact on air quality in the Borough and in the development. Air quality assessments will be needed for development proposals where appropriate and adequate mitigation must be provided.
 - > Noise and vibration: Proposals for potentially noisy development must suitably demonstrate that measures will be implemented to mitigate its impact. A noise assessment will be required to be submitted if the proposed development is a noise-sensitive development.
- 4.32 Policy DM24- Managing and reducing flood risk** states that all proposals for new development should avoid and reduce the risk of flooding to future occupants and not increase the risk of flooding.

- 4.33 Policy DM25- Sustainable Drainage System** states that Sustainable Drainage Systems (SuDS) must be sensitively incorporated into new development by way of site layout and design.
- 4.34 Policy DM31- Sustainable Transport** states that developments must submit a Travel Plan and a Transport Assessment in support of development proposals in accordance with the Transport for London (TfL) thresholds.
- 4.35 Policy DM32- Parking** indicates that car and cycle parking should be provided in accordance with the London Plan. The Council will strongly encourage contributions to car club schemes or the provision of car club bays as an alternative to on-site car parking. Parking should be provided for disabled people.

Sustainable Design and Construction SPD

- 4.36** Adopted in February 2013, the Sustainable Design and Construction Supplementary Planning Document (SPD) supports the Local Plan Strategic Policies. This compliments the Local Plan and brings together policy requirements and guidance from national, regional, and local planning framework that promote sustainable buildings.
- 4.37** The SPD includes detailed guidance on Energy and Carbon, Changing Climate, Flood Risk, Water, Pollution, Waste, Construction, Biodiversity and Transport.

New Local Plan

- 4.38** The council has begun the process of preparing a New Local Plan which will replace the existing Local Plan documents adopted in July 2017. However, this plan is still in the early stages of consultation and a structured framework of guidance policies is yet to be developed.
- 4.39** The New Local plan will be structured around the Borough Plan priorities of Housing, People, Place and Economy.

5. BREEAM SUMMARY

- 5.1** In accordance with Policy SP4 of Haringey's Local Plan 'Working Towards a Low Carbon Haringey', the flexible non-residential floorspace will be assessed under the BREEAM Shell Only New Construction 2018 assessment with a target of achieving the required 'Excellent' rating.



- 5.2** A full BREEAM Pre-Assessment has been presented in **Appendix A** and provides an illustrative route to achieving the 'Excellent' rating. The predicted score at this stage is 74.90%, where a 'Very Good'

score is $\geq 55\%$ and an 'Excellent' score is $\geq 70\%$. This represents a high level of sustainable design and construction.

- 5.3** The principles and requirements of many of the individual credits feature throughout this Sustainability Statement, where appropriate, however the mandatory credits for BREEAM 'Excellent' are listed as follows:
- > **Man 03: Responsible Construction Practices** – A minimum of one credit is to be achieved, requiring a Considerate Constructors Scheme score of between 25 and 34.
 - > **Ene 01: Reduction in CO₂ emissions** – An Energy Performance Ratio (EPR) is to be compared against benchmark figures to minimise operational energy demand and carbon emissions in buildings. A minimum of four credits are to be achieved.
 - > **Wat 02: Water Monitoring** – A water meter is to be provided on the mains water supply which should have a pulsed output connected to a Building Management System (BMS).
 - > **Mat 03: Responsible Sourcing** – All timber used on the project must be sourced in accordance with the UK Government's Timber Procurement Policy.
 - > **Wst 03: Operational Waste** – A dedicated space(s) for the segregation and storage of operational recyclable waste is to be provided. This is to be clearly labelled, easily accessible (to building users and for waste collection) and of an adequate size.
- 5.4** Whilst this has been determined as the most appropriate route to certification, the actual route to certification may vary as the detailed design progresses.

6. ONE PLANET LIVING FRAMEWORK

- 6.1** The One Planet Living Framework consists of ten principles to plan, deliver and commit to sustainability. The goals and guidance of One Planet Living is to encourage development teams to set sustainability objectives which are bespoke to the scheme's location and context. These objectives arise from an evaluation of local ecological footprints, and a thorough examination of environmental, social and economic needs at local, regional and global levels.
- 6.2** The applicant is committed to using the One Planet approach and guiding principles to move towards a more sustainable city. This approach was adopted on the Hybrid application and will continue to be used in this RMA. This Sustainability Statement will highlight where the principles of One Planet Living have been incorporated into the proposed development.

- 6.3** Figure 4 below outlines the overall goals of One Planet, principle by principle. However, there is no one set way to deliver a One Planet framework.
- 6.4** The Goals and Guidance encourage development teams to set sustainability objectives which are bespoke to the scheme's location and context. These objectives arise from an evaluation of local ecological footprints and a thorough examination of environmental, social and economic needs at local, regional and global levels.

	Health & happiness	Encourage active, social, meaningful lives to promote good health and wellbeing
	Equity & local economy	Creating safe, equitable places to live and work which support local prosperity and international fair trade
	Culture & community	Nurturing local identity and heritage, empowering communities and promoting a culture of sustainable living
	Land & nature	Protecting and restoring land for the benefit of people and wildlife
	Sustainable Water	Using water efficiently, protecting local water resources and reducing flooding and drought
	Local & sustainable food	Promoting sustainable humane farming and healthy diets high in local, seasonal organic food and vegetable protein
	Travel & transport	Reducing the need to travel, encouraging walking, cycling and low carbon transport
	Materials & products	Using materials from sustainable sources and promoting products which help people reduce consumption
	Zero waste	Reducing consumption, re-using and recycling to achieve zero waste and zero pollution
	Zero carbon energy	Making buildings and manufacturing energy efficient and supplying all energy with renewables

Figure 4: One Planet Living Goals (www.bioregional.com/one-planet-living ©Bioregional)

7. ENERGY AND CO₂ REDUCTION

Context

One Planet Living Principle



Zero carbon
energy

Making buildings and manufacturing energy efficient
and supplying all energy with renewables

Planning Policy

- 7.1 Policy SP4 of Haringey's Local Plan: Working Towards a Low Carbon Haringey** – In line with London Plan policy all new developments are required to take measures to reduce energy use and carbon emissions during design, construction, and occupation, by incorporating the following:
- > All new residential development will achieve a minimum 25% reduction in total (regulated) CO₂ emissions.
 - > All new non-residential development shall be built to at least BREEAM “very good” standard and should aim to achieve BREEAM “excellent”.
- 7.2** The **Sustainable Design and Construction Supplementary Planning Document** outlines guidance on how developments in the London Borough of Haringey should be sustainably designed – including guidance on Energy and Carbon.
- 7.3 Policy DM22 of Haringey's Development Management Plan** - Decentralised Energy states that subject to other policy requirements, proposals that contribute to the provision and use of Decentralised Energy network infrastructure will be supported.

St Ann's New Neighbourhood

Energy Strategy

- 7.4** An Energy Statement has been produced by Hodkinson Consultancy (December 2023).
- 7.5** Challenging CO₂ reduction requirements have been set via condition 79a of the masterplan consent, in addition to the newer requirements set within the 2022 GLA Energy Assessment Guidance. The Phase 1B and 2 energy strategy addresses these whilst adhering to the site heat network connection principles set out in the masterplan energy strategy. Heat demands for all

homes will be met almost entirely from air source heat pumps. No gas-fired heating is proposed to be installed. A summary of the proposed energy strategy is set out, below.

- > Energy demands are to be reduced substantially through fabric 'Be Lean' measures in order for the London Plan energy efficiency targets for both residential and commercial uses to be achieved. This includes the use of MVHR in all properties, low U-values and air tightness targets, and a bespoke approach to thermal bridging performance;
- > A holistic approach which balances further considerations such as daylighting, overheating, air quality and noise to ensure resident comfort. The requirements of the newly introduced Part O have been considered, with an accompany overheating report describing how the overheating strategy has been developed;
- > A balanced strategy for the generation and delivery of decentralised heating. The Developer is committed to the delivery of heat which is both low in CO₂ and reasonably priced. A strategy has therefore been proposed which both meets the ambition of a single site heating network, but also ensures 95% heat delivered is low carbon (and renewable) by using roof-mounted air source heat pumps. A small contribution (5%) is provided from electric boilers;
- > All available roofspace has been set aside for the application of photovoltaic (PV) panels. This represents 0.78kW/dwelling which is considered substantial for a development of this type and size.

7.6 Based on the above, the site is able to achieve a 79% CO₂ reduction over Part L 2021 through a 100% air source heat pump led network, PV panel provision and an enhanced fabric specification. Please refer to the Energy Statement (December 2023) for more detail.

7.7 The energy strategy is therefore able to deliver several health benefits:

- > A comfortable and healthy temperature indoors all year round.
- > Healthier air quality indoors and outdoors – due to the lack of fuel combustion and lower likelihood of condensation and mould.
- > Lower energy bills for residents due to efficient building design and insulation levels and glazing choices.

Lighting

7.8 All external lighting, and any security lighting, will be energy efficient and adequately controlled using PIR sensors, daylight cut-off sensors or time switches where possible. This will ensure the conservation of energy when the lighting is not in use.

Appliances

- 7.9** Where provided, energy efficient white goods will be provided. The purchasing of energy efficient white goods will also be promoted through the provision of information on the EU Labelling Scheme contained within the Home Information Manual.
- 7.10** The minimum standards to be adopted for white goods are as follows:
- > Fridges and fridge-freezers: F rating.
 - > Washing machines: C rating.
 - > Washer-dryers: E rating.
 - > Dishwashers: E rating.
 - > Appliances not included in this list, such as tumble dryers, remain under the old EU Energy Efficiency Labelling Scheme (A+++ to D) and should be A rated where possible or a B as an absolute minimum.

Energy Monitoring

- 7.11** Energy display devices, which can monitor electricity and primary heating fuel consumption, may be provided to each of the dwellings, this will be investigated in the next stage of design. These devices can empower the occupants to be more aware of their usage and therefore make energy and cost savings, where possible.

8. SUSTAINABLE WATER

Context

One Planet Living Principle



Sustainable
Water

Using water efficiently, protecting local water resources
and reducing flooding and drought

Planning Policy

- 8.1 Haringey's Local Plan, Strategic Policies: SP5 – Water Management and Flooding:** outlines the development's requirement to be water efficient during construction and operation and reduce all form of flood risk. Developments should also implement Sustainable Drainage Systems as well as:
- > Improve water environment, water quality and drainage systems.
 - > Minimise water use.
 - > Take account of flood risk vulnerability and apply the National Planning Policy Framework (NPPF) Sequential Test and Exception Test.
 - > Implement measures to prevent surface water and flooding.
 - > Restore and enhance the Blue Ribbon Network.
- 8.2 The Sustainable Design and Construction Supplementary Planning Document** outlines guidance on how developments in the London Borough of Haringey should be sustainably designed – including guidance on Water.
- 8.3 Policy SI 5 Water Infrastructure** states that in order to minimise the use of mains water, water supplies and resources should be protected and conserved in a sustainable manner. Development proposals should minimise the use of mains water in line with the Optional Requirement of the Building Regulations (residential development) achieving mains water consumption of 105 litres or less per head per day (excluding allowance of up to five litres for external water consumption). Commercial development should achieve at least the BREEAM excellent standard for the 'Wat 01' category.
- 8.4 Policy SI 12 Flood Risk Management** states that Flood Risk Assessments and strategies should be developed in order to ensure flood risk is minimised and mitigated and that residual risk is addressed.

8.5 Policy SI 13 Sustainable Drainage states that development proposals should:

- > Achieve greenfield run-off rates and ensure surface run-off is managed as close to source as possible.
- > Follow the Drainage Hierarchy with preference to green over grey features.
- > Resist impermeable paving where possible.
- > Drainage proposals are to promote multiple benefits including increased water use efficiency, improved water quality, enhance biodiversity, urban greening, amenity, and recreation.

St Ann's New Neighbourhood

Internal Water Efficiency

- 8.6** All new dwellings will target a minimum water efficiency standard of 105 litres/person/day in line with London Plan and Building Regulations. An evaluation of the proposed fixtures and fittings will be undertaken during the detailed design, however an illustrative strategy to achieve this water target is set out in the Water Efficiency Calculator in **Appendix B**.
- 8.7** The commercial space is being designed to a shell only specification so the internal water efficiency credits for Wat 01 does not apply. However, future fit out tenants will be encouraged to achieve a 40% reduction over the baseline (12.5% reduction is the minimum target from the London Plan).

Leak Detection and Prevention

- 8.8** Another method of reducing water consumption is to ensure that water leaks do not go undetected. In accordance with the BREEAM Assessment, a leak detection system will be installed for the commercial units which will be capable of detecting a major water leak on the mains water supply within the building and between the building and the utilities water meter.

Water Metering

- 8.9** In accordance with the BREEAM Assessment, a water meter with a pulsed output will also be installed on the mains supply for the commercial units. This will allow the water consumption of the development to be monitored and managed and therefore encourage reductions.

Flood Risk

- 8.10** Developments in low flood risk areas are promoted to, not only protect homes and local communities and reduce the cost implications if flooding occurs, but to protect the environment from the transfer of pollutants during flooding events.
- 8.11** According to the Environment Agency's Flood Map shown in Figure 5 below, the Proposed Development lies in a low risk flood zone (Flood Zone 1) which is defined as land that has a less than 0.1% annual probability of river or sea flooding.



Figure 5: Environment Agency Flood Map – <https://flood-map-for-planning.service.gov.uk>

- 8.12** In relation to surface water flooding using the Environment Agency Surface Water Flooding Maps the site is at 'very low' risk of surface water flooding which means that each year the area has a chance of flooding of less than 0.1%. There are small parts of the Site that are shown to be at 'low' risk of surface water flooding which is determined as a chance of flooding of between 0.1% and 1%. Full details are set out in Price and Myer's May 2022 Drainage Strategy and Flood Risk Assessment which form part of the Environmental Statement (ES) submitted with this Application.

Sustainable Drainage Systems

- 8.13** Sustainable drainage systems (SuDS) can deliver multiple benefits which broadly fit into four categories: water quantity, water quality, amenity and biodiversity, shown in Figure 6 below. The

overarching principle of SuDS design is that surface water runoff should be managed for maximum benefit. Long term environmental and social factors must be included in decisions regarding sustainable drainage. Sustainable drainage takes account of the quantity and quality of runoff, and the amenity and aesthetic value of surface water in the urban environment.

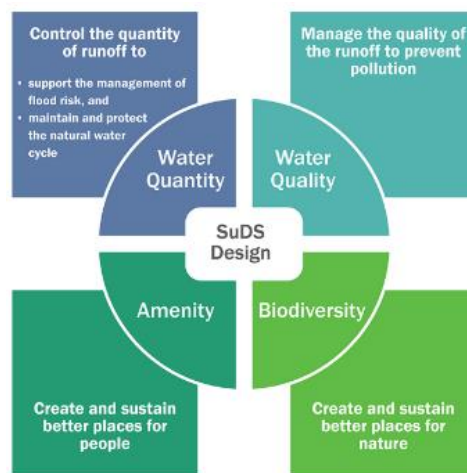


Figure 6: The four 'pillars' of SuDS – CIRIA SuDS Manual (2015)

- 8.14** Within the landscape, Sustainable Urban Drainage Systems (SuDS) elements have been integrated where feasible to slow run-off rates through the Site and encourage natural infiltration and evapotranspiration. This will help minimise risk of surface water flooding and protect water resources by ensuring water is filtered before being discharge from the Site. An overview of those proposed are displayed in Figure 6 below.
- 8.15** SuDS features include green roofs, of which the majority of the green roof areas are proposed to be intensive green roofs which retain more surface water than extensive green roofs. These will act as the first level of intervention reducing and slowing rain-water runoff.
- 8.16** In the event of an extreme storm event, a large detention basin is located to the south of the Peace Garden area. The detention basin has been designed to have a maximum water level of 1.2m – in accordance with Haringey's SuDS guidance. When not in use, this feature will primarily be used as an area for play – bringing socio-environmental benefits.
- 8.17** At ground level, permeable paving is proposed within the car parking bays and other predominantly pedestrian areas. The permeable car parking bays will be underlain by cellular tree pits that provide space for the roots of the proposed trees and provide attenuation storage for surface water during storm events. The permeable car parking bays and bioretention tree pits will be used to intercept surface water run-off from the road. Underground Modular Attenuation Tanks are proposed to be located beneath the courtyards of Plot F and H. Full details are set out in the Drainage Strategy and Flood Risk Assessment by Price and Myers (May 2022) which form part of the Environmental Statement submitted with this Application.

