Sustainability Statement
November 2023

ABERFELDY VILLAGE MASTERPLAN

Greengage

Aberfeldy Village Masterplan – The Aberfeldy New Village LLP
Sustainability Statement – November 2023

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Aberfeldy Village Masterplan – Sustainability Statement

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1.0 INTRODUCTION

1.1 This report supersedes the Sustainability Statement dated October 2022 previously submitted in support of the Hybrid Application (LBTH Ref: PA/21/02377/A1 and GLA Ref: 2023/0300/S3) and should therefore be read on a standalone basis.

Following a resolution to refuse planning permission by the London Borough of Tower Hamlets (LBTH) Strategic Development Committee (SDC) in February 2023, and the subsequent direction that the Mayor of London will act as the local planning authority for the purposes of determining the Hybrid Application, the design of the scheme has been amended to accommodate second staircases in all buildings over 18m in height.

For the sake of completeness only it should be noted that the above referenced amendments follow previous amendments to the Hybrid Application, made prior to its consideration by the LBTH SDC, the assessments of which were set out within previous revisions of this Sustainability Statement. In summary the previously assessed charges were: the incorporation of Jolly's Green within the red line boundary, the removal of the previously proposed Block A3 and associated increase in open space and play space, an increase in the number of affordable rented family homes, and the inclusion of second staircases in Plots F & I.

Further information is set out within the accompanying Covering Letter (as prepared by DP9 Ltd, dated November 2023) and the updated Planning Statement (as prepared by DP9 Ltd, dated November 2023).

1.2 This Sustainability Statement has been prepared by Greengage Environmental and is submitted in support of a hybrid application seeking detailed planning permission for Phase A and Outline planning permission for future phases, comprising:

Outline planning permission (all matters reserved) for the demolition of all existing structures and redevelopment to include a number of buildings (up to 100m AOD) and up to 140,591 (GEA) of floorspace comprising the following mix of uses: Residential (Class C3); Retail, workspace, food and drink uses (Class E); Car and cycle parking; Formation of new pedestrian route through the conversion and repurposing of the Abbott Road vehicular underpass for pedestrians and cyclists connecting to Jolly's Green; Landscaping including open spaces and public realm; and New means of access, associated infrastructure and highway works.

In Full, for residential (Class C3), retail, food and drink uses and a temporary marketing suite (Class E and Sui Generis), together with access, car and cycle parking, associated landscaping and new public realm, and open space. This application is accompanied by an Environmental Statement.

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1.3 This report details the approach that the applicant and the design team have collectively taken towards achieving a high standard of sustainable development and environmental performance. This Statement outlines the features that have been incorporated into the design proposals and the measures that will be implemented during the construction and operation phases, which aim to reduce the environmental impact of the proposed development and contribute positively to sustainable development.

1.4 The purpose of the Sustainability Statement is to provide an independent verification that the design of the proposed development is in accordance with the sustainability and energy objectives of relevant planning policy at all levels and is an example of good practice in

sustainable design. This Statement reports the performance of the proposed development using national, regional and local level guidance on sustainability indicators from both government and industry.

1.5 The Statement includes:

- A brief description of the proposed development;
- A summary of the relevant international, national and local sustainable development policy drivers;
- An examination of the performance of the proposed development in accordance with other key sustainable policies at all levels, including the London Plan 2021 and the policies contained within the London Borough of Tower Hamlets' Local Plan.

1.6 A review of the proposed development's sustainability against set planning objectives and best practice identifies the opportunities and constraints of both the application site and the proposals. By undertaking the sustainability appraisal at this stage in the design process, the potential to contribute positively to sustainable development is optimised. The Sustainability Statement therefore also provides a framework for the team to monitor the proposed development's performance throughout its development.

2.0 THE PROPOSED DEVELOPMENT

2.1 The proposed development site is located in Lower Lea Valley, in Poplar Riverside character place, on the land to the north of East India Dock Road (A13), east of the Blackwall Tunnel Northern Approach Road (A12) and to the south west of Abbot Road, within the London Borough of Tower Hamlets ("LBTH").