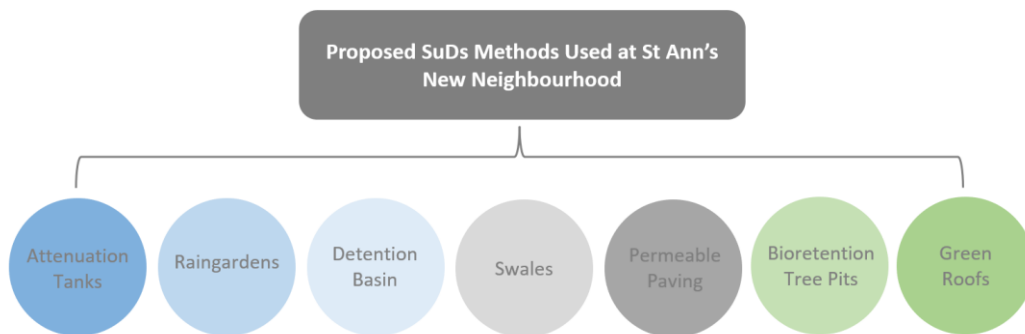


Figure 7: Summary of proposed SuDS methods used at St Ann's New Neighbourhood

9. WASTE MANAGEMENT & CIRCULAR ECONOMY

Context

One Planet Living Principle



Planning Policy

9.1 Haringey's Local Plan, Strategic Policies: SP6 – Waste and Recycling states developments must:

- > Incorporate integrated and well-designed recycling facilities.
- > Have waste facilities that consider and minimise pollution and nuisance issues.
- > Develop and Site Waste Management Plan which identifies volume and types of demolition and construction waste and demonstrate how waste will be minimised and managed during construction and occupation.
- > Achieve at least BREEAM Excellent standard for Wst 01 in the new non-domestic spaces, which requires dedicated recycling/composting storage to be present and fulfil certain qualities and capacities, relating to use of the space.

- 9.2 The **London Plan Policy SI 7 Reducing Waste and Supporting the Circular Economy** states that referable applications should promote circular economy outcomes and aim to be net zero-waste.
- 9.3 **Policy DM4 of Haringey's Development Management Plan – Provision and Design of Waste Management Facilities** states that developments should consider how to sustainably manage waste arising from the development during the design, construction, and occupation phases of new developments. Furthermore, developments are required to make on-site provision for general waste, the separation of recyclable materials and organic material for composting.

St Ann's New Neighbourhood

Circular Economy

- 9.4 An overview of the measures to be implemented in accordance with the three main Circular Economy principles are outlined in the Circular Economy Statement (Hodkinson Consultancy, November 2023), submitted alongside this Reserved Matters Application.
- 9.5 A circular economy is defined as one where materials are retained in use at their highest value for as long as possible and are then reused or recycled, leaving a minimum of residual waste.
- 9.6 In contrast to a linear economy (take, make, dispose), a circular economy keeps products and materials circulating through the system at their highest value for as long as possible, through re-use, recycling, refurbishment, and remanufacturing.
- 9.7 The end goal is to retain the value of materials and resources indefinitely, with no residual waste at all. This is possible but will require a fundamental change in the way that buildings are designed, built, operated, and deconstructed.
- 9.8 Applying circular economy thinking to the built environment is complex, with many overlapping issues and trade-offs to consider. However, there are some core guiding principles that promote a regenerative and restorative whole systems approach that should be applied on every project. These are as follows:

1. Conserve resources and source ethically

- > Minimise the quantities of materials used
- > Minimise the quantities of other resources used
- > Specify and source materials and other resources responsibly and sustainably

2. Design to eliminate waste (and for ease of maintenance)

- > Design for longevity, adaptability or flexibility and reusability or recoverability

- > Design out construction, demolition, excavation, and municipal waste arising

3. Manage waste sustainably and at the highest value

- > Manage demolition waste
- > Manage excavation waste
- > Manage construction waste
- > Manage municipal waste

9.9 Circular economy considerations have formed a key part of the Sustainability Strategy for St Ann's New Neighbourhood. Considerations around resource efficiency and responsible procurement have been considered within the sustainability strategy from the early stages. Please refer to the Circular Economy Statement (Hodkinson, November 2023) for a more detailed summary of the principles implemented.

Construction Waste

9.10 The reduction of construction waste not only minimises environmental impacts through ensuring the responsible use of resources and waste disposal but can also significantly reduce construction costs for the developer.

9.11 A Waste Management Plan by Waterman (May 2022) has been drafted (Appendix C) which establishes ways of minimising waste at source, assess the use, reuse and recycling of materials on and off-site and prevent illegal waste activities. This plan will be disseminated to all relevant personnel on and off-site.

9.12 The plan sets the following targets:

- > Construction waste target of <6.5 tonnes per 100m² GIA.
- > Diversion of 95% non-hazardous waste from landfill.

9.13 The following waste minimisation actions will be considered:

- > Consider opportunities for zero cut and fill to avoid waste from excavation or groundworks.
- > Design for standardisation of components and the use of fewer materials.
- > Design for off-site or modular build.
- > Return packaging for reuse.

- > Consider community reuse of surplus materials or offcuts; and
- > Engage with supply chains and include waste minimisation initiatives and targets in tenders and contracts.

9.14 As part of their commitment to divert construction waste from landfill, the Client will regularly monitor and record the Site's waste reduction performance. This will be compared against a target benchmark where at least 95% (by volume) of non-hazardous waste is to be diverted from landfill.

Household Waste

9.15 The Client is committed to following the waste hierarchy and reducing waste sent to landfill. As such, adequate storage is to be provided in communal stores located at ground floor level, where both recyclable and non-recyclable waste can be stored in accordance with Haringey's waste collection service.

9.16 It is expected to be easy to accommodate convenient waste separation in homes. There is a target to achieve 65% recycling rate by 2030 through kitchen design and storage facilitates that facilitates waste segregation.

9.17 Residents will have to segregate dry mixed recycling, food waste and general waste and take these to a general waste store / leave these in bins for collection in front of their home. All waste will be collected weekly by London Borough of Haringey Council. Space has been allocated for residents to leave bulky waste items.

9.18 The opportunity to include facilities/schemes during operation that enable reduction of common waste streams e.g. packaging-free grocery delivery area; zero waste shop; surplus redistribution could be investigated and incorporated as the design progresses.

9.19 Full details are set out in the Operational Waste Management Strategy by Watermans, submitted as part of the Hybrid application.



Commercial Waste

9.20 Adequate space for the segregation and storage of commercial waste and recycling will be provided in designated communal stores at ground floor level. This space will meet the following BREEAM requirements:

- > Bins will be clearly labelled to assist with waste segregation, storage and collection and accessible to building occupants and facilities operators; and
- > The storage will be of a capacity that is appropriate to the building's type, size and predicted volumes of waste.

10. MATERIALS

Context

One Planet Living Principle

	Materials & products	Using materials from sustainable sources and promoting products which help people reduce consumption
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Planning Policy

- 10.1 Haringey's Local Plan, Strategic Policies: SP6 – Waste and Recycling states developments must:**
- > Incorporate integrated and well-designed recycling facilities.
 - > Have waste facilities that consider and minimise pollution and nuisance issues.
 - > Develop and Site Waste Management Plan which identifies volume and types of demolition and construction waste and demonstrate how waste will be minimised and managed during construction and occupation.
 - > Achieve at least BREEAM Excellent standard for Wst 01 in the new non-domestic spaces, which requires dedicated recycling/composting storage to be present and fulfil certain qualities and capacities, relating to use of the space.
- 10.2 The London Plan Policy SI 7 Reducing Waste and Supporting the Circular Economy** states that referable applications should promote circular economy outcomes.
- 10.3 The Sustainable Design and Construction Supplementary Planning Document** outlines guidance on how developments in the London Borough of Haringey should be sustainably designed – including guidance on Waste.

St Ann's New Neighbourhood

Environmental Impact

- 10.4** New building materials will be selected, where possible, to ensure that they minimise environmental impact and have low embodied energy – from manufacture, transportation and operational stages, through to eventual demolition and disposal.

10.5 The applicant is seeking to address the following principles:

- > Design to optimise embodied carbon, reduce operational energy and integrate Circular Economy principles. For example, testing energy reductions, increased envelope specification or calculating carbon payback periods for MEP equipment or renewables, increase in landscaping and tree planting to promote positive carbon sequestering.
- > Address upfront embodied carbon emissions (A1-5) through the reduction of material use. For example, re-work and reuse excavated material as fill on the site with appropriate re-compaction, consider innovative cement mixes and explore alternative floor build ups to reduce the amount of concrete within the main structure. Early-stage optimisation studies can be undertaken to ensure that the sub-structure is not over engineered.
- > Consider the carbon cost/ benefit between upfront carbon, operational carbon, and life cycle carbon due to replacement cycles.
- > At each replacement cycle, prioritise low carbon and durable materials.
- > Operational energy loads must be minimised and meet local energy targets. This could include optimising mechanical and electrical layouts.
- > MMC/offsite construction to improve material efficiency will be used in the form of bathroom pods and pre-fabricated utility cupboards.

10.6 A Whole Life Cycle Carbon Assessment has been carried out by Hodkinson Consultancy (November 2023). The total site wide emissions confirm that 997 kgCO₂/m² over 60 years are expected (not including operational energy and water emissions). This is broken down as follows:

- > 745 kgCO₂/m² for modules A1-A5
- > 252 kgCO₂/m² for modules B – C.

10.7 The Whole Life Carbon Assessment (Hodkinson Consultancy, November 2023) has been submitted alongside this Reserved Matters Application and should be referred to for more information.

Local and Responsible Sourcing

10.8 Preference will be given to the use of locally sourced materials and local suppliers, where viable. This will benefit the local economy as well as having environmental benefits through reduced transportation.

10.9 The contractor will implement their sustainable procurement plan for the proposed development. The responsible sourcing of materials will be a key consideration in the selection of suppliers and the sustainable procurement plan will support new building materials being selected to minimise

environmental impact and have low embodied energy – from manufacture, transportation, and operational stages, through to eventual demolition and disposal.

10.10 The sustainable procurement strategy sets out the following aims and objectives:

- > Work closely with supply chain partners to minimise any negative impacts on people and the environment, while also seeking to maximize the socio-economic benefits resulting from procurement decisions.
- > Timber used on site, including timber used in the construction phase, such as hoarding, fencing and scaffolding, will be sourced from sustainable forestry sources (e.g., PEFC and FSC) where possible.
- > Procuring materials compliant with the BES6001 Responsible Sourcing Standard, where possible.
- > Other major construction materials will be certified under an Environmental Management System (EMS) such as ISO 14001.
- > Sourcing environmental product declarations (EPDs) for as many products as possible.



Recycled Materials

10.11 Where feasible, the materials used on site will contain materials that have been recycled. The use of recycled materials (e.g., crushed concrete from waste, used for hard standing) has less embodied energy impact, other than that expended in their processing or transport.

10.12 The materials for the proposed development will target a benchmark of 20% (of the value) for reused or recycled content, as required for the Circular Economy principles being adopted on site.

11. LAND AND NATURE

Context

One Planet Living Principle



Planning Policy

- 11.1 Haringey's Local Plan, Strategic Policies: SP13** outlines that new developments shall protect and improve Haringey's:
- > Parks and open spaces.
 - > Biodiversity and nature conservation (including private gardens)
 - > Provide opportunities for children's play space.

St Ann's New Neighbourhood

Noise Pollution

- 11.2** Peabody Trust, Catalyst by Design and Hill Residential Limited are committed to reducing noise disturbance to internal and external areas of dwellings to improve the health and wellbeing of the occupants and to help protect community cohesion.
- 11.3** A monitoring survey was undertaken to establish baseline ambient noise levels experienced on the Site and the relative local background and traffic noise levels. The survey established that the existing noise climate is characterised by road traffic on St Ann's Road to the north and the railway line to the south. Noise levels due to these sources are typical of urban environments and vibration levels are low.
- 11.4** Based on the results of the 3D noise model, a preliminary glazing and ventilation acoustic performance specification has been developed to comply with the internal noise level criteria in ProPG. The results of the 3D modelling also indicate that noise levels in the gardens of the proposed development layout will be compliant with ProPG/BS8233 guidance.
- 11.5** Following the above survey, the following mitigation measures are proposed:

- > Development and use of a Construction Environmental Management Plan (CEMP) which will incorporate a number of specific noise and vibration mitigate measures to control emissions from the Site while under construction. This will also include a commitment to carry out noise and vibration monitoring to ensure that reasonable levels are complied with.
- > Acoustic enclosures are proposed for noisier items of plant to reduce noise levels.
- > Acoustically upgraded façade elements (glazing and ventilation) are proposed for buildings exposed to higher noise levels.

11.6 It is anticipated that all noise will have negligible impact with the exception of construction noise however the impact of this is considered minor and is only temporary. Please refer to the report by Cass Allen (November 2023) for further detail.

Air Quality

- 11.7** Poor air quality is the greatest environmental risk to public health in the UK and is known to exacerbate the impact of pre-existing health conditions. It is not only a major risk to human health, but it also has significant damaging impacts on both plants and animals.
- 11.8** An Air Quality Assessment has been undertaken by RSK Environment Ltd (RSK) (May 2022). The report assesses the construction and operation phase emissions in relation to the development. During construction phase, mitigation recommendations provided by RSK will be followed to reduce the impacts of dust emissions.
- 11.9** At the operational phase, the main potential air quality impact is likely to be emissions from road traffic associated with the proposed development (i.e. changes in flow volume and distribution) with the key air pollutants of concern being nitrogen dioxide (NO₂) and particulate matter (PM₁₀ and PM_{2.5}).
- 11.10** The impacts of the proposed development on NO₂, PM₁₀ and PM_{2.5} concentrations, prior to mitigation, are predicted to be 'negligible' at all receptor locations. Therefore, it is not considered that any specific mitigation measures are required for operational phase. Nevertheless, it is recommended that transport related mitigation measures should be included to minimise the potential impact of the development on local air quality. Please refer to the full report for further detail on mitigation strategies.

Ground Contamination

- 11.11** A sitewide contamination assessment was submitted with the hybrid application, and conditions relating to that have been secured in the hybrid consent (Conditions 16, 17, 18 and 19).
- 11.12** Remediation of the land will also ensure that BREEAM credits can be secured under Land Use and Ecology 02 within the assessment process.

Brownfield Site

- 11.13** The Site has been previously used for development which is predominantly covered in hard standing and is therefore considered 'brownfield'. Redeveloping and revitalising vacant and under-used sites is supported by the NPPF.

Protection of Ecological Value

- 11.14** St Ann's New Neighbourhood falls in a Site of Importance for Nature Conservation (SINC). There is a SINC woodland along the southern boundary that should be protected as identified by the Strategic Ecology Report (October 2021) conducted by London Wildlife Trust. This report also identified a number of buildings on site have potential to provide bat roosts, many of the exotic trees are noteworthy from a landscape heritage perspective as they are rare or unusual specimens and the amenity grassland and associated shrubs and trees provide foraging areas and nesting/breeding sites for a range of mostly common species of birds and insects.
- 11.15** Mitigation measures will be in place during the construction phase to minimise damage and disruption to wildlife and habitats, including controls to minimise noise, lighting and dust disturbance set out within the Construction Environmental Management Plan (CEMP).
- 11.16** Bird nesting habitat will be cleared outside of the nesting bird season (typically March to July inclusive) or checked by an ecologist prior to its removal. Furthermore, nest boxes will be provided on new buildings and new compensatory habitat will be provided within the Site and best practice will be followed to minimise additional lighting from the development impacting foraging and commuting bats. With the proposed mitigation in place, residual effects on birds are considered to be negligible.

Enhancement of Ecological Value

- 11.17** Enhancing a site's ecological value not only helps to reduce a development's environmental impact but improves the health and wellbeing of the occupants through their interaction with the natural environment.
- 11.18** Middlemarch have undertaken a Biodiversity Net Gain calculation for the site. Their report should be referred to for more information.



Biodiverse Roofs

- 11.19** Biodiverse roofs have demonstrable sustainability benefits, including:
- > Reduction in urban heat island effect (localised cooling through increased evaporation);

- > Provision of ecological habitats for fauna and flora, particularly where these roofs can replicate pre-existing ecological conditions; and
- > Reduction in surface water run-off.

12. LOCAL & SUSTAINABLE FOOD

Context

One Planet Living Principle

 Local & sustainable food	Promoting sustainable humane farming and healthy diets high in local, seasonal organic food and vegetable protein
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Planning Policy

- 12.1 Policy DM12 of Haringey’s Development Management Plan – Housing Design and Quality** states that development proposals should “seek to include enhanced provision of green infrastructure, including the quantity and quality of landscaped areas, tree provision and, where the site allows, the provision of additional open space”.
- 12.2 Policy G8 Food Growing** states that space should be provided in new developments for urban agriculture/community gardening as well as identify potential sites that could be used for food production.
- 12.3 Haringey Sustainable Food Strategy** in place between 2010-2015 aimed to encourage and support local people to take an active role in where their food comes from and to make sustainable choices. The strategy also aimed to increase food growing in the borough and reduce food waste.
- 12.4 The GLA’s London Food Strategy** (2018) is a framework outlining how London boroughs can collaborate to adapt the city’s food system to changing requirements. It acknowledges child obesity and the pressure on food banks is rising as well as an urgent need to reduce greenhouse gas emissions linked with food delivery and production, which contribute to poor local air quality. Priorities relevant to this development are: reducing food insecurity, good food in community settings, community gardening, urban farming, good food for the environment and good food economy.

St Ann's New Neighbourhood

Growing Food

- 12.5** St Ann's New Neighbourhood contains growing areas for the community to grow their own vegetables. There will be a growing hub in the south-east part of the Site, as well as orchards and residential courtyards throughout.
- 12.6** Future residents will have the ability to grow and consume their own locally sourced food as five allotments have been identified within 1.2km of the Site: South Grove, Elmar Road, Franklin Street, Mount View and Ivat Way allotments.
- 12.7** Space will be provided in all dwellings and commercial spaces for food waste bins, for instance in kitchens and shared waste points.

13. TRAVEL & TRANSPORT

Context

One Planet Living Principle

	Travel & transport	Reducing the need to travel, encouraging walking, cycling and low carbon transport
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Planning Policy

- 13.1 Haringey's Local Plan, Strategic Policies: SP7 – Transport** requires adoption of maximum car parking standards and car free housing wherever possible. In addition, car sharing and car clubs are promoted. Measures to influence behavioural change such as promoting low carbon vehicles are supported.
- 13.2 Policy DM31 of Haringey's Development Management Plan – Sustainable Transport** states that developments must submit a Travel Plan and a Transport Assessment in support of development proposals in accordance with the Transport for London (TfL) thresholds.
- 13.3 Policy DM32 of Haringey's Development Management Plan – Parking** outlines that car and cycle parking should be provided in accordance with the London Plan. The Council will strongly

encourage contributions to car club schemes or the provision of car club bays as an alternative to on-site car parking. Parking should be provided for disabled people.

- 13.4** The **Sustainable Design and Construction Supplementary Planning Document** outlines guidance on how developments in the London Borough of Haringey should be sustainably designed – including guidance on Transport.

13.5 The **London Plan Policies:**

- > **T1** Strategic Approach to Transport
- > **T2** Healthy Streets
- > **T3** Transport Capacity
- > **T4** Assessing and Mitigating Transport Impacts
- > **T5** Cycling
- > **T6** Car Parking
- > **T7** Deliveries, Servicing and Construction

- 13.6** **Transport for London's Travel Planning Guidance** sets out requirements for different land uses, and states that a Travel Plan is required due to the site having more than 80 residential units and more than 1000 sqm of food/drink space.

St Ann's New Neighbourhood

Sustainable Transport & Local Amenities

- 13.7** Sustainable transport links are central to the sustainability debate. They provide a positive contribution to environmental, societal and economic sustainability of the places they serve.
- 13.8** The provision of alternative sustainable transport options and associated facilities reduces dependency on traditionally fuelled cars and has the following benefits:
- > Encourages active travel and helps improve people's health and wellbeing;
 - > Reduces congestion and encourages clean travel which helps to improve the air quality of the local area; and
 - > Provides cost savings compared with maintaining and running traditionally fuelled cars.

- 13.9** The Transport Assessment (Markides Associates, May 2022) confirms that the Site has good accessibility to services and facilities as well as good local connections to public services and bicycle infrastructure connections. The accessibility of the site is improved by the proposed masterplan and the inclusion of more direct routes to Harringay Railway Station and Harringay Green Lanes station.
- 13.10** To promote uptake of sustainable transport, the Applicant commits to producing travel plans for the residential and non-residential elements of the Development and a Framework Travel Plan is appended to the Transport Assessment.
- 13.11** The Proposed Development has access to the following key amenities in the local area which will help to reduce dependency on private transport:
- > Health services such as:
 - > Parade Chemist – 1.7km;
 - > Barnet, Enfield and Haringey Mental Health Trust – <1km
 - > Small/large scale retail services such as:
 - > Sainsbury's Supermarket – 2.5km;
 - > The Old Ale Emporium (public house) – 2km;
 - > Various cafes and restaurants – closest being 500m from site;
 - > Recreation and leisure facilities such as:
 - > Legends Gym – 2km;
 - > Finsbury Park – 4.1km;
 - > Education and community facilities such as:
 - > Saint Mary's Infant and Juniors School – 500m;
 - > St Ann's CE Primary School – 500m;
 - > Administrative services such as:
 - > Harringay Post Office – 1.7km;
 - > Various facilities within Haringey (Zone 3 of London) and 11.7km from Central London.

Public Transport

13.12 The Site is located within close proximity to a number of transport links, such as:

- > **Harringay Green Lanes** is served by the East Coast Main Line services; Harringay Green Lanes by London Overground network; and Seven Sisters by London Overground and the Victoria line.
- > **Local bus services** are located just outside the site's frontage along St Ann's Road and on the nearby La Rose Lane located 200m and 300m away from the centre of the development.

Cycle Parking

13.13 Encouraging cycling not only makes a positive contribution to health and well-being, but also reduces pressure on existing transport systems.

13.14 Cycle parking is spread across the site with the intention that each block will contain the required amount of long stay cycle parking (in accordance with the London Plan). Long stay parking will allow for 1.5 spaces per 1B2P and 2 spaces all other dwellings. Short stay parking will account for 5 to 40 dwellings: 2 spaces; thereafter 1 space per 40 dwellings.

13.15 The Development also includes the creation of a cycle and pedestrian link from the Site to Stanhope Gardens / Warwick Gardens. This brings both the Harringay Green Lanes and Harringay Railway Station within a shorter walking distance – helping to encourage active travel and sustainable trips.



Car Parking & Electric Car Charging

13.16 58 vehicle parking spaces are proposed. On-street parking provision is 0.17 space per home, with accessible spaces located within 50 metres of the home entry. 15 of blue badge/disabled car parking spaces are allocated for residents, with 6 additional disabled spaces for users of the non-residential spaces.

13.17 Car Club schemes contribute to the sustainability of the scheme as they reduce the need for car ownership and discourage unnecessary car travel. In addition, car club vehicles are usually energy efficient and cleaner than the average car which helps to further reduce emissions.

13.18 Electric vehicles have the benefit of eliminating emissions, including carbon dioxide, oxides of nitrogen, carbon monoxide and particulates that normal cars emit. Therefore, 20% of electric car charging spaces will have active charging facilities, with the remainder built with passive charging.

14. HEALTH & HAPPINESS

Context

One Planet Living Principle

	Health & happiness	Encourage active, social, meaningful lives to promote good health and wellbeing
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Planning Policy

- 14.1** **Haringey's Local Plan, Strategic Policies: SP14 – Health and Wellbeing** outlines the council's commitment to prioritise interventions and resources to those areas of the borough where health inequalities are greatest, as well as support the integration of community facilities and services, i.e. health, education, cultural and leisure in multi-purpose buildings.
- 14.2** **Haringey's Local Plan, Strategic Policies: SP11 – Design** states that all new development should enhance and enrich Haringey's built environment and create places and buildings that are high quality, attractive, sustainable, safe, and easy to use.
- 14.3** **Haringey's Local Plan, Strategic Policies: SP4 – Working towards a low carbon Haringey** requires all new developments to take measures to reduce energy use and carbon emissions during design, construction and occupation alongside promoting low- and zero-carbon energy generation.
- 14.4** The **London Plan Policy GG6 – Increasing Efficiency and Resilience** states the requirement for London to be a more efficient and resilient city with overarching policies for zero carbon by 2050 and the need to design for climate change impacts.
- 14.5** The **London Plan Policy SI 1 – Improving Air Quality** states that development should seek opportunities to identify and deliver further improvements to air quality. Where emissions need to be reduced to meet the requirements of Air Quality Neutral or to make the impact of development on local air quality acceptable, this is done on-site.
- 14.6** The **London Plan Policy SI 4 – Managing Heat Risk** outlines the requirement for development proposals to minimise adverse impacts on the urban heat island through design, layout, orientation, materials and the incorporation of green infrastructure.

St Ann's New Neighbourhood

Inclusive Design

- 14.7** The Applicant's commitment to inclusivity will ensure that the Proposed Development is scaled appropriately so as to respond to the needs of all its users. The Applicant will endeavour to incorporate the requirements of the Equality Act (2010) into their design, making reasonable adjustments to enable disabled access, regularly reviewing whether the buildings are accessible and effective, and providing necessary design adjustments where it is practical to do so.
- 14.8** St Ann's New Neighbourhood will provide 90% of dwellings to be compliant to Building Regulations Approved Document M4(2) standards and provide 10% of dwellings to be M4 (3) compliant. These standards will ensure accessible and adaptable accommodation for everyone; young families, older people, individuals with a temporary or permanent physical impairment, and allow residents to stay in their home despite developing disabilities. They also enable flexibility, visitability (facilitating ease of visiting access to the homes by everyone, regardless of mobility or disability) and future-proofing i.e. the accommodation will be adaptable and able to respond to changing technological and environmental conditions.
- 14.9** Furthermore, hard landscaping features will be provided to all dwellings at a gradient of no more than 1:21 providing suitable access for all.
- 14.10** For further information refer to the Inclusive Design Consultancy and Research Documents produced by David Bonnett Associates (December 2023).

Daylight and Sunlight

- 14.11** The promotion of good daylighting levels contributes to sustainability through improving the occupant's quality of life and reducing the building's energy consumption by minimising the need for artificial lighting.
- 14.12** The layout of the Proposed Development has been carefully designed to optimise the daylight and sunlight quality within what is a challenging urban location.
- 14.13** The internal performance of all habitable rooms and amenity space proposed as part of the development have been tested in accordance with the BRE methodology and is assessed as providing very good daylight conditions and reasonable sunlight conditions. In relation to amenity spaces the majority of amenity spaces are very well lit. The areas where deviations occur are typically at the lower levels or the inwards facing facades of the proposed blocks.
- 14.14** Please refer to the Daylight Sunlight report submitted alongside the application for more information.

Overheating

- 14.15** Minimising the risk of summer overheating and high uncontrollable temperatures is important so as to ensure that homes are comfortable for their occupants and remain comfortable in the future.
- 14.16** A Dynamic Overheating Assessment of a sample of dwellings and communal corridors has been selected for the dynamic overheating assessment based on design characteristics that establish them as representative of the overall proposed scheme has been undertaken by Hodkinson Consultancy (November 2023).
- 14.17** The performance of dwellings and communal corridors has been assessed against the Chartered Institution of Building Services Engineers (CIBSE) guidance TM59 Design methodology for the assessment of overheating risk in homes (2017) and Approved Document O Overheating (2021) - all dwellings and corridors tested demonstrate compliance with the CIBSE TM59 and AD(O) overheating assessment criteria.
- 14.18** For more information on the overheating strategy, please refer to this report for more detail.

Security

- 14.19** The Applicant is committed to ensuring the development is safe and secure for the occupants; reduce the risks and costs associated with crime; and improve occupiers' quality of life by reducing the fear of crime.
- 14.20** As such, St Ann's New Neighbourhood will be aiming to incorporate the principles of Secured by Design where appropriate. Natural surveillance through active frontages to possible crime risk spots and cycle storage has been designed to be secure. Ground floor windows will be openable and the public realm lighting will be designed to ensure people using pedestrian and cycle routes will feel safe. The ground floor windows will also benefit from security shutters.

Health Impact Assessment

- 14.21** A Health Impact Assessment (HIA) was prepared by Barton Willmore, now Stantec, in May 2022 to support the Hybrid planning application. The HIA identified and assessed the potential health effects of the development, the opportunities for improving health and equality and how to mitigate against negative impacts on health and reduce health inequalities. For further information refer to this report.

15. EQUITY & LOCAL COMMUNITY

Context

One Planet Living Principle

	Equity & local economy	Creating safe, equitable places to live and work which support local prosperity and international fair trade
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Planning Policy

- 15.1 Haringey's Local Plan, Strategic Policies: SP2 – Housing** outlines the council's plan to provide high quality housing that:
- > Meets Mayor of London's Housing SPG (March 2016) and contribute to housing diversity in the local area and help to redress imbalance. Respond to the requirements of a changing population.
 - > Includes 90% of new housing to Building Regulation M4(2) accessible and adaptable dwellings and 10% meet M4(3) wheelchair user dwelling requirements.
 - > In addition there is an affordable housing target of 40%, and a requirement for affordable housing to be high quality and fully integrated in the scheme (see also DM13 in Development Management DPD)
- 15.2 Haringey's Local Plan, Strategic Policies: SP8 – Employment** states that the following must be met to ensure a strong local economy:
- > Include B class floorspace to meet Council's forecasted demand and to support growth.
 - > Support local employment and regeneration aims.
 - > Support environmental policies to minimise travel to work.
 - > Support small and medium sized businesses that need employment land and space.
- 15.3 Haringey's Local Plan, Strategic Policies: SP9 – Improving skills and training to support access to jobs and community cohesion and inclusion** requires developments to include space for education and to support new and expanding employment sectors such as green industries, and small and medium-sized enterprises.

- 15.4 Policy DM12 of Haringey's Development Management Plan – Housing Design and Quality** states developments must be 'tenure blind' to ensure homes across tenures are indistinguishable from one another in terms of quality of design, space standards and building materials.
- 15.5 The London Plan Policy GG4 – Delivering Homes Londoners Need**
- 15.6 The London Plan Policy H4 – Delivering Affordable Housing**
- 15.7 The London Plan Policy E3 – Affordable Workspace**
- 15.8 The London Plan Policy E11 – Skills and Opportunities For All**
- 15.9 The London Plan Policy SI 6 – Digital Connectivity Infrastructure**

St Ann's New Neighbourhood

Job Creation

- 15.10** The demolition and construction related employment expected to be generated by the Development will generate employment within the construction industry. A local labour target and a local apprenticeship target is being explored for Hill Residential during construction to ensure jobs and training opportunities are focused towards the local community.
- 15.11** The development will set an ambitious target for jobs targeted at local residents not in employment, education or training and an ambitious target for percentage of jobs both during construction and during operations that are filled by Haringey residents. Prioritising the opportunity to employ young people, and those from deprived areas. These targets have been secured via the S106 and will therefore be implemented.
- 15.12** The potential to pay London Living Wage will be paid as a minimum to all site staff will be explored. Targets for project spend with social enterprise & community interest companies and procurement commitment to local supply chain during construction & operation will also be explored.

Housing Delivery

- 15.13** St Ann's New Neighbourhood would make a positive contribution towards the London Plan's housing delivery targets by delivering 464 new homes. Across both Phases of delivery, there will be 73% affordable homes, of which 50 option for local organisation to buy, and the rest 60% London Affordable Rent, 22% London Shared Ownership, 28% London Living Rent with all residents having access to greenspace or a private garden.

- 15.14** A total of 38 older person London Living Rent units and 97 wheelchair accessible units are proposed (10%), distributed across the tenures and phases of the masterplan. 90% of the units meet Building Regulations Part M4(2) compliance and 10% of units meet Part M4(3) compliance for accessibility.

16.CULTURE & COMMUNITY

Context

One Planet Living Principle

 Culture & community	Nurturing local identity and heritage, empowering communities and promoting a culture of sustainable living
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Planning Policy

- 16.1** **Haringey's Local Plan, Strategic Policies: SP10 – Town Centres** requires community facilities to be developed in accordance with the borough's town centre hierarchy.
- 16.2** **Haringey's Local Plan, Strategic Policies: SP16 – Community Facilities** requires developments that increases the demand for community facilities and services, to make appropriate contributions towards providing new facilities or improving existing facilities as well as promote the efficient use of community facilities and the provision of multi-purpose community facilities.
- 16.3** **The London Plan Policy D4 – Delivering Good Design**
- 16.4** **The London Plan Policy D5 – Inclusive Design**
- 16.5** **The London Plan Policy D8 – Public Realm**
- 16.6** **The London Plan Policy GG1 – Building Strong and Inclusive Communities**

St Ann's New Neighbourhood

Site Identity

- 16.7** The design and masterplan of St Ann's New Neighbourhood has evolved to give the proposals a distinctive identity that relates to the sites context, geology and social history to develop an

industrially inspired character that reflects the site's social memory as well as drawing inspiration from the areas local architectural vernacular.

- 16.8** The retention of seven buildings on site (within Phase 1A) retains the character of the area, with all improvements to the fabric and amenity of these buildings being as non-invasive as reasonably possible. The massing, scale, and material aesthetic of the residential development has been developed to honour and respond to the character of the local area and to ensure key views of the new build elements of the scheme.
- 16.9** The site will be open and permeable to the local community, providing them with green amenity / walking space. The new community facilities (with wellness/exercise, creative and social events and activities) and food growing spaces will also be open to the external community helping to establish a positive and coherent sustainable identity that everyone can identify with, including residents and local communities, so contributing towards health and well-being, inclusion and cohesion.

Community

- 16.10** The community space will look to explore the running of events to promote sustainable lifestyles, products, and services and run events suitable for a range of ages and abilities. This will include consideration of social activities such as a 'Remakery', repair café or library of things for neighbours to interact and share knowledge and product.
- 16.11** The potential for 'green leases' for commercial and community space is being explored. These ensure retail and workspaces align with a shared set of values focused on sustainability alongside affordable workspace aimed at local businesses and sustainable entrepreneurs is being offered.