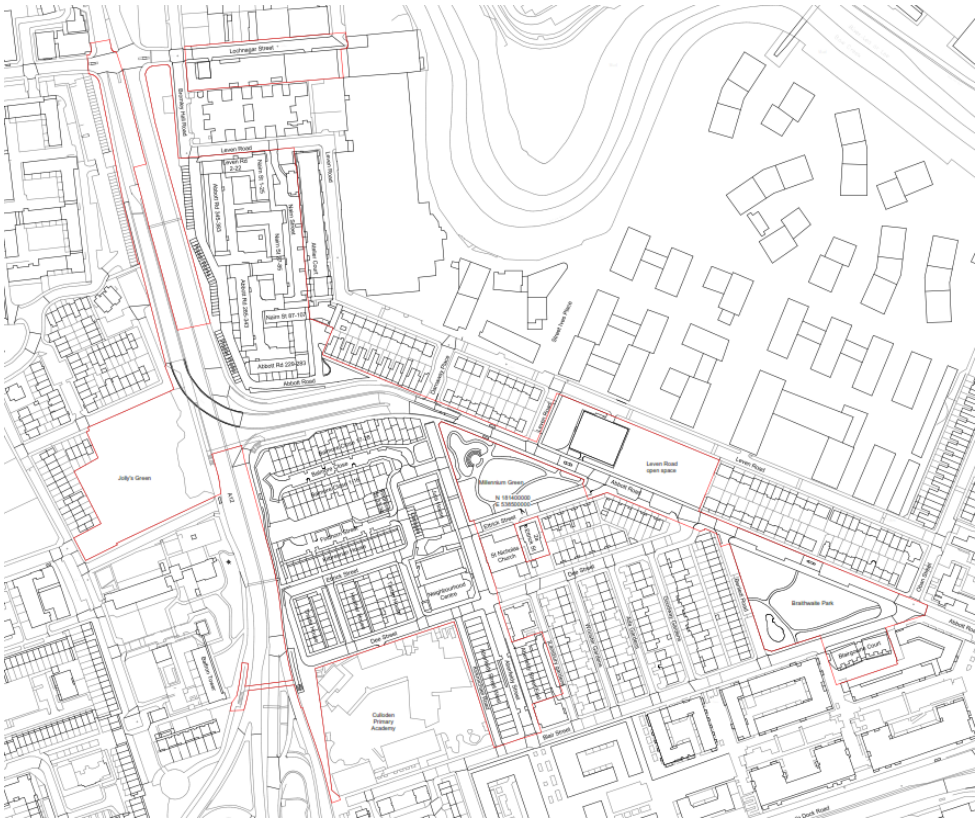
2.2 This Sustainability Statement has been prepared by Greengage Environmental and is submitted in support of a hybrid application seeking detailed planning permission for Phase A and Outline planning permission for future phases, comprising:

Outline planning permission (all matters reserved) for the demolition of all existing structures and redevelopment to include a number of buildings (up to 100m AOD) and up to 140,591 (GEA) of floorspace comprising the following mix of uses: Residential (Class C3); Retail, workspace, food and drink uses (Class E); Car and cycle parking; Formation of new pedestrian route through the conversion and repurposing of the Abbott Road vehicular underpass for pedestrians and cyclists connecting to Jolly's Green; Landscaping including open spaces and public realm; and New means of access, associated infrastructure and highway works.

In Full, for residential (Class C3), retail, food and drink uses and a temporary marketing suite (Class E and Sui Generis), together with access, car and cycle parking, associated landscaping and new public realm, and open space. This application is accompanied by an Environmental Statement.

2.3 The site location with existing buildings can be seen in the figure below.

Figure 2.1 Site Location (Levitt Bernstein Architects)



3.0 PLANNING POLICY & LEGISLATIVE CONTEXT

KEY SUSTAINABILITY DRIVERS

3.1 The aim of sustainable development is to seek to simultaneously progress economic, social and environmental goals and policies in ways that develop and maintain a good quality of life for everyone and enable future generations to do the same.

3.2 Strategies for sustainable development – broad, long-term plans of action aimed at achieving the goals of sustainable development – have been developed by national governments, and a range of organisations throughout the world, in order to set out a blueprint for action. There are also a number of international and national policy drivers for energy efficiency and reduced carbon dioxide (CO_2) emissions, which have been introduced to address the implications of climate change.

3.3 The remainder of this statement sets out these policy drivers and how the development has responded to each of these under key topic areas that together cover the environmental, social and economic needs of the proposed development.

National Policy Drivers

Climate Change Act 2008 (2050 Target Amendment)

3.1 On 26th November 2008, the UK Government published the *Climate Change Act 2008*, the world's first long-term legally binding framework to mitigate against climate change. Within the original framework, the Act sets legally binding targets to increase greenhouse gas emission reductions through action in the UK and abroad from the 60% target to 80% by 2050. In addition, there is an interim target set by the 5th Carbon Budget, which requires a reduction in greenhouse gas emissions of 57% relative to 1990 levels. This was amended in 2019 to a revised target of a 100% reduction in carbon emissions by 2050, over the 1990 baseline emissions levels, often known as a net zero target.

National Planning Policy Framework

3.2 The *National Planning Policy Framework* (NPPF) was adopted in March 2012, and subsequently revised in July 2021, with further updates in September 2023, setting out a key part of the Government's reforms to make the planning system less complex and more accessible, whilst protecting the environment and promoting sustainable growth. The NPPF supersedes the previous national planning guidance, namely the Planning Policy Statements and Planning Policy Guidance Notes.

3.3 At the heart of the NPPF is a 'presumption in favour of sustainable development', which requires Local Authorities as part of any plan-making or decision-making, to provide clear guidance on how the presumption should be applied locally. In addition, the NPPF sets out twelve core land-use planning principles that the Government has identified that underpin both plan-making and decision-making. Of these, the following have been identified as being relevant to sustainability and energy:

Paragraph 82 - 'a) set out a clear economic vision and strategy which positively and proactively encourages sustainable economic growth, having regard to Local Industrial Strategies and other local policies for economic development and regeneration'

Paragraph 152 - 'The planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change. It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure.'

REGIONAL PLANNING POLICY

The London Plan 2021

3.4 The London Plan 2021 was formally adopted in March 2021, forming the Spatial Development Plan for London and a part of the statutory Development Plan for Greater London.

3.5 The London Plan 2021 will run from 2021 to 2041, providing a longer- term view of London's development to inform decision making.