17. CONCLUSION

- 17.1** The purpose of this Sustainability Statement is to demonstrate that the Proposed Development at St Ann's New Neighbourhood by Peabody Trust, Catalyst by Design and Hill Residential Limited is considered sustainable, as measured against relevant local and national planning policies.
- 17.2** Through the incorporation of sustainable design and construction methods, energy and water saving measures, sustainable transport methods, waste reduction techniques and measures to enhance the ecological value of the Site, a high quality and sustainable development is proposed.
- 17.3** The One Planet Living framework and its ten principles have been used to develop and communicate the sustainability objectives of the Proposed Development, and measures proposed by the design team to meet these objectives. These are as follows:
- > **Energy and CO₂ Reduction** – The site will achieve a 79% CO₂ reduction over Part L 2021 through a 100% air source heat pump led network, PV panel provision and an enhanced fabric specification.
 - > **Water Reduction** – Flow control devices and water efficient fixtures and fittings will be installed in all dwellings to target a maximum internal daily water consumption of 105 litres/person/day. The site lies in a low flood risk zone and will benefit from SUDs such as a green roof, permeable paving, and swales.
 - > **Waste Management and Circular Economy** – Adequate facilities will be provided for domestic, commercial and construction related waste, including segregated bins for refuse and recycling. The principles of a circular economy shall be incorporated into the development.
 - > **Materials** – Where practical, new building materials will be sourced locally to reduce transportation pollution and support the local economy. New materials will be selected based on their environmental impact and responsible suppliers will be used where possible.
 - > **Land and Nature** – Enhancements will be implemented through the provision of landscaped areas, play space and additional tree and shrub planting across the Site. The retained, improved and new landscape features will deliver a positive biodiversity net gain baseline score has been achieved on-site using the Defra Biodiversity Metric 4.0.
 - > **Local and Sustainable Food** – An area designated for food growing is proposed and will include 4 allotment-style areas accessible to all which will provide residents with the opportunity for communal food growing.
 - > **Travel and Transport** – The site will benefit from a good existing public transport network and sustainable modes will be encouraged through the provision of long stay cycle spaces and short

stay cycle spaces. The development includes 58 car parking spaces, 20% with active car charging and the remainder with passive electric charging provision.

- > **Health and Happiness** – The health and wellbeing of future residents will be improved through inclusive design, daylight and sunlight provision, the risk of overheating reduced, secured by design measures promoting community safety and provision of new open space for social interaction.
- > **Equity and Local Community** – St Ann's New Neighbourhood would make a positive contribution towards the London Plan's housing delivery targets by delivering 464 new homes and will create jobs both during construction and operation. A diverse mix of homes also respond to the local and wider market demands with a significant proportion of locally affordable homes ensuring that affordable homes are well integrated and ideally indistinguishable from market housing.
- > **Culture and Community** – The landscape-led approach to the masterplan and the Site's redevelopment, in conjunction with a diverse mix of uses across the scheme, will help establish a positive and coherent sustainable identity that everyone can identify with, including residents and local communities, so contributing towards health and well-being, inclusion and cohesion.

- 17.4** Through the One Planet Living Framework and an extensive collaborative design process, it has been demonstrated that St Ann's New Neighbourhood is an exemplar of modern design quality and sustainable building practice. The use of the One Planet Framework on this project has been used to demonstrate that a person-centred approach has been taken and that the outcomes of this process are central to the ambitions of the design team.

APPENDICES

Appendix A

BREEAM New Construction 2018 Office Shell Only
'Excellent' Pre-Assessment

Appendix B

Water Efficiency Calculator

Appendix C

Waste Management Plan

Appendix A

BREEAM New Construction 2018 Office Shell Only
'Excellent' Pre-Assessment



BREEAM 2018 TRACKER

St Anns Phases 1B&2, London Borough of Haringey

Project name & number	St Ann's Phase 1B&2	BREEAM assessor	Zeta Stebbings
Client	Catalyst Housing Limited	Project manager	Zeta Stebbings
Local authority & postcode	Haringey	Rating required	Excellent
Reason for BREEAM	Planning requirements	Building type	Retail
Status of project	Pre Assessment	Assessment scope	Shell only
Development description	Phase 1B&2 comprises 464 homes across a range of tenures, a small commercial unit, and new landscape.		

BREEAM assessment details		Target score	Awarded score	BREEAM rating benchmarks	
Reference number	BREEAM-0099-6256	74.90%	3.60%	Pass	≥ 30
Scheme	New Construction			Good	≥ 45
Version	v6	Excellent		Very Good	≥ 55
GIFA (m²)	112.51			Excellent	≥ 70
Part L	2021			Outstanding	≥ 85

Meeting log			BREEAM credits					
Date	Location	Key actions from DTM	Section	Available credits	Target credits	Section weighting	% credits targeted	Category score
30.05.2023	Teams	Update pre-assessment in line with comments provided by the the design team	Management	15	10	12.00%	66.67%	8.00%
			Health & Wellbeing	8	5	7.00%	62.50%	4.37%
31.05.2023	Teams	Meeting held with Middlemarch to discuss Ecology report and ensuring all pre-requisites are included	Energy	13	8	9.50%	61.54%	5.84%
			Transport	12	10	14.50%	83.33%	12.08%
			Water	3	3	2.00%	100.00%	2.00%
			Materials	14	7	22.00%	50.00%	11.00%
			Waste	10	7	8.00%	70.00%	5.60%
			Land Use & Ecology	13	13	19.00%	100.00%	19.00%
			Pollution	6	6	6.00%	100.00%	6.00%
			Innovation	10	1	10.00%	10.00%	1.00%
			Rating	Excellent				

Revision	Date	Revision details	Author	QA	PM sign off
v1	19.05.2023	For discussion ahead of planning submission	ZS	ZL	ZS
v2	31.05.2023	Updated following BREEAM meeting	ZS	ZL	ZS

Producing BREEAM Evidence:

- All pieces of information need to have a clear source for the audit trail i.e. company branding, name of author and date;
- The BRE require calculator tools to be completed for specific issues. These will be completed by the assessor once all information required for the calculation is provided;
- Drawings produced for BREEAM should be annotated to show how each criterion is met. Notes can be added directly to the drawing, or annotated by hand.

Hodkinson Consultancy can provide you with a wide range of templates to help demonstrate compliance. Your assessor will discuss these with you.

For best results please print this document in A3 format.

BREEAM New Construction 2018 Tracker

Issue			Credits			Evidence				Notes		
			Issue sub-title	RIBA Stage	Credit description	Available	Targeted	Design Stage evidence description	Responsibility		Status	Minimum standards
Management	Man 01	Project brief and design	Project delivery planning	RIBA 2	The project delivery stakeholders will meet to identify and define roles, responsibilities and contributions for each key phase of project delivery. The following will be considered: - End user requirements; - Aims of the design and design strategy; - Particular installation and construction requirements or limitations; - Occupiers' budget and technical expertise in maintaining any systems; - Maintainability and adaptability of the proposals; - Operational energy; - Requirements for the production of project and end user documentation; - Requirements for commissioning, training and aftercare support.	1	1	Meeting minutes confirming that all stakeholders met to identify and define roles	Hill Group	Required		
							Roles and responsibilities matrix	Hill Group	Required			
			Stakeholder consultation	RIBA 2	All interested parties will be consulted and the design team will demonstrate how the consultation exercise influences the Project Brief and Concept Design. Prior to completion of the detailed design all interested parties give and receive consultation feedback.	1	1	Consultation plan setting out the process and scope of the consultation	Hill Group	Required		
			Pre-requisite - BREEAM Advisory Professional	RIBA 1	The project team, including the client, formally agree strategic performance targets early in the design process.	-	-			Provided		
									Provided			
			BREEAM Advisory Professional - Concept Design	RIBA 2	A BREEAM AP will work with the project team to maximise the project's overall performance against BREEAM. They will monitor progress against the performance targets and identify risks and opportunities related to the achievement of the rating.	1	1	BREEAM monitoring documents	BREEAM AP - Zeta Stebbings	Required		
						Risks and opportunities document related to the achievement of the rating	BREEAM AP - Zeta Stebbings	Required				
	BREEAM Advisory Professional (AP) - Detailed Design	RIBA 3	A BREEAM AP will continue to work with the project team to maximise the project's overall performance against BREEAM. Feedback will be provided to support them in taking corrective actions and achieving their agreed rating.	1	1	BREEAM monitoring documents	BREEAM AP - Zeta Stebbings	Required				
						Risks and opportunities document related to the achievement of the rating	BREEAM AP - Zeta Stebbings	Required				
	Man 02	Life cycle cost and service life planning	Elemental Life Cycle Cost (LCC)	RIBA 2	An entire asset LCC Plan will be produced with design options appraisals in line with 'Standardised method of life cycle costing for construction procurement' PD 156865: 2008. This will include an indication of future replacement costs over a period of analysis and will include service life, maintenance and operation cost estimates. Details of how the LCC Plan has been used to influence building and systems design and specifications to minimise life cycle costs and maximise critical value will be demonstrated by the team.	2	0			Not Targeted		
			Component level life options appraisal	RIBA 4	A component level LCC options appraisal will be produced in line with PD 156865: 2008 and will include details on the building envelope, building services, finishes and external spaces. Appropriate examples provided by the design team will be used to demonstrate how this appraisal has been used to influence building and systems design and specification to minimise life cycle costs and maximise critical value.	1	0			Not Targeted		
			Capital cost reporting		Report the capital cost for the building in pounds per square metre of gross internal floor area (£k/m²).	1	1	Predicted capital costs	Hill Group	Required		
	Man 03	Responsible construction	Pre-requisite - Legally harvested and traded timber		All timber and timber-based products used during the construction process of the project are 'legally harvested and traded timber'.	-	-	Confirmation that all timber will be legally sourced	Hill Group	Required		
			Environmental management		The principal contractor will operate an Environmental Management System covering their main operations (e.g. ISO 14001). All parties who manage the construction site will also implement best practice pollution prevention policies and procedures on site.	1	1			Provided		A copy of Hill's EMS certificate has been provided
					Copies of the best practice pollution prevention policies and procedures	Hill Group	Required					
			Pre-requisite - BREEAM Advisory Professional		The client and the contractor formally agree performance targets.	-	-			Not Targeted		
BREEAM Advisory Professional - Site				The BREEAM AP will also monitor construction progress throughout all stages where decisions critically impact BREEAM performance and will proactively identify risks and opportunities related to the procurement and construction process.	1	0			Not Targeted			
Responsible construction management				The principal contractor evaluates the risks (on site and off site), plans and implements actions to minimise the identified risks. Compliance with Considerate Constructors is required for 1 credit.	1	1	Man 03 template	Hill Group	Required	1 credit - Excellent 2 credits - Outstanding		
				Compliance with Considerate Constructors is required whilst also undertaking additional responsible construction practices.	1	1	Man 03 template	Hill Group	Required			
Monitoring of construction site impacts - Utility		Assign responsibility to an individual for monitoring, recording and reporting energy use and water consumption from all on-site construction processes throughout the build programme.	1	1	Confirmation that both energy and water will be monitored during construction	Hill Group	Required					
Monitoring of construction site impacts - Transport		Assign responsibility to an individual for monitoring, recording and reporting transportation data resulting from all on-site construction processes throughout the build programme.	1	1	Confirmation that transport will be monitored during construction	Hill Group	Required					
Man 04	Commissioning and handover	Testing and inspecting building fabric		Post-construction testing and inspection will be undertaken by a suitably qualified professional who will undertake the survey and testing in accordance with the appropriate standard. Any defects identified during post-construction testing and inspection will be rectified prior to building handover and close out.	1	0			Not Targeted			
Total for management						15	10	Credit weighting	0.80			
Health and wellbeing	Hea 01	Visual comfort	Daylighting		At least 80% of floor area in occupied spaces (or 35% in retail sale areas) is adequately day lit with an average daylight factor of 2% or more.	2	0			Not Targeted		
			View Out		95% of the floor area in 95% of spaces for each relevant building area will be within 8m of an external wall. The external wall must have a window or permanent opening that provides an adequate view out. The window or opening must be ≥ 20% of the surrounding wall area.	1	1	Drawing and/or calculations confirming the % of the floorplan that complies with the requirements	Karakusevic Carson Architects	Required		
			External lighting		All external lighting located within the construction zone will be specified in accordance with BS 5489-1:2013 Code for the practice for the design of road lighting. Lighting of roads and public amenity areas and BS EN 12464-2:20145 Light and lighting - Lighting of work places - Part 2: Outdoor work places.	1	1	Electrical specification and/or drawing confirming that external lighting requirements are included in the design	AWA Building Services Consultants	Required		
	Hea 05	Acoustic performance	Acoustic performance		Demonstrate that all spaces in the building achieve, and for the relevant areas exceed, the performance standards required by BS for sound insulation, indoor ambient noise levels and reverberation times.	1	1	Confirmation to be provided confirming the building will comply with performance standards	Cass Allen	Required		
					Suitably qualified acoustician qualifications	Cass Allen	Required					
	Hea 06	Security	Security of site and building	RIBA 2	A Suitably Qualified Security Specialist (SQSS) will conduct an evidence-based Security Needs Assessment (SNA). This SNA will be used to identify attributes of the site and surroundings which may influence the approach to security for the development. The SQSS will develop a set of security controls and recommendations and these will be incorporated in the design.	1	0			Not Targeted		Currently not targeted but Hodgkinson to review if this is achievable based on work done to date
							Not Targeted					
	Hea 07	Safe and healthy surroundings	Safe access		Dedicated and safe cycle paths will be provided from the site entrance to any cycle storage, and connect to off-site cycle paths where applicable. Also, dedicated and safe footpaths are provided on and around the site providing suitable links. Pedestrian drop-off areas are designed off, or adjoining to, the access road and should provide direct access to other footpaths and it will ensure that any delivery areas are not accessed through general parking areas and do not cross or share pedestrian and cyclist paths. There will be dedicated parking or waiting area for goods vehicles with appropriate separation from the manoeuvring area and staff and visitor car parking. Also, parking and turning areas will be designed for simple manoeuvring according to the type of delivery vehicle likely to access the site, thus avoiding the need for repeated shunting.	1	1	Drawings to confirm how the requirements have been incorporated into the design	Landscape Architect	Required		
Outdoor space				There will be outside space providing building users with an external amenity area.	1	1	Drawings confirming the size and location of the outdoor space	Landscape Architect	Required			
Total for health and wellbeing						8	5	Credit weighting	0.88			