3.6 The London Plan considers sustainable design across several chapters with key issues recognised in the policies listed below:

Policy SI1 Improving Air Quality

Measures should be in place including development plans and policies should identify and improve upon local air quality. Developments must not undertake any work which will adversely impact local air quality and at least be Air Quality Neutral.

Policy SI2 Minimising greenhouse gas emissions

Though no specific energy targets are specified for minor developments, The London Plan 2021 encourages all developments to minimise energy demand and incorporate renewable technologies. As such, the energy hierarchy will be referred to in this Sustainability Statement and opportunities maximised for the proposed development to be energy efficient.

Policy SI3 Energy Infrastructure

Developments should identify the need for any necessary energy infrastructure, including analysing the suitability of connecting to or expanding any existing heating and cooling networks for the development. Developments should connect to existing heat networks wherever feasible.

Policy SI7 Reducing waste and supporting the circular economy

Developments should adopt Circular Economy principles demonstrating how waste and materials have been reduced or reused to prevent waste in the system.

Other London Plan policies

The London Plan 2021 contains other policies which consider sustainable design and those applicable to this site include: Policy D4 Delivering good design, Policy D3 Inclusive design, Policy G1 Green Infrastructure, Policy G5 Urban greening, Policy G6 Biodiversity and access to nature, Policy SI4 Managing Heat Risk, Policy SI5 Water infrastructure, Policy SI12 Flood Risk management, Policy SI13 Sustainable Drainage, Policy T4 Assessing and Mitigating Transport Impacts, Policy T5 Cycling.

Such policies will be referred to and detailed where applicable throughout the report.

LOCAL POLICY DRIVERS

Tower Hamlets' Local Plan 2031 (Adopted January 2020)

Policy S.SG2 Delivering sustainable growth in Tower Hamlets

3.7 Development will be supported and is considered to contribute towards delivering the Local Plan vision and objectives and to be sustainable where it:

a. delivers managed growth, through:

i. good design

ii. preserving or enhancing the character and setting of the area, and

iii. not resulting in unacceptable impacts on the natural and historic environment and its assets, transport capacity and infrastructure.

b. shares the benefits of growth, through:

i. contributing to creating healthy environments - encouraging physical activity, promoting good mental and physical wellbeing and reducing environmental factors which can contribute to poor health, including poor air quality

ii. creating mixed and balanced communities

iii. delivering tenure-blind developments

iv. increasing opportunities for social interaction

v. providing local training or employment opportunities in either, or both, the construction and end use, and

vi. delivering social and transport infrastructure and public realm improvements which are inclusive and accessible to all.

Policy D.SG4 Planning and construction of new development

3.8 1. All major development should sign up to the considerate constructors' scheme and where appropriate a constructors forum.

3.9 During construction, major development is required to:

a. comply with the non-road mobile machinery low emission zone requirements

b. minimise levels of noise, vibration, artificial light, odour, air quality, fumes or dust pollution

c. consider the routing, timing and frequency of heavy goods vehicle movements to reduce their impact on vulnerable road users, local amenity and congestion

d. use, where available, construction and/or freight consolidation centres, and

e. consider the impact of construction on the water supply, flood risk and drainage and implement suitable mitigation measures where required.

3.10 2. Major development must consider the cumulative impact of other major development occurring in the vicinity on levels of noise, vibration, artificial light, odour, air quality, fumes or dust pollution, and plan timings of works, delivery timings and routes and location of equipment accordingly to reduce this cumulative impact.

3.11 3. Development is required to employ the highest standards of sustainable construction, including:

a. Sustainable construction methods, such as the use of sustainably sourced and recycled materials, and

b. The use of demolished material from the development site, where practicable, in order to minimise the transportation of waste and reduce carbon dioxide emissions.

Policy S.DH1 Delivering high quality design

3.12 Development is required to meet the highest standards of design, layout and construction which respects and positively responds to its context, townscape, landscape and public

realm at different spatial scales, including the character and distinctiveness of the borough's 24 places (as shown on Figure 4) and their features. To achieve this, development must:

a. be of an appropriate scale, height, mass, bulk and form in its site and context

b. represent good urban design: provide coherent building lines, roof lines and setbacks, complement streetscape rhythm and associated landscapes (including boundary treatment) and ensure optimal plot coverages to avoid over-development

c. ensure the architectural language: scale, composition and articulation of building form, design of detailing, elements and materials applied on elevations, complements and enhances their immediate and wider surroundings

d. protect important views of and from landmark buildings and vistas

e. use high quality design, materials and finishes to ensure buildings are robust, efficient and fit for the life of the development

f. create well-connected, inclusive and integrated spaces and buildings which can be easily adaptable to different uses and the changing needs of users

g. incorporate features of positive biodiversity value within the site, where possible

h. use design and construction techniques to ensure that the development does not result in unacceptably harmful impacts arising from overheating, wind, air pollution, light pollution and noise pollution and the loss of sunlight and daylight, whilst optimising energy and waste efficiency, and

i. provide a mix and range of publicly accessible open spaces and water spaces that promote biodiversity, health and well-being

3.13 Other relevant policies that will be referred to (where applicable) throughout this report are:

- Policy S.TR1 Sustainable travel
- Policy D.ES7 A zero carbon borough
- Policy D.ES9 Noise and vibration
- Policy D.ES4 Flood Risk
- Policy D.ES5 Sustainable drainage
- Policy D.ES2 Air quality
- Policy D.ES10 Overheating
- Policy D.DH2 Attractive streets, spaces and public realm
- Policy D.DH8 Amenity
- Policy S.OWS1 Creating a network of open spaces
- Policy S.OWS2 Enhancing the network of water spaces
- Policy D.ES3 Urban greening and biodiversity

3.14 In addition to these core policies, the LBTH' Local Plan provides additional guidance on delivering sustainable places. As the Site is in Poplar, the Lower Lea Valley sub-area development principles will be applied to the proposed Development.