BREEAM New Construction 2018 Tracker

	Issue			Credits			Evidence				Notes	
	Issue	Issue sub-title	RIBA Stage	Credit description	Available	Targeted	Design Stage evidence description	Responsibility	Status	Minimum standards		
Energy	Ene 01	Reduction of energy and carbon		An Energy Performance Ratio for New Construction (EPR _{nc}) will be calculated. The EPR _{nc} achieved will be compared with the benchmarks below in order to award the corresponding number of BREEAM credits.	9	6	A copy of the building regulations output document from the approved software	Hodkinson Consultancy	Required	4 credits - Excellent 6 credits - Outstanding		
	Ene 03	External lighting		External light fittings within the construction zone will have an average initial luminous efficacy of not less than 70 luminaire lumens per circuit Watt, automatic control to prevent operation during daylight hours and presence detection in areas of intermittent pedestrian traffic.	1	1	Electrical specification confirming that external lighting requirements are implemented in the design Lighting layout drawings confirming that the external lighting requirements have been implemented in the design	AWA Building Services Consultants AWA Building Services Consultants	Required Required			
	Ene 04	Low carbon design	Passive design analysis	RIBA 2	The project team will analyse the proposed building design and development during Concept Design to identify opportunities for the implementation of passive design measures. Passive design measures will be implemented to reduce the total heating, cooling, mechanical ventilation, lighting loads and energy consumption in line with the passive design analysis findings and the reduced total energy demand and carbon dioxide (CO ₂) emissions resulting from the passive design measures will be calculated.	1	0			Not Targeted		
			Free cooling		A free cooling analysis will be included in the passive design analysis and it will identify opportunities for the implementation of free cooling solutions. The building will be naturally ventilated or will use a combination of the free cooling strategies.	1	0			Not Targeted		
			Low and zero carbon technologies	RIBA 2	An energy specialist will completes a feasibility study by the end of Concept Design, this will establish the most appropriate recognised local (on-site or near-site) low or zero carbon (LZC) energy sources for the building or development. The LZC technologies for the building will be specified in line with the feasibility study recommendations. The reduced regulated carbon dioxide (CO ₂) emissions resulting from the feasibility study will be quantified.	1	1	Low zero carbon feasibility study Energy assessor qualifications/assessor number Results from the dynamic simulation demonstrating reductions in CO ₂ emissions from the specified LZC technology	Hodkinson Consultancy Hodkinson Consultancy Hodkinson Consultancy	Required Required Required		
	Total for energy				13	8	Credit weighting		0.73			
	Transport	Tra 01	Transport assessment and travel plan	RIBA 1	A travel plan is developed based on a site-specific travel assessment or statement. This statement should include: - Existing travel patterns and opinions of existing building or site users towards cycling and walking; - Travel patterns and transport impact of future building users; - Current local environment for walkers and cyclists; - Reporting of the number and type of existing accessible amenities within 500m of the site; - Disabled access; - Calculation of the existing public transport Accessibility Index (AI); - Current facilities for cyclists.	2	2	Transport assessment Travel plan	Markides Associates Markides Associates	Required Required		
Tra 02		Sustainable transport			Note - At least one credit must be achieved for Tra 01 for any credits to be awarded in this issue. Credits will be awarded based on the Accessible index (AI) of the project, and the number of transport measures implemented.	10	8	Tra 01 table confirming the sustainable transport measures to be implemented Drawings confirming that the sustainable transport measures have been incorporated in the design	Hodkinson Consultancy Markides Associates	Required Required		
Total for transport				12	10	Credit weighting		1.21				
Water	Wat 02	Water meter		A pulsed water meter is installed on the mains water supply to each building. This includes instances where water is supplied via a borehole or other private source. The water meter should connect to a BMS or utility monitoring system or should be capable of connecting to one.	1	1	Mechanical specification confirming that pulsed water meters have been implemented in the design Drawings confirming the location of the pulsed water meter	AWA Building Services Consultants AWA Building Services Consultants	Required Required	Good Very Good Excellent Outstanding		
	Wat 02	Leak detection		A leak detection system capable of detecting a major water leak on the utilities water supply within the building will be installed AND A leak detection will be installed between the buildings and the utilities water supply. This leak detection will be a permanent automated water leak detection system that alerts the building occupants to the leak and is activated when the flow of water passing through the water meter. Also, it will be able to identify different flow and therefore leakage rates and also programmable to suit the owner's or occupier's water consumption criteria.	1	1	Mechanical specification confirming that a leak detection system has been specified Drawing confirming the location of the leak detection system	AWA Building Services Consultants AWA Building Services Consultants	Required Required			
	Wat 04	Water efficient equipment		Identify all water demands from uses that could be realistically mitigated or reduced and establish a demonstrable reduction in the total water demand of the building.	1	1	Drawing or specification confirming that there are sources of unregulated water in the development Confirmation on how the unregulated water will be reduced	AWA Building Services Consultants Landscape Architect	Required Required			
	Total for water				3	3	Credit weighting		0.67			
	Materials	Mat 01	Environmental impacts - LCA		During the Concept Design and Technical Design, demonstrate the environmental performance of the building as follows: - Carry out a building LCA on of the superstructure design using either the BREEAM Simplified Building LCA tool or an IMPACT Compliant LCA tool according to the methodology Submit the Mat 01/02 Results Submission Tool to BRE at the end of Concept Design, and before planning permission is applied for (that includes external material or product specifications).	7	2	The options appraisal summary document The Mat 01/02 Results Tool Details of how the LCA design options have informed the design decision-making process Demonstrate that the LCA options appraisal summary document has been received by the design team and client	Hodkinson Consultancy Hodkinson Consultancy Hill Group Hill Group	Required Required Required		
		Mat 02	Environmental impacts – EPD		Construction products with an EPD that achieve a total EPD points score of at least 20 will be undertaken. Enter the details of each EPD into the Mat 01/02 Results Submission Tool, including the material category classification. The Mat 01/02 Results Submission Tool will verify the EPD points score and credit award.	1	1	The Mat 01/02 Results Submission tool Commitment to use products that have an EPD	Hodkinson Consultancy Hill Group	Required Required		
Mat 03		Responsible sourcing of construction products	Pre-requisite		All timber and timber-based products used on the project will be legally harvested and traded as per the UK Government's Timber Procurement Policy (TPP)	-	-	Confirmation that all timber will be sourced legally (policy document)	Hill Group	Required	All ratings	
			Enabling sustainable procurement	RIBA 2	A sustainable procurement plan will be used to guide the specification towards sustainable construction products. This plan will include sustainability aims, objectives and strategic targets to guide procurement activities and will also include a requirement for assessing the potential to procure construction products locally. There must be a policy to procure construction products locally where possible. Details of the checking and verifying the effectiveness of the procurement plan will also be included. In addition, if the plan is applied to several sites or adopted at an organisational level it will identify the risks and opportunities of procurement against the process set out in BS ISO 20400:2017.	1	1	Sustainable procurement plan	Hill Group	Required		
			Measuring responsible sourcing		Superstructure, internal finishes, substructure and hard landscaping are responsibly sourced in accordance with the below targets: 3 credits > 30% of points achieved 2 credits > 20% of points achieved 1 credit > 10% of points achieved	3	2	Responsible sourcing certificates Completed copy of the Mat 03 Calculator tool.	Hill Group Hodkinson Consultancy	Required Required		
Mat 05		Designing for durability and resilience	Protecting vulnerable parts of the building from damage		Protection measures will be incorporated into the building's design and construction to reduce damage to the building's fabric or materials.	1	1	Drawings confirming the robustness measures to be implemented	Hodkinson Consultancy	Required		
			Protecting exposed parts of the building from material degradation		Provide a detailed assessment of the element's resilience when exposed to the applicable material degradation and environmental factors and provide convenient access to the roof and façade for cost-effective cleaning, replacement and repair in the building's design will be implemented and the design the roof and façade to prevent water damage, ingress and detrimental ponding will also be undertaken.			Drawings confirming the building elements and how they'll be protection from environmental factors	Hodkinson Consultancy & Karakusevic Carson Architects	Required		
Mat 06		Material efficiency		RIBA 1	Targets will be set and opportunities and methods to optimise the use of materials will be reported for all RIBA stages. The implementation of material efficiency will be reported on during developed design through to construction.	1	0			Not Targeted		
Total for materials				14	7	Credit weighting		1.57				

	Issue			Credits			Evidence			Minimum standards	Notes		
	Issue	Issue sub-title	RIBA Stage	Credit description	Available	Targeted	Design Stage evidence description	Responsibility	Status				
Waste	Wst 01	Construction waste management	Pre demolition audit	RIBA 2	A pre-demolition audit of any existing buildings, structures or hard surfaces will be carried out This will be used to determine whether refurbishment or reuse is feasible and to maximise the recovery of material for subsequent high grade or value applications.	1	1			Provided	1 credit - Outstanding	A pre-demolition audit has been undertaken and is considered BREEAM compliant.	
			Construction resource efficiency		A compliant Resource Management Plan (RMP) covering non-hazardous waste materials, demolition and excavation waste will be produced. The site will meet or improve on the benchmarks as shown below: - One credit - <11.1 tonnes per 100m ² - Two credits - <6.5 tonnes per 100m ² - Three credits - <3.2 tonnes per 100m ²	3	1	Resource Management Plan or commitment to undertake one	Hill Group	Required			
			Diversion of resources from landfill		Waste materials will be sorted into separate key waste groups either on-site or through a licensed contractor for recovery. The diversion from landfill benchmarks for non-hazardous construction waste and demolition and excavation waste generated will meet the following: - Non Demolition - 80% (tonnage) - Demolition - 90% (tonnage)	1	1	Resource Management Plan or commitment to undertake one	Hill Group	Required			
	Wst 02	Recycled aggregates	Pre-requisite	RIBA 2	To encourage the reuse of site material, a pre demolition audit of any existing buildings, structures or hard surfaces will be undertaken.	-	-			Not Targeted			
			Project Sustainable Aggregate Points		Aggregate uses, types and quantities will be identified for each identified use and aggregate type. The region in which the aggregates are sourced will be calculated (km).	1	0			Not Targeted			
	Wst 03	Operational waste		Operational waste		Provide a dedicated space for the segregation and storage of operational recyclable waste generated. This will be appropriately labelled, accessible to building users and waste management contractors and be of a sufficient size. If large amounts of waste are expected, waste compactors or balers will be provided and if appropriate, organic waste facilities (with a water outlet).	1	1	Drawings confirming the location and details of the refuse area to be installed.	Waste Consultant	Required	Excellent Outstanding	
	Wst 05	Adaptation to climate change	Resilience of structure, fabric, building services and renewables installation		RIBA 2	A climate change adaptation strategy appraisal will be undertaken using a systematic risk assessment to identify the impact of expected extreme weather conditions arising from climate change on the building over its projected life cycle. The assessment will include the following: - Hazard identification - Hazard assessment - Risk estimation - Risk evaluation - Risk management Following this study develop recommendations or solutions based on the climate change adaptation strategy appraisal that aim to mitigate the identified impact.	1	1	Climate change adaptation strategy appraisal	Hodkinson Consultancy	Required		
					RIBA 4	An update will be provided during Technical Design demonstrating how the recommendations or solutions proposed at Concept Design have been implemented where practical and cost effective.			Updated climate change adaptation strategy appraisal	Hodkinson Consultancy	Required		
	Wst 06	Design for disassembly and functional adaptability	Design for disassembly and functional adaptability - recommendations	RIBA 2	A study to explore the ease of disassembly and the functional adaptation potential of different design scenarios will be carried out. Following this recommendations or solutions will be developed, based on the study that aim to enable and facilitate disassembly and functional adaptation.	1	1	Disassembly and functional adaptability study	Hill Group & Karakusevic Carson Architects	Required			
			Disassembly and functional adaptability – implementation	RIBA 4	The team will provide an update on how the recommendations or solutions have been implemented where practical and cost effective. Omissions will also justified in writing to the assessor. Any changes to the recommendations and solutions during the development of the Technical Design should also be recorded. A building adaptability and disassembly guide will be produced to communicate the characteristics allowing functional adaptability and disassembly to prospective tenants.	1	1	Implementation plan report Building adaptability and disassembly guide	Hill Group & Karakusevic Carson Architects Hill Group & Karakusevic Carson Architects	Required Required			
	Total for waste						10	7	Credit weighting	0.80			
	Land Use and Ecology	Le 01	Site selection	Previously occupied land		At least 75% of the proposed development's footprint is on an area of land which has previously been occupied.	1	1	Drawing confirming that at least 75% of the building footprint is on previously developed land	Karakusevic Carson Architects	Required		
Contaminated land					A contaminated land professional's site investigation, risk assessment and appraisal has deemed land within the site to be affected by contamination. The site investigation, risk assessment and appraisal have identified the degree of contamination, contaminant sources or types and the options for remediating sources of contamination. The remediation of the site will be carried out in accordance with the remediation strategy.	1	1	A copy of the remediation strategy and implementation plan.	Specialist	Required			
Le 02		Risks and opportunities	Pre-requisite - Assessment route selection		An assessment route for the project has been determined using BREEAM Guidance Note GN34 BREEAM Ecological Risk Evaluation Checklist.	-	-			Provided		Route 2 is the most appropriate route for the site	
			Survey and evaluation	RIBA 1	Route 2 only: An appropriate individual is appointed at an early stage for the involvement of site configuration and to ensure that they can influence strategic planning decisions. An appropriate level of survey and evaluation will be carried out to determine the ecological baseline of the site, taking account of the zone of influence to establish: - Current and potential ecological value and condition of the site, and related areas within the zone of influence; - Direct and indirect risks to current ecological value; - Capacity and feasibility for enhancement of the ecological value of the site and areas within the zone of influence.	1	1	BREEAM Ecology report	Middlemarch	Required			
			Determining the ecological outcomes for the site	RIBA 2	To achieve this credit the survey and evaluation criteria must have been achieved. The project team will liaise and collaborate with representative stakeholders to identify and consider ecological outcome for the sites for the project. When determining the ecological impact of the site this will involve the identification, appraisal and selection of specific solutions and measures sufficiently early to influence key project planning decisions. The optimal ecological outcome for the site will be selected after liaising with representative stakeholders and the project team.	1	1	Details of the stakeholder collaboration (e.g. meeting minutes or a report)	Middlemarch	Required			
Le 03		Managing negative impacts on ecology	Pre-requisite – Identification and understanding the risks and opportunities		To achieve this credit the credits under LE 02 must be achieved.	-	-	Evidence as requested for LE 02	Middlemarch	Required			
			Planning, liaison, implementation and data	RIBA 2	Roles and responsibilities will be clearly defined, allocated and implemented to support successful delivery of project outcomes at an early enough stage to influence the concept design or design brief. Site preparation and construction works will be planned and implemented at an early project stage to optimise benefits and outputs. The project team will implement the solutions, and measures that have been selected (see LE 02) during site preparation and construction works.	1	1	Details of the roles and responsibilities of the project team	Middlemarch	Required			
			Managing negative impacts of the project		Route two only: Negative impacts from site preparation and construction works will be managed according to the hierarchy and either: - No overall loss of ecological value has occurred (2 credits) OR - The loss of ecological value has been limited as far as possible (1 credit)	2	2	BREEAM report confirming the ecological value	Middlemarch	Required			
Le 04		Change and enhancement of ecological value	Pre-requisite - Identifying and understanding the risks and opportunities		To achieve this credit the credits under LE 03 must be achieved.	-	-	Evidence as requested for LE 03	Middlemarch	Required			
			Liaison, implementation and data collation		Route two only: The project team will implement the solutions and measures selected in a way that enhances ecological value in the following order: - On site, and where this is not feasible; - Off site within the zone of influence.	1	1	BREEAM report confirming the measures to be installed as recommended by a specialist	Middlemarch	Required			
			Enhancement of ecology		Route two only: Credits will be awarded on a scale of 1 to 3, based on the calculation of the change in ecological value occurring as a result of the project.	3	3	LE 04 calculator	Middlemarch	Required			
Le 05		Long term ecology management and maintenance	Pre-requisite - Roles and responsibilities, implementation, statutory obligations		The client or contractor will confirm that compliance is being monitored against all relevant UK, EU and international standards relating to the ecology of the site.	-	-	Confirmation that all relevant UK, EU and international standards are being met	Middlemarch	Required			
			Planning, liaison, data, monitoring and review management and maintenance		The project team will liaise and collaborate with representative stakeholders to: - Monitor and review implementation and the effectiveness; - Develop and review management and maintenance solutions, actions or measures. The monitoring and reporting of on the ecological outcomes/successes for site implemented at the design and construction stage and the arrangements of ongoing management of the new landscape and habitats will be reviewed. Also, the ecological value of the site and its relationship to its zone of influence and any linked sustainable activities will be maintained. As part of the tenant or building owner information supplied a section on Ecology and Biodiversity to inform the owner or occupant of local ecological features will be included.	1	1	Details of the stakeholder collaboration (e.g. meeting minutes or a report)	Middlemarch	Required			
			Landscape and ecology management plan		A landscape and ecology management plan will be developed in accordance with BS 42020:20131 covering the first five years. The landscape and management plan will be updated as appropriate to support maintenance of the ecological value of the site.	1	1	Landscape and ecology management plan	Middlemarch	Required			
Total for land use and ecology						13	13	Credit weighting	1.46				

BREEAM New Construction 2018 Tracker

			Issue		Credits			Evidence				
	Issue		Issue sub-title	RIBA Stage	Credit description	Available	Targeted	Design Stage evidence description	Responsibility	Status	Minimum standards	Notes
Pollution	Pol 03	Flood and surface water management	Pre-requisite		An appropriate consultant is appointed to carry out the following requirements; an appropriate consultant is one who has qualifications and experience relevant to designing SuDS and flood prevention measures and completing peak rate of run-off calculations.	-	-	Consultant qualifications	Price and Myers	Required		
			Flood resilience		A site-specific flood risk assessment (FRA) confirms the development is in a flood zone that is defined as having a low annual probability of flooding. The FRA takes all current and future sources of flooding into consideration.	2	2			Provided		FRA received confirms the site is in flood zone one. The report received is BREEAM compliant.
			Pre-requisite - Surface water run-off		Surface water run-off design solutions must be bespoke.	-	-	Drainage report	Price and Myers	Required		
			Surface water run-off - volume		Drainage measures will be specified so that the peak rate of run-off from the site to the watercourses (natural or municipal) shows a 30% improvement for the developed site compared with the pre-developed site. This should comply at the 1-year and 100-year return period events.	1	1	Calculation results for the pre-and post-development peak rate of run-off	Price and Myers	Required		
			Surface water run-off - volume		Flooding of property will not occur in the event of local drainage system failure (caused either by extreme rainfall or a lack of maintenance); AND Drainage design measures will be specified so that the post-development run-off volume, over the development lifetime, is no greater than it would have been prior to the assessed site's development. This must be for the 100-year 6-hour event, including an allowance for climate change. Any additional predicted volume of run-off for this event will be prevented from leaving the site by using infiltration or other SuDS techniques.	1	1	Information showing the proposed drainage solution, system failure flood flow routes, potential flood ponding levels and ground floor levels	Price and Myers	Required		
			Minimising watercourse pollution		Drainage strategy confirms that there is no discharge from the developed site for rainfall up to 5 mm and that areas with a low risk source of watercourse pollution will have an appropriate level of pollution prevention treatment provided. Areas with a high risk of contamination or spillage of substances have separators installed in surface water drainage systems. All water pollution prevention systems will be designed and installed in accordance with the recommendations of documents such as the SuDS manual and other relevant industry best practice. Relevant maintenance agreements for the ownership, long term operation and maintenance of all specified SuDS will also be in place.	1	1	Drainage report confirming that appropriate water pollution prevention systems have been specified	Price and Myers	Required		
	Pol 04	Reduction of night time light pollution		The external lighting strategy has been designed in compliance with Table 2 (ILP) Guidance notes for the reduction of obtrusive light, 2011. Also All external lighting will have the capabilities to be automatically switched off between 23:00 and 07:00. If safety or security lighting is provided and will be used between 23:00 and 07:00, this will comply with the lower levels of lighting recommended during these hours in Table 2 of the ILP guidance notes. Illuminated advertisements will be designed in compliance with ILP PLG05 The Brightness of Illuminated Advertisements.	1	1	Electrical specification confirming that external lighting requirements are implemented in the design Lighting layout drawings confirming that the external lighting requirements have been implemented in the design	AWA Building Services Consultants AWA Building Services Consultants	Required Required			
	Total for pollution					6	6	Credit weighting		1.00		
Innovation	Man 03	Responsible construction	Responsible construction management		The principal contractor evaluates the risks (on site and off site), plans and implements actions to minimise the identified risks, covering the items included in the Responsible Construction Management Template. All criteria must be met to achieve this credit.	1	1	Man 03 template	Hill Group	Required		
	Hea 01	Visual comfort	Daylighting		At least 80% of floor area in occupied spaces (or 50% in retail sale areas) is adequately day lit with an average daylight factor of 3% or more.	1	0			Not Targeted		
	Hea 06	Security	Security of site and building		A compliant risk based security rating scheme has been used. The performance against the scheme has been confirmed by independent assessment and verification.	1	0			Not Targeted		
	Ene 01	Reduction of energy use	Beyond zero net regulated carbon		The building will achieve an EPR NC ≥ 0.9 and zero net regulated CO ₂ emissions. Energy generation from on-site and near-site LZC sources will be sufficient to offset carbon emissions from regulated energy use plus a percentage of emissions from unregulated energy use. The exemplary credits will be awarded as follows: 1 credit - 10% 2 credits - 50% 3 credits - 100% (carbon negative)	3	0			Not Targeted		
	Mat 01	Environmental impacts	Third party verification		A suitably qualified third party will carry out the building LCAs OR produces a report verifying the building LCAs accurately represent the designs under consideration during Concept Design and Technical Design. For each LCA option, the findings of the verification checks made by the suitably qualified third party will be itemised in the report including. The suitably qualified third party's relevant skills and experience will be provided and a declaration of their third party independence from the project client and design team will be included in their report.	1	0			Not Targeted		
	Mat 03	Responsible Sourcing	Measuring responsible sourcing		Superstructure, internal finishes, substructure and hard landscaping and core services are responsibly sourced in accordance with the below targets: 3 credits plus 1 exemplary credit > 50% of points achieved.	1	0			Not Targeted		
	Wst 01	Construction waste management	Construction waste management		Prepare a compliant Resource Management Plan (RMP) covering non-hazardous waste materials, demolition and excavation waste and less than <1.9 tonnes of waste per 100m ² will be generated. Sort waste materials into separate key waste groups either on-site or through a licensed contractor for recovery. Meet the diversion from landfill benchmarks for non-hazardous construction waste and demolition and excavation waste generated: Non Demolition - 95% (tonnage) Demolition - 85% (tonnage)	1	0			Not Targeted Not Targeted		
	Wst 02	Recycled aggregates	Project sustainable aggregate points		Identify all aggregate uses and types on the project and determine the quantity in tonnes for each identified use and aggregate type. Identify the region in which the aggregate source is located and calculate the distance in kilometres travelled by all aggregates by transport type.	1	0			Not Targeted		
	Wst 05	Adaptation to climate change	Responding to climate change		In addition to the Wst 05 criteria the following credits will also need to be achieved: - Hea 04 thermal comfort; - Ene 01 reduction of energy use and carbon emissions; - Ene 04 low carbon design; - Wat 01 water consumption; - Mat 05 designing for durability and resilience; - Pol 03 Flood and surface water management.	1	0			Not Targeted		
	Le 02	Risks and opportunities	Determine the ecological outcomes for the site		When determining the optimal ecological outcome for the site the wider site sustainability-related activities and the potential for ecosystem service related benefits will be considered. This will include opportunities for integrating ecology with wider site sustainability-related activities and ecosystem service related benefits. The following must also be achieved: - Hea 07 Safe and healthy surroundings; - Pol 03 Flood and surface water management - Achieve credits for 'Surface water run-off' and 'Minimising watercourse pollution'; - Pol 05 Reduction of noise pollution.	1	0			Not Targeted		
Total for Innovation					10	1	Credit weighting		1.00			



Appendix B

Water Efficiency Calculator

Water Efficiency Calculator St Ann's Phase 1B/2				
Internal Water Consumption				
Installation Type	Unit of Measure	Capacity / Flow Rate	Litres/person/day	Notes
WC	Full Flush Volume (Litres)	6	8.76	Low flush WCs will be installed to reduce the volume of water consumed during flushing. All WCs will have dual flush cisterns which will provide both part (4L) and full (6L) flushes.
	Part Flush Volume (Litres)	4	11.84	
Basin Tap	Flow Rate (Litres/minute)	4	7.90	All taps (excluding kitchen taps) will be reduced to 4 litres/minute using flow restrictors. Where multiple taps are to be provided the average flow rate will be used.
Bath	Capacity (Litres to overflow)	160	17.60	All baths will have reduced capacities of 160 litres (excluding displacement). The bath taps are not included in this calculation as they are already incorporated into the use factor for the baths.
Shower	Flow Rate (Litres/minute)	8	34.96	Shower flow rates will be reduced to a maximum of 8 litres/minute using flow restrictors fixed to the shower heads. These contain precision-made holes or filters to restrict water flow and reduce the outlet flow and pressure.
Kitchen Tap	Flow Rate (Litres/minute)	5	12.56	Kitchen taps will be reduced to 5 litres/minute using flow restrictors which will be fitted within the console of the tap or in the pipework.
Washing Machine	Water Consumption (Litres/kg)	8.17	17.16	Water efficient washing machines or washer-dryers will be specified. The make and model numbers of the appliances are unknown at this stage therefore a default figure of 8.17 litres/kg has been assumed.
Dishwasher	Water Consumption (Litres/place setting)	1.25	4.50	All dishwashers will be water efficient. The make and models numbers are unknown therefore a default figure of 1.25 litres/place setting has been assumed at this stage.
Net Internal Water Consumption (Litres/person/day)			115.3	
Normalisation Factor			0.91	
Total Internal Water Consumption (Litres/person/day)			104.9	The total internal water consumption target of ≤105 litres/person/day will be achieved in accordance with Regulation 36 para (2)b optional requirement Approved Document G.
Allowance for External Water Consumption (Litres/person/day)			5	
Total Water Consumption (Litres/person/day)			109.9	The total water consumption target of ≤110 litres/person/day will be achieved in accordance with Regulation 36 para (2)b optional requirement of Approved Document G.

Appendix C

Waste Management Plan



Site Waste Management Plan

St Ann's New Neighbourhood

May 2022

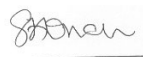
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Client Name: Hill Residential Limited, Catalyst Housing Limited and Catalyst by Design Limited
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Quality Assurance – Approval Status

This document has been prepared and checked in accordance with Waterman Group's IMS (BS EN ISO 9001: 2015, BS EN ISO 14001: 2015 and BS EN ISO 45001:2018)

Issue	Date	Prepared by	Checked by	Approved by
Draft	April 2022	Ellie Booth Milly Bowen		
Comments		Issued in draft with team notes for client, design team, and legal review.		
Final	May 2022	Ellie Booth	Milly Bowen	Sarah Owen Senior Associate 
Comments		Issued in final for planning following receipt of project planning consultant and legal review comments.		

Disclaimer

This report has been prepared by Waterman Infrastructure & Environment Limited, with all reasonable skill, care and diligence within the terms of the Contract with the client, incorporation of our General Terms and Condition of Business and taking account of the resources devoted to us by agreement with the client.

We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.

This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at its own risk.

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- A. Soilfix Material Balance Summary
- B. Common Construction and Demolition Waste Codes

1. Introduction

1.1 The Brief

Waterman Infrastructure & Environment Limited (Waterman) has been instructed by Hill Residential Limited, Catalyst Housing Limited, and Catalyst by Design Limited (the Applicant) to prepare a site waste management plan (SWMP) for the redevelopment of part of St Ann's hospital (the Site). The Site lies within the administrative boundary of the London Borough of Haringey (LBH).

1.2 Description of Development

This SWMP accompanies a hybrid planning application seeking permission for:

- 1) detailed planning for Phase 1a, for:
 - a) the change of use, conversion and alteration of seven existing hospital buildings within Phase 1a for a flexible range of uses (Use Class E, F1 / F2);
 - b) the demolition of some existing buildings (in accordance with the demolition plan);
 - c) the erection of new buildings for residential uses (Use Class C3); and
 - d) alterations to the existing access road and installation of new vehicular, pedestrian and cycle accesses; landscaping including enlargement of the Peace Garden, associated car and cycle parking spaces and servicing spaces.
- 2) the demolition of existing buildings and structures in Phases 1b, 2 and 3 (in accordance with the demolition plan);
- 3) outline planning (all matters reserved except access) for Phases 1b, 2 and 3 for:
 - a) the erection of new buildings for residential development (Use Class C3), commercial business and service (Use Class E), and local community and learning (Use Class F1 / F2); and
 - b) associated pedestrian and cycle accesses; landscaping including enhancements to the St Ann's Hospital Wood and Tottenham Railsides Site of Importance for Nature Conservation (SINC) car and cycle parking spaces and servicing spaces.

More detail about proposed uses and areas is set out in section 3.

1.3 Report Scope

The purpose of this outline SWMP is to:

- a) summarise the benefits of waste minimisation and management (WMM) and relevant guidance, policies, and standards.
- b) describe the Site, existing uses, and the proposed development;
- c) forecast how much excavation, demolition, and construction waste might arise.
- d) set out ways to minimise and manage this waste; and
- e) outline WMM measures and performance targets for the construction phase.

This document should be read in conjunction with other submission documents, including the Operational Waste Management Strategy, the Sustainability Statement, and the Circular Economy Statement.

1.4 Exclusions and Limitations

This report was undertaken in accordance with a scope of works agreed between Waterman and the Applicant.

The benefit of this report is made to Hill Residential Limited, Catalyst Housing Limited and Catalyst by Design Limited.

Waterman has endeavoured to assess all information provided to it during this work but makes no guarantees or warranties as to the accuracy or completeness of this information.

The conclusions resulting from this study are not necessarily indicative of future conditions or operating practices at the Site.

When appointed, it is assumed the Principal Contractor will agree to comply with this SWMP and future revisions. It will implement and update the SWMP throughout the project.

It is assumed this SWMP will be reviewed and further developed prior to construction to include additional WMM measures.

2. Guidance, Policies, and Standards

The following guidance, policies, standards were considered in developing this SWMP.

2.1 Benefits of Waste Minimisation and Management (WMM)

Benefits of waste minimisation and management (WMM) include:

- a) reducing disposal and material costs by designing to be resource efficient, reducing ordering, and reducing waste taken to landfill (or other disposal);
- b) reducing carbon dioxide emissions;
- c) satisfying planning requirements; and
- d) complementing other aspects of sustainable design.

WMM should follow the principles of the waste hierarchy¹: prevention; prepare for reuse; recycling; recovery; then disposal. In the first instance, finding ways to reduce waste generation. Where this is not possible, materials should be reused and recycled.

Waste minimisation includes designing out waste and limiting waste arising during construction. Waste management involves identifying potential waste streams, setting target recovery rates, and overseeing the process to meet these targets.

Fully benefitting from WMM means adopting its principles at the earliest possible stage, preferably mandated by the Applicant through procurement requirements.

2.2 Guidance

2.2.1 Government Guidance²

Waste management guidance is produced by government bodies including Defra³, the Environment Agency, and Ministry of Housing, Communities & Local Government. It advises on disposing, moving, licencing, storing, treating, and using waste.

2.2.2 Defra Non-Statutory Guidance for Site Waste Management Plans 2008⁴

The Defra guidance on SWMPs explains how to implement and save money with a SWMP.

2.2.3 Building Research Establishment's Environmental Assessment Method

The Building Research Establishment's Environmental Assessment Method (BREEAM) process evaluates the procurement, design, construction, and operation of a development against targets that are based on performance benchmarks. It applies to non-residential buildings only.

Under BREEAM New Construction 2018 issue Wst 01 (construction waste management), credits are available for:

- preparing a pre-demolition audit;
- preparing a compliant Resource Management Plan (RMP);
- meeting construction waste resource efficiency benchmarks; and
- diverting resources from landfill.

¹ DEFRA (2011) 'Guidance on applying the Waste Hierarchy', [Online]. Available at www.gov.uk/government/publications/guidance-on-applying-the-waste-hierarchy (accessed 1 April 2022).

² UK Government guidance, "Environmental Management: Waste", available from <https://www.gov.uk/topic/environmental-management/waste> (accessed 1 April 2022).

³ Department for Environment, Food & Rural Affairs (Defra).

⁴ DEFRA, "Non-statutory guidance for site waste management plans", April 2008.

More information about the credits available as part of Wst 01 and the Applicant's waste targets are summarised in section 5.2.1 below.

2.2.4 Building Research Establishment SmartWaste Plan⁵

The BRE SmartWaste Plan is a virtual tool for preparing, implementing, and reviewing SWMPs.

2.2.5 Waste Resources Action Programme guidance

Useful Waste Resources Action Programme (WRAP) resources include the following guidance documents:

- a) *"Procurement guidance for construction: Setting a requirement for Waste Minimisation and Management"*;
- b) *"Practical Solutions for Sustainable Construction: Achieving Good Practice Waste Minimisation and Management"*;
- c) *"The Demolition Protocol: Aggregates Resource Efficiency in Demolition and Construction"*; and
- d) an online tracker designed to assist the collation and analysis of data associated with SWMPs.

WRAP recommended construction waste recovery rates are set out in section 5.2.2.

2.2.6 Definition of Waste: Development Industry Code of Practice (DoW CoP)⁶

The definition of waste code of practice is helpful when:

- a) assessing if an excavated material is classified as waste;
- b) determining if treated excavation waste ceases to be waste for a particular use;
- c) determining if excavated materials are not classified as waste, and when they can be reused;
- d) establishing and operating fixed soil treatment facilities;
- e) putting together a materials management plan (MMP);
- f) reusing contaminated and uncontaminated material at source or between sites within defined cluster projects; and
- g) transferring and reusing clean naturally occurring soils between registered sites.

A MMP details the type, volume, and quality of material. It should be submitted to a suitably qualified person for review. Then the project can be declared to CL:AIRE. A verification report is needed at the end of the project to confirm compliance with the MMP.

2.3 Legislation

2.3.1 Environmental Protection Act 1990

Section 34 of the Environmental Protection Act 1990 sets out the requirements for the 'duty of care' for controlled waste. The 'duty of care' applies to all businesses that produce, import, carry, keep, treat or dispose of controlled waste from business or industry, or act as a waste broker in this respect. Its purpose is to ensure that all parties in the waste handling chain take all reasonable steps to ensure that waste is handled legally and safely when being passed along the links in the chain between the waste producer and the site of final disposal or recovery.

All businesses are responsible for the safe and proper disposal of waste, even once it has been passed to a third party. This 'duty of care' extends to the point where the waste has either been satisfactorily disposed of, or fully recovered.

The 'duty of care' requires that:

⁵ BRE SmartWaste, available from www.smartwaste.co.uk/ (accessed 1 April 2022).

⁶ CL:AIRE, *Definition of Waste Code of Practice*, available from <http://www.claire.co.uk/projects-and-initiatives/dow-cop> (accessed 1 April 2022).

- a) all waste is stored and disposed of responsibly;
- b) waste is only handled or dealt with by individuals or businesses that:
 - i. are authorised to deal with it;
 - ii. have an Environmental Permit or relevant waste exemption;
 - iii. are a registered carrier of controlled waste; and
- c) a record is kept of all waste received or transferred through the provision of written information about the waste (previously known as a waste transfer note – WTN – a term still in common usage).

Regulation 35 of the Waste (England and Wales) Regulations 2011 (see below) sets out the content of the written information / transfer note.

The failure of a person who produces, treats, or passes on waste to comply with the ‘duty of care’ is a criminal offence under section 34 of the Environmental Protection Act 1990, regardless of whether environmental harm has occurred.

Statutory guidance on how to meet the ‘duty of care’ is outlined in *Waste Duty of Care, Code of Practice*⁷.

2.3.2 The Waste (England and Wales) Regulations 2011

The Waste Regulations 2011 require waste producers or those handling waste to comply with the waste hierarchy (prevention, prepare for reuse, recycling, recovery, disposal) unless it can be justified on environmental or technical grounds that this is not appropriate.