4.0 ENERGY

Sustainability Objective:

To address the causes of climate change by reducing emissions of greenhouse gases, in particular carbon dioxide (CO_2). To reduce the local and global impact of pollution on the environment, by improving the energy efficiency of buildings and generating energy from low or zero carbon technologies.

Relevant Policy: London Plan 2021 Policy SI2, SI3, SI4; LBTH's Local Plan Policy D.ES7

Context

4.1 In order to meet the Climate Change Act (2008) and net zero target, overall CO_2 emissions must be reduced by 100% by 2050 (compared with 1990 levels). Policy focus is primarily on reducing operational CO_2 emissions from buildings through energy efficiency and the use of renewable energy sources.

4.2 Developments within Greater London are required to address the London Plan, which sets planning policy standards for energy efficiency and the use of renewable technologies through the Energy Hierarchy:

- Be Lean - reduce energy loads to a minimum through energy efficient heating and lighting systems, and efficient appliances;
- Be Clean - Cut transmission losses through local generation of energy (decentralised energy generation), use combined heat and power and community heating;
- Be Green - Meet the remaining demand with clean fuels, such as renewable technologies; and,
- Be Seen: monitor, verify and report on energy performance.

4.3 Policy SI2 'Minimising greenhouse gas emissions' of the London Plan 2021 states that major developments should be net zero-carbon and include a detailed energy strategy using the energy hierarchy. In meeting the zero-carbon target a minimum on-site reduction of at least 35% beyond 2021 Building Regulations is expected. Residential development should also achieve a 10% reduction in CO_2 and non-residential 15% through energy efficiency measures 'Be Lean'.

4.4 Policy SI3 'Energy Infrastructure' requires proposals to identify the need for, and suitable sites for, any necessary energy infrastructure requirements including energy centres, energy storage and upgrades to existing infrastructure. It also requires proposals to identify existing heating and cooling networks, identify proposed locations for future heating and cooling networks and identify opportunities for expanding and inter-connecting existing networks as well as establishing new networks.

4.5 Policy SI4 'Managing heat risk' is also relevant, requiring proposals to minimise internal heat gain and the impacts of the urban heat island through design, layout, orientation and materials. Major proposals should demonstrate through an energy strategy how they will

reduce the potential for overheating and reliance on air conditioning systems in accordance with the cooling hierarchy.

4.6 Local policies which are relevant include the following within LBTH's Local Plan:

- Policy D.ES7: A zero carbon borough
- The policy requires both residential and non-residential developments to be **zero carbon** (to be achieved through a minimum 45% reduction in regulated carbon dioxide emissions on-site and the remaining regulated carbon dioxide emissions to 100% - to be offset through a cash in lieu contribution).
- Besides, an energy assessment must show how the development has maximised energy efficiency and provided up to 20% reduction of carbon dioxide emissions through on-site renewable energy generation.

Delivery

Building energy performance

4.7 Energy demand will be reduced beyond the minimum Building Regulations Part L requirements for the proposed development in line with the GLA London Plan Energy Hierarchy.

4.8 A detailed assessment of the energy performance of the proposed development is presented in a standalone Energy Statement produced by Meinhardt. The key energy and sustainability measures and results described in the Energy Statement are summarised below:

Be Lean

4.9 Initially, the development will aim to reduce energy demand through the adoption of passive design and construction measures. These energy efficiency measures will be incorporated in accordance with the requirements set out by the GLA.

4.10 The proposed development will seek to achieve a minimum 10% reduction for the domestic elements and 15% reduction for non-domestic elements through passive efficient design measures at the 'Be Lean' stage, in line with the requirements of the new London Plan. The wide range of energy efficiency measures incorporated include:

- The prioritisation of the design of a highly energy efficient building envelope through the incorporation of very low U-values for the exposed walls, floors and roofs as well as high performance double glazing;
- A highly insulated building fabric maximising air tightness with a permeability rate of 3.00 $m^3/m^2.h$ at 50Pa;
- Low energy LED lighting with adequate controls specified throughout; and
- Mechanical ventilation with heat recovery to provide ample fresh air with minimal heat loss / energy use within commercial spaces and residential units.

Be Clean

4.11 As part of the Be Clean stage of the energy assessment, the potential to connect to an existing or proposed decentralised energy network has been evaluated.

4.12 There is possibility for the Proposed Development to connect to a distribution network.

Detailed proposals (Phase A)

4.13 The primary source of heating for Plots I1 and J1 will be via air source heat pump (ASHP) systems.

4.14 Plots F1 and H1-H3 will be supplied by the existing Phase 3 Energy Centre Heat Network. There are plans for the energy centre, currently running on CHP and gas boilers, to be decarbonised in the near future.

Outline proposals (Phase B to Phase D)

4.15 A new Phase 4 Energy Centre, which will comprise air source heat pumps and water to water heat pumps, will supply space heating and hot water to the outline proposals.