The requirements include that:

- a) waste is stored correctly i.e. it must be properly contained;
- b) waste is only collected by registered waste carriers;
- c) records of transfers of waste are kept for at least two years; and
- d) waste is only taken to an appropriately authorised facility.

Businesses that carry their own waste need to be registered as a waste carrier. Lower tier waste carriers register once only. Companies transporting construction and demolition waste, whether their own waste or not, need to register as upper tier waste carriers and so must renew their waste carriers licence every three years.

2.3.3 Environmental Permitting (England and Wales) Regulations 2016

These regulations stipulate when an Environmental Permit (EP) is required for the storage or management of wastes. For a demolition or construction site, an EP could be required for the use of mobile plant to process waste on-site.

2.3.4 Hazardous Waste (England and Wales) Regulations 2005

If controlled waste is classified as hazardous, in accordance with the Hazardous Waste Regulations 2005, enhanced ‘duty of care’ requirements apply. Facilities receiving hazardous waste must report to the waste producer and the regulator as to the receipt and fate of each consignment of hazardous waste. The written information requirements are met by the use of the consignment note (enabling tracking of waste from producer to final disposal / recovery facility).

⁷ HSMO, *Waste Duty of Care, Code of Practice*, available from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/759083/waste-code-practice-2018.pdf (accessed 1 April 2022).

2.4 Planning Policy

2.4.1 National Planning Policy Framework (NPPF) 2021⁸

The NPPF introduces the presumption in favour of sustainable development. One of the objectives of sustainable development is environmental protection. Minimising waste is one of the ways of achieving the environmental objective.

2.4.2 National Planning Policy for Waste (NPPW) 2014⁹

The NPPW instructs local planning authorities to ensure that the reuse / recovery of construction waste is maximised. Off-site disposal should be minimised.

2.4.3 London Plan 2021¹⁰

London Plan policy SI 7, reducing waste and supporting the circular economy, promotes minimising waste, reusing materials, and recycling. It aims to meet or exceed the following targets:

- a) zero biodegradable or recyclable waste to landfill by 2026;
- b) reuse / recycle / recover 95% of construction and demolition waste; and
- c) beneficial use of 95% of excavation waste (though all inert excavation waste should be put to beneficial uses). Beneficial use includes placement to land in a way that provides environmental benefits such as restoration of priority habitat or flood alleviation.

2.4.4 Mayor of London guidance

Sustainable Design and Construction Supplementary Planning Guidance¹¹

Section 2.7 of this guidance, minerals and waste, provides guidance on design and construction stages including pre-fabrication, choice of materials, and managing existing resources.

Circular Economy Statement guidance¹²

The Mayor of London's circular economy statement guidance encourages applicants to record the source of all waste arisings during construction and monitor using a waste management tool such as SmartWaste.

2.4.5 London Borough of Haringey Local Plan

LBH Strategic Policies 2017¹³

Strategic policy SP6, waste and recycling, requires SWMPs for all major applications. It expects SWMPs to identify demolition and construction waste types, volumes, and WMM during construction.

⁸ NPPF 2021, available from <https://www.gov.uk/government/publications/national-planning-policy-framework--2> (accessed 1 April 2022).

⁹ NPPW 2014, available from <https://www.gov.uk/government/publications/national-planning-policy-for-waste> (accessed 1 April 2022).

¹⁰ GLA London Plan 2021 available from <https://www.london.gov.uk/what-we-do/planning/london-plan/new-london-plan/london-plan-2021> (accessed 1 April 2022).

¹¹ Mayor of London's Sustainable Design and Construction SPG available from <https://www.london.gov.uk/what-we-do/planning/implementing-london-plan/london-plan-guidance-and-spgs/sustainable-design-and> (accessed 8 April 2022).

¹² Mayor of London's Circular Economy Statement guidance available from <https://www.london.gov.uk/what-we-do/planning/implementing-london-plan/london-plan-guidance/circular-economy-statement-guidance> (accessed 8 April 2022).

¹³ LBH Local Plan: Strategic Policies 2013 (with alterations 2017) available from <https://www.haringey.gov.uk/planning-and-building-control/planning/planning-policy/local-plan/local-plan-strategic-policies> (accessed 1 April 2022).

LBH Development Management Development Plan Document 2017¹⁴

Policy DM4 of LBH's Development Management Development Plan Document (DPD) expects all proposals to consider sustainable management of waste arising from design and construction.

LBH New Local Plan 2021¹⁵

LBH started the process of preparing a new Local Plan in 2020. The formal consultation on its "*New Local Plan: First Steps*" document ran from November 2020 until March 2021. A draft Local Plan is expected in summer 2022.

The "*New Local Plan: First Steps*" identified minimising waste and reducing emissions from resource use as a key issue to be addressed by the New Local Plan. It suggested the New Local Plan would set expectations on how proposed developments will minimise waste over its entire lifespan, which includes minimising the quantities of resources used in construction and demolition.

Sustainable Design and Construction SPD 2013¹⁶

LBH's "*Sustainable Design and Construction Supplementary Planning Document*" (SPD) advocates the waste hierarchy, reusing construction material, modern methods of construction, and responsibly sourcing materials. It expects development involving demolition of buildings to undertake a Demolition Waste Audit which should be considered from early in the design process.

¹⁴ LBH Local Plan: Development Management DPD (July 2017) available from <https://www.haringey.gov.uk/planning-and-building-control/planning/planning-policy/local-plan/local-plan-development-management-dpd> (accessed 1 April 2022).

¹⁵ Information about LBH New Local Plan process available from <https://www.haringey.gov.uk/planning-and-building-control/planning/planning-policy/new-local-plan-first-steps-engagement> (accessed 1 April 2022).

¹⁶ LBH Sustainable Design and Construction Supplementary Planning Document available from <https://www.haringey.gov.uk/planning-and-building-control/planning/planning-policy/local-plan/supplementary-planning-documents-spds> (accessed 1 April 2022).

3. The Site and Proposed Development

3.1 Site Location

The Site is bound by St Ann's Road to the north, Hermitage Road to the east, a railway line to the south, and the rear of a residential street Warwick Gardens to the west. It occupies an area of 7.2 hectares.

3.2 Existing Uses and Layout

The Site currently comprises over 40 buildings formerly part of St Ann's hospital. Most of the buildings are no longer operational. They vary in height from two to three storeys.

The Site has a relatively flat topography with a gentle fall west to east and north to south. It comprises a mix of natural landscaped elements including a SINC to the south. The SINC comprises standalone mature trees covered by individual tree protection orders (TPOs) and a lawn in the centre known as the Peace Garden.

3.3 Proposed Uses and Areas

The proposed development is described in section 1.2. It is divided into four phases: 1a, 1b, 2, and 3. Planning permission for Phase 1a is being sought in detail, with the rest (phases 1b, 2, and 3) in outline. Proposed areas are summarised in the table below.

Table 1: Proposed residential and non-residential areas

Use	Proposed gross internal area (GIA) m ²
Residential	Up to 97,500
Non-residential	Up to 4,150

3.4 Enabling Works

Initial activities to prepare for construction are likely to include:

- establishing Site access;
- geotechnical and ground investigations to inform the detailed structural design and confirm ground conditions at the Site;
- arboricultural works – including the protection of any trees / vegetation to be retained and / or removed;
- ecological works, where required;
- installing Site hoarding and further security fencing;
- ground re-profiling works;
- service disconnections and diversions;
- general clearance; and
- installation of temporary surface water management measures.

3.5 Demolition

Demolition is likely to include:

- internal strip out of the existing buildings and associated structures;
- removal of all mechanical plant and equipment; and
- deconstruction of the existing buildings and associated structures.

The 36 buildings proposed for demolition are detailed in the Applicant's pre-demolition and pre-refurbishment audit prepared by Reusefully Ltd presented elsewhere in the planning application. They include a workshop building, an office, a pharmacy, stores, and bungalows. Seven buildings will be retained and refurbished on-site. It is understood the buildings being retained will support most of the proposed non-residential space.

The pre-demolition audit outlines opportunities for reusing and recycling waste materials as much as possible (see section 5.1.1).

3.6 Groundworks and Excavation

Groundworks will include installation of piled foundations across the development.

Below ground / substructure works are likely to involve:

- a) groundworks to create level development platforms;
- b) excavation for foundations and to allow installation of any below ground services;
- c) installation of ground slabs (ground bearing or suspended block) and supporting beams; and
- d) remedial works if any contamination is identified.

More detail about the proposed substructure works is set out in Environmental Statement Chapter 5: Construction Methodology and Phasing (a separate submission document).

3.7 Construction

Construction is likely to include:

- a) building superstructure (constructing the main building envelope, pouring concrete, installing steel frames, etc.);
- b) internal fit out and finishes (installing block work, dry lining to internal walls, mechanical and electrical installations, etc.);
- c) landscaping works (ground modelling, vegetation planting, constructing footpaths, etc.); and
- d) hand over.

4. Estimated Waste Types and Arisings

4.1 Demolition, Groundworks and Excavation

4.1.1 Anticipated waste types

A list of common demolition wastes is presented in Appendix B.

A pre-demolition audit prepared by Reusefully Ltd is presented elsewhere in the planning application. It details the 36 buildings to be demolished, the 7 buildings to be retained, and results of pre-demolition and pre-refurbishment assessments.

The Applicant's contaminated land assessment (presented elsewhere in the planning application) identifies former uses of the Site resulted in contamination principally within Made Ground by substances including arsenic, asbestos, and lead. It is therefore likely that hazardous and non-hazardous material will be encountered during groundworks and excavation. Anticipated waste types will be refined using the results of future ground investigations.

4.1.2 Anticipated arisings

In its pre-demolition audit, Reusefully Ltd estimates 22,782 tonnes of material might arise from demolition. This includes concrete, brick, metal, plaster products, and timber products. Further details can be found in the pre-demolition audit presented elsewhere.

Material balance calculations have been undertaken by Soilfix (see Appendix A). The calculations include material to be generated from demolition (and processed into recycled aggregates) and soils to be cut and filled across the Site. Soilfix estimate approximately 60,000m³ of material could be generated during demolition and excavation works – namely soil and top soil, capping hardcore, sub-base, tarmac, and drainage aggregate. Soilfix estimate about 77% of this material (approximately 46,000m³) could be reused on-site, which equates to a surplus of approximately 14,000m³ of material which will require removal from Site.

4.2 Construction

4.2.1 Anticipated waste types

A list of common construction wastes is included in Appendix B.

Any hazardous wastes would require special management to prevent environmental harm.

4.2.2 Anticipated arisings

The BRE SmartWaste waste benchmark calculator has been used to estimate types and amounts of construction waste arising from the proposed residential areas. Non-residential areas are discounted as these areas are within the existing buildings to be refurbished (with one exception, see note beneath table below). These data should be used for guide purposes only.

Table 2: Estimated construction waste types and arisings

Waste product	Waste benchmark calculator estimations (tonnes)
	Residential only
Bricks	1,087.17
Tiles and ceramics	77.74
Concrete	1,471.13
Inert	4,237.82
Insulation materials (non-hazardous)	74.87
Metals	206.69
Packaging materials	409.84
Plasterboard / gypsum	515.37
Binders	18.80
Plastic (excluding packaging)	276.11
Timber	1,249.53
Floor coverings (soft)	8.13
Electric and electronic equipment (non-hazardous)	5.57
Furniture	1.65
Canteen / office / ad-hoc waste	153.93
Liquids	7.81
Oils	2.33
Bituminous mixtures (non-hazardous e.g. asphalt)	85.43
Hazardous waste	89.64
Other waste	392.94
Mixed construction and / or demolition waste	4,204.51
Total	14,577.01

The waste benchmark calculator estimations in the table above are based:

- on the residential GIAs presented in Table 1;
- the BRE SmartWaste categories “Residential – Houses / Flats / Apartments”;
- proposed non-residential space being provided in retained buildings with the exception of one unit (a food store) which will form part of the outline component to be confirmed during detailed design; and
- the total number of residential units proposed (995). Of these, 239 are proposed for Phase 1a (the detailed element), equalling 24% of the total units. On this basis, about 24% of the waste predicted to arise in the table above is predicted to arise during construction of Phase 1a.

5. Waste Minimisation and Management Measures, Targets, and Monitoring

It is recognised there is an opportunity to reduce the use of natural resources through the detailed design processes, procurement, and construction. The following measures and targets are applicable to all phases of the development.

5.1 WMM Measures

5.1.1 Design and Specification

The design will consider:

- a) modern construction methods (which will be determined at detailed design stage);
- b) using prefabricated materials, standardised modulation components, or low waste fabrication techniques where feasible, e.g., utility cupboards will be prefabricated;
- c) the use of recyclable or second-hand materials (rather than non-recyclable materials) from local or sustainable sources where available;
- d) retaining existing features where possible, e.g., seven of the existing buildings and existing bricks to be used within the refurbishment areas;
- e) reusing waste that is created as much as possible, such as, the reuse of bricks in the landscaping and the reuse of cobbles, bollards, manholes, and the iron columns supporting the external walkway; and
- f) recycling waste that is created as much as possible, e.g., concrete from demolition will be crushed on-site and utilised to form the drainage layer.

Further circular economy design measures (involving conserving resources and eliminating waste) can be found in the Applicant's Circular Economy Statement prepared by XCO2.

5.1.2 Procurement

The Applicant will ensure the Principal Contractor is aware of appropriate WMM measures through the tendering and contract processes. It will ensure drawings are adequately specified and dimensioned so that accurate quantities of materials can be ordered. It will maintain a role in the management of the supply chain during construction to encourage opportunities to minimise waste.

Communication with suppliers would be undertaken to:

- a) reduce over-ordering;
- b) specify materials to be delivered with minimum packaging and to seek recyclable packaging;
- c) encourage waste minimisation opportunities such as bulk buying;
- d) return reusable packaging to the supplier;
- e) use and / or recycle off-cut material; and
- f) return surplus materials to supplier e.g. plasterboard.

5.1.3 Waste Disposal

Waste disposal will be minimised as much as possible, in line with the waste hierarchy. However, if demolition, excavation, or construction waste is to be disposed of, it requires pre-treatment before disposal at landfill. Pre-treatment must be a physical, thermal, chemical, or biological process (including sorting on-site) that changes the characteristics of the waste to reduce its volume, reduce its hazardous nature, facilitate its handling, and enhance its recovery.

Waste classification technical guidance¹⁷ requires that within a mixed waste the separately identifiable wastes are assessed separately.

Mixing hazardous waste, including mixing different types of hazardous waste or mixing hazardous waste with other waste substances, is prohibited under the Hazardous Waste Regulations 2005. Wastes that have been mixed must be separated whenever possible.

Before a waste can be accepted at a landfill site, the landfill operator must be satisfied the waste meets:

- a) its permit conditions;
- b) waste acceptance procedures (WAP); and
- c) waste acceptance criteria (WAC).

If disposal to landfill is the best management option, the waste producer must follow these procedures or the operator may refuse to accept the waste.

Before a waste producer can take waste to a landfill site for disposal, they need to check the landfill site has the appropriate permit¹⁸ and must have completed the following:

- a) duty of care transfer note / hazardous waste consignment note;
- b) pre-treatment declaration form¹⁹;
- c) basic characterisation of the waste, to include:
 - i. description of the waste;
 - ii. waste code (using List of Wastes²⁰);
 - iii. composition of the waste (by testing, if necessary); and
 - iv. WAC testing (if required).

5.1.4 Demolition

Before

A pre-demolition audit has been undertaken to identify and maximise material that could be saved or recycled. The audit can also be used to support the BREEAM assessment process. The result of this audit is often known as a Demolition Bill of Quantities.

The purpose of the audit is to:

- a) specify types of materials;
- b) estimate the amount of material expected;
- c) record the condition of materials. Cleaner material is easier to recycle;
- d) identify potential applications for the reuse and recycling of demolition materials; and
- e) identify possible contamination by hazardous materials like asbestos or lead. These materials will limit reuse / recycling options and are more likely to require disposal.

During

Soft strip before demolition allows items to be reclaimed for use on-site or sold to a reclamation yard. The construction programme should allow time for this reclamation to take place.

Accurate data records on all demolition waste arisings and management routes should be added to the SWMP.

¹⁷ Technical Guidance WM3 available from <https://www.gov.uk/government/publications/waste-classification-technical-guidance> (accessed 1 April 2022).

¹⁸ See <https://www.gov.uk/guidance/waste-environmental-permits> (accessed 1 April 2022).

¹⁹ Environment Agency guidance, *Treatment of waste for landfill*, available from <https://www.gov.uk/government/publications/treatment-of-waste-for-landfill> (accessed 1 April 2022).

²⁰ More information about the List of Wastes, or European Waste Catalogue codes, is available from <https://www.gov.uk/how-to-classify-different-types-of-waste> (accessed 1 April 2022).

5.1.5 Excavation

Before

Ground investigations will be undertaken at detailed design stage and a suitable remediation strategy will be established if required.

A waste classification assessment should be carried out when the extent of excavation (and so waste arising) is established. This should minimise the volume of hazardous waste excavated and maximise opportunities for reuse or recovery.

A MMP should be prepared if excavated material is to be reused.

During

Contaminated and uncontaminated soils are likely to be mixed during the piling process. A watching brief should be maintained to segregate different soils and reduce mixing.

As described in section 4.1, Soilfix estimate about 77% of material to be generated from demolition and excavation could be reused on-site. Excavated material will therefore be handled carefully to maximise reuse opportunities.

Excess excavated soils will be analysed and classified prior to disposal.

5.1.6 Construction

Before

The Applicant / Principal Contractor will develop a detailed construction SWMP that:

- a) identifies likely hazardous waste and procedures for management;
- b) identifies registered waste carriers (for hazardous waste), authorised recycling facilities, and authorised disposal contractors;
- c) instructs how to check valid authorisation of these waste carriers / contractors; and
- d) ensures detailed procedures are in place for the transfer of waste to registered carriers or other hauliers (for non-hazardous waste) and that all contractors, including subcontractors and their personnel, are fully aware of those procedures.

The Principal Contractor must ensure:

- a) responsibility for waste management is assigned;
- b) the responsible party has the necessary training and authority to ensure compliance;
- c) waste is stored in accordance with relevant legislation, notably section 34 Environmental Protection Act 1990;
- d) waste collection is undertaken only by registered waste carriers;
- e) waste is deposited at authorised treatment and disposal sites;
- f) when waste is removed from Site the following information is recorded:
 - i. the quantity of waste leaving (volume or tonnage);
 - ii. the identity of the person removing the waste;
 - iii. the relevant waste carrier registration number;
 - iv. a written description of the waste; and
 - v. the destination of the waste.
- a) resources are reused within the Site where possible;
- b) waste segregation is undertaken as appropriate following assessment of waste types and quantities to

arise at various stages of the project and the local waste reprocessing market e.g. existing bricks not used within the refurbishment will be segregated on-site to create a pile mat;

- c) waste is sorted and recycled on-site into as many of the following categories as possible / practical;
 - i. inert / hardcore;
 - ii. metals;
 - iii. plastics;
 - iv. concrete;
 - v. glass;
 - vi. cardboard / paper;
 - vii. gypsum / plasterboard;
 - viii. miscellaneous;
 - ix. timber; and
 - x. hazardous e.g. chemicals and oils.
- j) on-site segregation receptacles are marked, clearly signposted, and easily accessible;
- k) on-site segregation is considered in the first instance. If this is not possible, off-site sorting of mixed wastes should be undertaken in preference to disposal; and
- l) a 'quick wins' approach is adopted. This should target waste with high impact on cost. It should focus on moving from disposal to recycling / recovery. Waste timber (from formwork) and plasterboard off cuts are often chosen.

Quick wins can offer significant cost savings to the project. WRAP identifies a waste recovery quick win as: *"an improvement in recovery (reuse or recycling) for a specific construction waste material which will deliver a higher than standard practice recovery without increasing costs, preferably with a cost saving"*²¹.

During

The Principal Contractor is encouraged to recycle and reuse locally available construction, demolition, and excavation waste materials.

The Principal Contractor should arrange audits to:

- a) ensure waste actually reaches its planned destination; and
- b) record amounts of waste reused, recycled, recovered and sent to landfill against targets.

The Principal Contractor should seek to establish a strong partnership with a waste management contractor from the outset to enable fast flow of data returns after collection.

At least every six months during construction works the Principal Contractor should review the plan, record the types, quantities and disposal method of all wastes, and subsequently update the plan as necessary.

5.2 WMM Targets

5.2.1 Applicant's Sustainability Targets

The Applicant's sustainability targets are set out in its Circular Economy Statement and Sustainability Statement (both presented as separate submission documents). Those of relevance to this SWMP are summarised below.

²¹ WRAP, *Practical solutions for sustainable construction: Waste Recovery Quick Wins: Improving recovery rates without increasing costs*, July 2007, page 8.

BREEAM New Construction 2018 (non-residential areas only)

The Applicant is targeting an 'Excellent' rating under BREEAM New Construction 2018 for the proposed non-residential areas. Its BREEAM pre-assessment, presented in the Sustainability Statement, explains how the Applicant is targeting four credits as part of Wst 01. The pre-assessment commits to satisfying the following criteria under Wst 01:

- completing a pre-demolition audit;
- implementing a compliant RMP;
- achieving a construction resource efficiency of < 6.5 tonnes of construction waste generated per 100m² of GIA; and
- diverting at least 80% of non-demolition waste and 90% of demolition waste from landfill.

Circular economy commitments

The Circular Economy Statement commits to the following Site-wide targets (applicable to residential and non-residential areas):

- at least 95% of all demolition waste will be repurposed, recycled and / or reused (with maximised reuse on-site, for example within sub-base);
- at least 95% of construction waste will be reused, returned to supplier for recycling and / or recycled (i.e. diverted from landfill); and
- at least 95% of excavation waste will be diverted from landfill and put to beneficial use.

5.2.2 Best and Good Practice Recovery Rates

WRAP guidance²² details standard, good practice, and best recovery rates. These are summarised in Table 5.

Before works start, waste targets will be set by the Applicant. Due consideration will be given to the rates below. Standard recovery rates should be adopted as the minimum.

²² WRAP, *Achieving good practice Waste Minimisation and Management*, n.d.

Table 3: Standard, good, and best practice recovery rates by material, extracted from WRAP guidance

Material	Standard recovery rate (%)	Good practice quick win rate (%)	Best practice recovery rate (%)
Timber	57	90	95
Metals	95	100	100
Plasterboard	30	90	95
Packaging	60	85	95
Ceramics	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**	Limited information**

Notes from the WRAP guidance:

* "This is a required recovery target for the type of WEEE likely to be produced from construction sites e.g., lighting (Waste Electrical and Electronic Equipment (WEEE) Regulations 2013)"

** "This cannot be 100%, as some hazardous waste (e.g., asbestos) must be landfilled."

5.3 WMM Monitoring

The Principal Contractor will review the SWMP at least every month. It will check it meets the needs of the project's WMM and recycling rates. Quantities of waste reused, recycled, recovered, incinerated, or landfilled will be recorded. A comparison should be made with estimated waste arisings where relevant. Targets should be adjusted / improved where possible.

6. Roles and Responsibilities

The responsibilities of each party in the development and monitoring of the SWMP are outlined in the table below.

Table 4: Roles and responsibilities

Organisation	Timeframe	Responsibilities
The Applicant: Hill Residential Limited, Catalyst Housing Limited and Catalyst by Design Limited		The overriding responsibility for ensuring that a SWMP is prepared and implemented lies with the Developer. However, on appointment of a Principal Contractor, responsibility is shared.
	Pre-construction	a) ensure updated SWMP is prepared before any construction work begins and ensure it is clear and comprehensive; b) appoint Principal Contractor, provide a copy of this planning stage SWMP to the Principal Contractor; c) require a pre-demolition audit to identify materials that could be salvaged and reused; and d) require soft strip of the existing buildings before demolition.
	During construction	e) alongside Principal Contractor, update SWMP as project progresses and ensuring effective implementation; f) pay waste contractors only when evidence of delivery at an authorised site is provided; and g) undertake periodic checks and audits.
	Post Construction	h) require Principal Contractor to produce detailed SWMP; i) keep a copy of SWMP for two years; and j) together with Principal Contractor undertake a review of waste arisings and fate against estimated waste arisings and identify strengths and weaknesses of waste management method. And explore opportunities for future improvement.
Author: Waterman	Pre-construction	k) Preparation of outline SWMP (this document).
	Construction / post construction	Not applicable – responsibility for updating and implementation should lie with the Applicant / Principal Contractor.
Principal Contractor: To be confirmed	Pre-construction	l) produce detailed SWMP (to assist evidencing Applicant's waste targets and BREEAM assessment; m) produce MMP for any excavation waste that is proposed for reuse; n) undertake pre-demolition audit to identify materials that could be salvaged and reused; and o) undertake a soft strip of the existing buildings before demolition
	During construction	p) ensure SWMP is kept at either the Site office, or a central location, and ensure it is available to all contractors and that its location is known; q) ensure subcontractors adhere to the SWMP; r) provide induction and training to all workers, and brief subcontractors; s) make and maintain arrangements to ensure cooperation and develop and promote sustainable waste management and monitoring of effectiveness; t) ensure waste produced during construction is reused, recycled or recovered; u) review and update the SWMP to record all waste removed from Site: i. identity of person removing waste and the waste carrier

Organisation	Timeframe	Responsibilities
		- registration number; ii. copy of written description of waste; and iii. the site the waste is being taken to and whether it is permitted or exempt.
		v) update the plan (a minimum of every six months and recommended every three months) to record types and quantities of waste that is: i. reused (whether on or off-site); ii. recycled (whether on or off-site); iii. sent for recovery (physical sorting, chemical biological treatment, composting, incineration with energy and remedial treatment of soil) (whether on or off-site); iv. landfilled; and v. disposed of by other means (including burning without recovery or where quantities of mixed waste that are landfilled, reused, recycled or recovered are not known). w) review waste quantities against estimated waste arisings every month; and x) set up a recycling centre on-site to facilitate achieving highest recycling rates.
	Post construction	Within three months the following would be undertaken: y) confirm the plan has been monitored and updated as required; z) explain differences between estimated waste arisings and likely destination of waste and actual performance. - aa) estimate likely cost savings that have been achieved by implementing the SWMP; and - bb) a copy of SWMP would be kept for two years at place of work or Site office. Other responsibilities: - cc) undertake review of waste arisings and disposal method against estimated waste and arisings and identify strengths and weaknesses of waste management method, and opportunities for future improvement.

7. Training and Communication

The Applicant/ Principal Contractor will provide regular training to staff and contractors to enable them to stay compliant with the SWMP. Training will be provided in the form of inductions or toolbox talks, for example.

The table below offers a template to help identify relevant training and communication activities, and how to record these have been undertaken.

Table 5: Summary of training record

Task	Details	Responsibility
Ensure all staff and subcontractors (where relevant) are briefed on waste management practices and the SWMP as part of induction and ensure attendance.		
Place information boards on waste management practices in accessible locations (e.g. in the canteen).		
Distribute a copy of the SWMP to all key personnel each time it is updated including where relevant: a) Principal Designer; b) Client; c) Site manager; and d) Subcontractor(s).		
Undertake inspections and independent audits to ensure waste management is being undertaken in accordance with legislation and to identify if targets are being met.		
Provide update bulletins outlining results of audits and performance against reuse and recycling targets.		
Provide appropriate training and ensure it is up to date.		

APPENDICES

A. Soilfix Material Balance Summary

MATERIAL BALANCE SUMMARY

<u>KEY</u>	
SOIL FINES	
CONCRETE & hardcore	
TOPSOIL FINES	
TARMAC	
SUB-BASE	
DRAINAGE AGGREGATE	

<u>TOTAL SOIL REQUIREMENTS</u>			
<u>TOTAL REQUIRED</u>	21080.40	m3	
<u>GENERATED</u>	21565.15	m3	
<u>BALANCE</u>	484.75	m3	TBC

<u>TOTAL CAPPING hardcore REQUIREMENTS</u>			
<u>TOTAL REQUIRED (WITHIN SOILFIX CONSTRUCTION)</u>	6239.90	m3	
<u>GENERATED</u>	16706.26	m3	
<u>BALANCE</u>	10466.36	m3	SURPLUS

<u>TOTAL TOPSOIL REQUIREMENTS</u>			
<u>TOTAL REQUIRED (ABOVE SOILFIX FORMATION)</u>	6109.20	m3	
<u>GENERATED</u>	7472.76	m3	
<u>BALANCE</u>	1363.56	m3	SURPLUS

<u>TOTAL SUB-BASE REQUIREMENTS</u>			
<u>TOTAL REQUIRED (ABOVE SOILFIX FORMATION)</u>	5995.00	m3	
<u>GENERATED</u>	6934.70	m3	
<u>BALANCE</u>	939.70	m3	SURPLUS

<u>TOTAL TARMAC REQUIREMENTS</u>			
<u>TOTAL REQUIRED (ABOVE SOILFIX FORMATION)</u>	1028.78	m3	
<u>GENERATED</u>	1028.78	m3	
<u>BALANCE</u>	0.00	m3	TBC

<u>TOTAL DRAINAGE AGGREGATE REQUIREMENTS (IN CONSTRUCTION PHASE)</u>			
<u>TOTAL REQUIRED</u>	6003.00	m3	
<u>GENERATED</u>	6676.06	m3	
<u>BALANCE</u>	673.06	m3	SURPLUS

B Common Construction and Demolition Waste Codes

Appendices

B. Common Construction and Demolition Waste Codes

The list below is available online from the Gov.uk website²³. You can find additional codes for other waste and advice on how to apply these codes in the Technical Guidance WM3: Waste Classification - Guidance on the classification and assessment of waste.

An asterisk (*) at the end of a code means the waste is hazardous.

Insulation and asbestos materials

Waste type	Waste status	Waste code
Insulation containing asbestos	Hazardous	17-06-01*
Other insulation containing hazardous substances	Hazardous	17-06-03*
Other insulation materials	Non-hazardous	17-06-04
Other construction materials containing asbestos	Hazardous	17-06-05*

Concrete, bricks, tiles and ceramics

This list excludes asbestos-containing materials – refer to the insulation and asbestos materials table for any waste with asbestos.

Waste type	Waste status	Waste code
Concrete	Non-hazardous	17-01-01
Bricks	Non-hazardous	17-01-02
Tiles and ceramics	Non-hazardous	17-01-03
Concrete, bricks, tiles and ceramics (alone or in mixtures) containing hazardous substances	Hazardous	17-01-06*
Concrete, bricks, tiles and ceramics in mixtures, containing no hazardous substances	Non-hazardous	17-01-07

Wood, glass and plastic

This list excludes packaging wastes and domestic type recyclables - refer to the [packaging section](#) for related codes.

Waste type	Waste status	Waste code
Wood - untreated	Non-hazardous	17-02-01
Glass - uncontaminated	Non-hazardous	17-02-02
Plastic - excludes packaging waste	Non-hazardous	17-02-03
Treated wood, glass, plastic (alone or in mixtures) containing hazardous substances	Hazardous	17-02-04*

²³ Gov.uk *Classify different types of waste*, available at: <https://www.gov.uk/how-to-classify-different-types-of-waste/construction-and-demolition-waste> (accessed 21 October 2021).

Bituminous mixtures, coal tar and tar

Waste type	Waste status	Waste code
Bituminous mixtures containing coal tar	Hazardous	17-03-01*
Other bituminous mixtures	Non-hazardous	17-03-02
Coal tar and tarred products	Hazardous	17-03-03*

Metallic waste, including cable

Waste type	Waste status	Waste code
Copper, bronze and brass	Non-hazardous	17-04-01
Aluminium	Non-hazardous	17-04-02
Lead	Non-hazardous	17-04-03
Iron and steel	Non-hazardous	17-04-05
Tin	Non-hazardous	17-04-06
Mixed metals	Non-hazardous	17-04-07
Metals containing hazardous substances	Hazardous	17-04-09*
Cables containing oil, coal tar and other hazardous substances	Hazardous	17-04-10*
Other cables	Non-hazardous	17-04-11

Soil, contaminated soil, stones and dredging spoil

You must be able to prove that your waste does not contain any hazardous substances to classify soil as non-hazardous. You will always need to assess the soil before you hand it over to be collected.

The presence of any fragments of asbestos-containing material in the soil results in a mixed hazardous waste – refer to the insulation and asbestos materials table for more guidance.

Waste type	Waste status	Waste code
Soil and stones containing hazardous substances	Hazardous	17-05-03*
Other soil and stones	Non-hazardous	17-05-04
Dredging spoil containing hazardous substances	Hazardous	17-05-05*
Other dredging spoil	Non-hazardous	17-05-06

Gypsum

Waste type	Waste status	Waste code
Gypsum materials containing hazardous substances	Hazardous	17-08-01*
Other gypsum materials	Non-hazardous	17-08-02

Cement

Waste type	Waste status	Waste code
Un-used or un-set cement	Hazardous	17-09-03*

Appendices

Paints and varnishes

Waste type	Waste status	Waste code
Containing organic solvents or other hazardous substances	Hazardous	08-01-11*
Not containing organic solvents or other hazardous substances	Non-hazardous	08-01-12
Paint or varnish remover	Hazardous	08-01-21*
Paint cans	Hazardous	Refer to packaging waste and recyclables section

Adhesives and sealants

Adhesives and sealants of a type normally used by householders can be classified under the codes indicated in brackets if separated out from other waste.

Waste type	Waste status	Waste code
Containing organic solvents or other hazardous substances	Hazardous	08-04-09* (20-01-27*)
Not containing organic solvents or other hazardous substances	Non-hazardous	08-04-10 (20-01-28)
Adhesive or sealant containers	Hazardous	Refer to packaging waste and recyclables section

Appendices

UK and Ireland Office Locations