4.16 A future connection to the DH network will be provided if a new network or heating source becomes available.

4.17 All apartments and amenity spaces will be provided with HIUs (heat interface units) where applicable which tap off the building or block heating system to provide domestic hot water and space heating within the apartment. Commercial units will be provided with a capped and metered heating supply.

4.18 For further details please refer to the Civil, MEP and Structural Engineering Stage 2 report and Energy report produced by Meinhardt.

Be Green

4.19 The renewable technologies feasibility study carried out for the development identified air source heat pumps (ASHPs) and photovoltaic (PV) panels as the most suitable technologies for the development.

4.20 Buildings J and I, forming part of the Detailed Proposals Phase A, will both use their own ASHP for hot water and space heating. Plot J will be net zero carbon.

4.21 PV panels will be implemented throughout the whole development where feasible.

4.22 The tables below outline the reduction in CO_2 emissions at each stage of the energy hierarchy.

Table 4.1 Carbon Dioxide Emissions at each stage of the energy hierarchy (Detailed Proposals)

	Total regulated emissions (Tonnes CO_2/year)	CO_2 savings (Tonnes CO_2/year)	Percentage Saving (%)
Part L 2021 baseline	264.3		
Be Lean	221.9	42.4	16%
Be Clean	221.9	0.0	0%
Be Green	190.3	31.5	12%
Total savings	-	74.0	28%
Offset to zero carbon	5,710 tonnes CO_2		

4.23

Table 4.2 Carbon Dioxide Emissions at each stage of the energy hierarchy (Outline Proposals)

	Total regulated emissions (Tonnes CO_2/year)	CO_2 savings (Tonnes CO_2/year)	Percentage Saving (%)
Part L 2021 baseline	1,138.7		
Be Lean	901.4	237.4	21%
Be Clean	901.4	0.0	0.0%
Be Green	308.2	593.2	52%
Total Savings	-	830.5	73%
Offset to zero carbon	9,245.8 tonnes CO_2		

Be Seen

4.24 In line with the policy requirements of the London Plan and as per the GLA methodology, the applicant will provide estimates of each of the performance indicators listed within the GLA's 'Be Seen' Energy Monitoring Guidance note.

Summary

4.25 Following the implementation of 'Be Lean, Be Clean and Be Green' measures across the development, the cumulative CO_2 savings over the site are estimated to be **28% for Detailed Proposals** and **73% for Outline Proposals** when compared to a Part L 2021 compliant scheme.

5.0 TRANSPORT

Sustainability Objective:

To reduce road congestion and pollution levels by enabling walking, cycling and use of public transport, and reducing the need for travel by private car.

Relevant Policy: London Plan 2021 Policy T4, T5, T6.1; LBTH's Local Plan Policy S.TR1, D.TR2, D.TR3

Context

5.1 Transport currently accounts for a quarter of the UK's carbon emissions. In order to meet the UK's net zero target, extensive decarbonisation of the transport sector is essential. 90% of all transport emissions are generated from road transport and whilst a considerable proportion of road transport emissions will be addressed through technical developments in car engines and greater use of biofuels, a significant move to greener consumer behaviour is also required.

5.2 Walking, cycling, and public transport, including buses and rail, are all alternative green travel options. Persuading and enabling people to use these alternative forms of transport is key in tackling the UK's transport issues; intrinsic to this is ensuring that new developments and key services are accessible.

5.3 The London Plan 2021 sets out policies T4 and T5 to ensure sustainable transport is properly embedded into the design of proposals through the use of Healthy Streets Approach. This will be secured through Travel Plans, Parking Design and Management Plans, Construction Logistics Plans and Delivery and Servicing Plans, which will be required having regard to Transport for London guidance.

5.4 Policy T5 and T6.1 refer more specifically to cycle and car parking with the aim of removing barriers to cycling and creating a healthy environment in which people choose to cycle, whilst also limiting the number of car-parking spaces and requiring all residential car parking spaces to provide infrastructure for electric or Ultra-Low Emission vehicles. At least 20 per cent of spaces should have active charging facilities, with passive provision for all remaining spaces in line with this policy.

5.5 Local policies which are relevant include the following within the LBTH's Local Plan:

- Policy S.TR1: Sustainable travel (prioritise needs of pedestrians and cyclists)
- Policy D.TR2 Impact on the transport network
- Policy D.TR3 Parking and permit-free, in particular:
- 3. Development is required to prioritise sustainable approaches to any parking through ensuring:
- a. Priority is given to space for cycle parking
- b. The allocation of car-club spaces
- c. There are sufficient electric-charging points

- d. Any parking spaces are distributed across all tenure types with priority given to family homes and accessible properties, and
- e. Where suitable, publicly-accessible shared cycle hire scheme docking station(s) are provided as part of the development (or through a financial contribution).

Delivery

PTAL

5.6 The proposed site has a Public Transport Access Level (PTAL) rating of 3-4, indicating a 'moderate/good' level of accessibility to public transport.

5.7 The Development is located in close proximity to various bus services which can be accessed from a number of bus stops. Bus route 309 serves the Aberfeldy Village neighbourhood. The northbound route uses the Abbott Road / A12 vehicle underpass.

5.8 The nearest overground train stations are:

- Langdon Park, which is on the Stratford to Lewisham line; and
- East India, which is on the Beckton-Tower Gateway branch.

5.9 The nearest underground train stations are Bromley-by-Bow and Canning Town, which provide access to the District and Hammersmith & City Lines, and the Jubilee Line respectively.

Transport Assessment

5.10 A Transport Statement and Travel Plan have been prepared for the proposed development and identify measures to encourage maximum use of public transport, walking and cycling facilities in preference to private car use. The implementation of the travel plan will encourage the use of sustainable travel options by building users.

5.11 The Proposed Development has been designed with the Healthy Streets approach in mind as demonstrated by the Designer's checklist and the Healthy Streets review set out in this document. Priority is given to pedestrians and cyclists and this is helped by a landscape and public realm strategy that significantly reduces vehicle dominance compared to the existing Site layout. Vision Zero principles have also been followed throughout.

5.12 As part of the proposals, the existing Abbott Road underpass will be repurposed to become a pedestrian and cycle-only HPJGC. Providing a new high quality connection for people walking and cycling across the A12 and accommodating expected significant future demand generated from development in the wider area and the introduction of new pedestrian and cycle bridges across the River Lea.

5.13 Cycle storage will be provided in line with the London Plan requirements, TfL's London Cycling Design Standards and LBTH's Local Plan Appendix 3 on Parking Standards.

5.14 Car parking with low residential ratio (0.065 spaces per dwelling) will be provided, along with electric car charging points (20% of spaces would be active with 80% passive facilities to enable easy future conversion).

5.15 Further details of the outlined measures can be found in the Transport Assessment and Travel Plan prepared by Velocity.

6.0 MATERIALS

Sustainability Objective:

To reduce the global, social and environmental impact of the consumption of resources by using sustainably produced and locally sourced products.

Relevant Policy: London Plan 2021 Policy SI2, SI7. LBTH's Local Plan Policy S.DH1

Context

6.1 Building materials have a vast environmental effect in terms of energy and resources consumed in their production, use and disposal. Therefore, if environmentally responsive building materials are chosen, a significant amount of CO_2 can be saved during construction as well as during operation.

6.2 The London Plan 2021 Policy SI7 'Reducing Waste and Supporting the Circular Economy' focuses on designing developments with adequate and easily accessible storage space that supports the separate collection of dry recyclables and food.

6.3 It is outlined within Policy SI2 of the London Plan that referable developments should 'calculate whole life-cycle carbon emissions through a nationally recognised Whole Life-Cycle Carbon Assessment and demonstrate actions taken to reduce life-cycle carbon emissions'.

Delivery

6.4 The proposed development will aim to meet the principles of sustainable material use as set out in planning policy and sustainable design criteria. To ensure good practice, the materials specification and products considered for the proposed development will have the following characteristics:

- Prioritisation for locally sourced and sustainably sourced materials, which will be documented through the production of a sustainable procurement plan at the early concept design stages;
- Prioritisation of materials with recycled content;
- New materials used are accredited to a recognised environmental standard such as BES 6001, FSC & ISO 14001;
- As a minimum requirement, 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;
- Mitigate the impacts of climate change by good design and specification; and
- Ensure material efficiency strategies are considered by the design team from the early project stages up to the end of construction, and appropriate measures are implemented to optimise material use in accordance with the design requirements of the development.

6.5 By using low-carbon building materials and reducing the overall use of materials, the embodied carbon of the scheme will be reduced. The development will incorporate recycled content within all rebar steel as well as ground-granulated blast furnace slag (GGBS) as a cement replacement within the concrete frame and foundations.

6.6 The embodied carbon of the proposed development has been calculated at 1,096 kg CO_{2e}/m^2 GIA for Detailed Proposals (Phase A) and 970 kg CO_{2e}/m^2 GIA for Outline (Phases B-D), both below GLA benchmarks.

6.7 The residential units that make up Plot J are to be designed as net zero carbon in construction. Different design options have been considered and will be further developed, but it is currently intended that a timber frame construction will be used to reduce embodied carbon emissions as much as feasibly possible.

6.8 A Circular Economy statement has also been provided in support of the planning application detailing the ways in which material use will be minimised and sustainable materials will be procured. The strategic circular economy approach for the new build elements of the scheme is to conserve resources, increase efficiency and source sustainably, design to eliminate waste (and for ease of maintenance) and to manage waste sustainably and at the highest value. Further details can be found in the report prepared by Greengage.

6.9 A Sustainable Procurement Plan (SPP) will be produced as part of the BREEAM assessment that will identify and prioritise material inputs which are considered more environmentally friendly.

7.0 WASTE & SITE MANAGEMENT

Sustainability Objective:

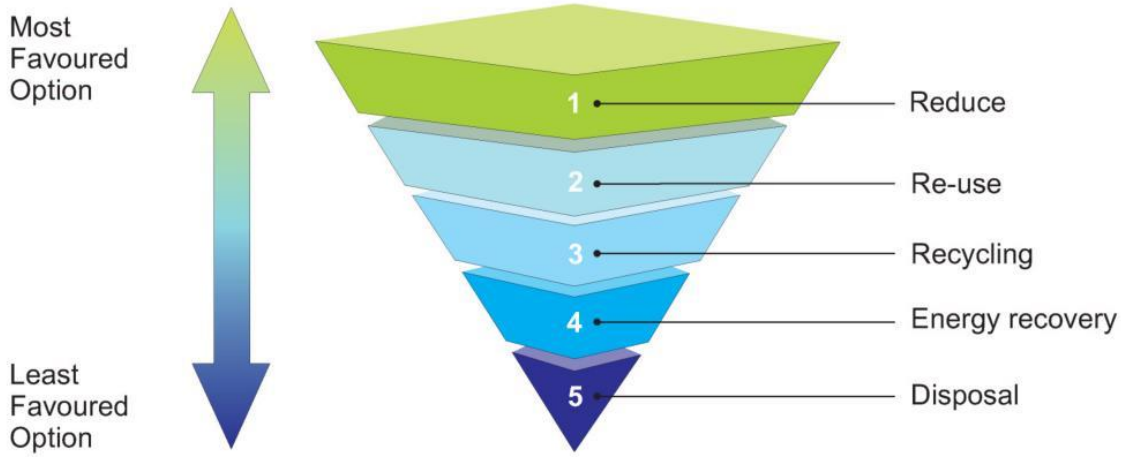
To reduce waste generation and disposal through the facilitation of recycling and to use sustainable methods of construction.

Relevant Policy: London Plan 2021 Policy SI7; LBTH's Local Plan Policy S.DH1, S.MW1, D.MW2, D.MW3

Context

7.1 The minimisation of waste and the increased use of recycled materials form an intrinsic key to resource protection. The Waste Hierarchy, which is a framework for sustainable waste management setting out the preferential treatment of waste, is shown in Figure 7.1.

Figure 7.1 The Waste Hierarchy (Kirklees Council, 2017, Waste)



7.2 The London Plan 2021 Policy SI7 '*Reducing Waste and Supporting the Circular Economy*' focuses on designing developments with adequate and easily accessible storage space that supports the separate collection of dry recyclables and organic waste. Construction waste targets of ≥95% of all construction and demolition waste being recycled and diverted from landfill by 2020 are specified within the policy.

7.3 Local policies which are relevant include the following within the LBTH's Local Plan:

- Policy D.MW3 Waste collection facilities in new development

1. All new development must include sufficient accessible space to separate and store dry recyclables, organics and residual waste for collection, both within individual units and for the building as a whole.

2. New major residential developments must incorporate high quality on-site waste collection systems that do not include traditional methods of storage and collection and are compatible with our waste collection methods outlined in Appendix 4. In instances where this is not practicable, supporting evidence must be submitted with the application to demonstrate this.

Delivery

Design and construction phase

7.4 The proposed development has aimed to 'design out' waste through the consideration of materials specification and construction techniques (e.g. prefabricated elements, standard component specifications) in order to prevent and minimise waste generation and make the construction process more time efficient and cost effective.

7.5 A pre-demolition audit will be expected to be carried out to quantify materials resulting from demolition and a site waste management plan will be used to reduce waste being sent to landfill, increasing reuse and recycling.

7.6 Disposal sites and routes will be identified by the contractor and presented in a Site Waste Management Plan (SWMP) that will apply the principles of the Waste Hierarchy.

7.7 The SWMP will ensure procedures and commitments are put in place for the following:

- Monitoring of waste generated on-site;
- Setting of targets for minimising the amount of waste generated on-site; and
- Sorting, reuse and recycling of construction waste, either on-site or off-site through a licensed external contractor.

7.8 The principal contractor will be responsible for implementing the SWMP and priority will be given to the re-use of waste on-site or to ensure materials taken off-site are re-used elsewhere or recycled. Resource efficiency and waste diversion targets will be set in line with policy requirements to reduce overall waste for the project.

7.9 The proposed development will also be registered with the Considerate Constructors Scheme and will be monitored against a Code of Considerate Practice, designed to encourage best practice beyond statutory requirements.

Operational phase

7.10 To encourage minimisation of waste, residential and commercial waste quantities were reviewed in an Operational Waste Management plan prepared by Velocity.

7.11 The residential waste was calculated as per LBTH waste storage requirements which dictate the recycling rates (total of food waste and recycling percentages).

7.12 The commercial waste was calculated using British Standard BS5906:2005 *Waste Management in Plots – Code of Practice* metrics. Most retail space was assumed to be Food & Beverage to allow for worst case waste generation.

7.13 To ensure all building users understand the recycling process and to avoid contamination, the space will be clearly labelled to assist with segregation, storage and collection of the recyclable waste streams.

7.14 Commercial elements would seek a zero landfill waste contract through a commercial waste contractor and residential waste will be disposed of by LBTH in their contracted facilities.

Residential waste management

7.15 Each residential property will be provided with a segregated waste bin, which will be fixed into an appropriate kitchen unit.

7.16 For Detailed proposals, residual waste from Plots F, H & J will be stored in 1,100-litre Eurobins and DMR will be stored in 1,280-litre Eurobins. Food waste will be stored in 240-litre wheeled bins.

7.17 Residual waste from Plot I will be stored in 5,000-litre URS units within the external landscaping and food waste will be stored in 240-litre wheeled bins within a residential waste store.

7.18 Residents will be required to transport their own waste from their property directly to their nearest waste store, using the passenger lifts (where necessary), where they will segregate their waste into appropriately labelled bins.

7.19 For Outline Proposals, each building will be provided with a residential waste store at ground floor level in close proximity to the lift and stair core.

7.20 Residual waste and DMR will be stored in 660-litre Eurobins, food waste will be stored in 240-litre wheeled bins.

7.21 Residents will also be provided with access to a bulky waste storage area for large redundant items such as furniture or appliances.

Commercial waste management

7.22 For the Detailed Proposals, to account for the flexible use class of the proposed commercial areas, for the purpose of estimating waste generation, it is assumed 75% of the total commercial area is restaurant and the remaining 25% retail.

7.23 As for Outline proposals, the restaurant metric has been applied to all retail areas. As the most onerous metric for waste generation, this ensures a robust waste management strategy is maintained throughout each design stage.

7.24 As necessary, the commercial tenants will transfer the segregated waste from their temporary internal waste storage to the nearest commercial waste store.

7.25 A commercial waste contractor will be appointed to service the Proposed Development once operational.

7.26 The commercial waste contractor will collect the bins directly from each of the commercial waste stores on an agreed schedule.

8.0 WATER

Sustainability Objective:

To conserve water by promoting water efficiency and water recycling.

Relevant Policy: The London Plan 2021 Policy SI5, SI12, SI13; Mayor's Water Strategy; LBTH's Local Plan Policy D.ES4. D.ES5, D.ES6

Context

8.1 To ensure a sustainable water supply for the future, it is vital that water is used more efficiently, and methods of harnessing and reusing water are developed and implemented.

8.2 Climate change is likely to mean more extreme weather events; therefore, the issue of 'surface water' flooding is becoming more and more important. Many existing urban drainage systems can cause problems of flooding, pollution or damage to the environment and are not proving to be sustainable. Use of Sustainable Drainage Systems (SuDS) is a cost-effective solution to harnessing and reusing water with a low environmental impact which can easily be incorporated into developments; they drain away surface water run-off through collection, storage and cleaning before allowing it to be released slowly back into the environment.

8.3 The London Plan 2021 Policy SI5 expects proposals to incorporate measures such as smart metering, water saving and recycling measures, including retrofitting, to help to achieve lower water consumption rates and to maximise futureproofing.

8.4 Policy SI12 seeks to ensure that flood risk is minimised and mitigated, and that residual risk is addressed in development proposals. There is a preference here towards natural flood management methods due to their multiple benefits including increasing flood storage and creating recreational areas and habitat. Where possible proposals should seek to implement these.

8.5 SI13 states that development proposals should aim to achieve greenfield run-off rates and ensure that surface water run-off is managed as close to its source as possible (rainwater harvesting, infiltration techniques and green roofs, rainwater attenuation, etc.). Development proposals for impermeable paving should be refused. Drainage should be designed and implemented in ways that address issues of water use efficiency, river water quality, biodiversity, amenity and recreation.

8.6 Local policies which are relevant include the following within the LBTH's Local Plan:

- Policy D.ES5 Sustainable drainage, in particular:

8.7 3. Development is required to achieve the following run-off rates:

8.8 a. New development in critical drainage areas is required to achieve a greenfield run-off rate and volume leaving the site

8.9 b. All other development should seek to achieve greenfield run-off rate and volume leaving the site. Where this is not possible, the minimum expectation is to achieve at least 50% attenuation of the site's surface water run-off at peak times prior to re-development.

Delivery

Water Efficiency

8.10 The design team will ensure water consumption (litres/person/day) for the assessed buildings is in line with the London Plan's 105l/p/d target. The water efficiency measures considered for incorporation should include low water-use appliances. An example of how the target could be reached is detailed below:

- WCs – 6/4 Dual flush
- Showers – 6l/min
- Basin taps – 4l/min
- Kitchen/ Sink taps – 5l/min
- Bath – 170l
- Dishwasher – 1.25l/place setting
- Washing Machine – 8.17kg/kilogram dry load

8.11 The proposed development will also seek to incorporate monitoring and control measures for water efficiency, with mains water meters for each block and sub-meters per flat.

Flood Risk and Sustainable Drainage

Flood Risk

8.12 The Site is located in Flood Zone 3a, an area benefiting from the presence of flood defences. A Flood Risk Assessment was undertaken by Parmarbrook.

8.13 The report concludes that the risk of flooding from surface water and ground water is very low for most of the site, and there is an unlikely risk from reservoir flooding.

8.14 To mitigate risk from tidal/fluvial flooding, finished floor levels of the residential units will need to be raised above the peak flood levels in the 2100 climate change breach scenario, and a minimum of 0.15m above adjacent ground levels. For the retail units, the finished floor levels should be set a minimum of 0.15 m above adjacent ground levels.

SuDS strategy

8.15 In accordance with London Plan requirements, the SuDS Hierarchy has been used to determine the most sustainable surface water drainage strategy for the proposed development to minimise flood risk onsite.

8.16 Sustainable urban Drainage Systems (SuDS) comprising blue roofs, an extent of biodiverse roofs (green and brown roof), and below ground cellular attenuation will be incorporated on site.

8.17 The proposed SuDS are designed to store the volume of water associated with a 1 in 100 year rainfall event, plus an additional allowance to account for increased rainfall due to climate change, and release at a controlled run-off rate to the nearby sewer, in line with LBTH Policy D.ES5.

8.18 Further details on the incorporation of SuDS for the proposed scheme can be found in the Drainage Strategy report prepared by Meinhardt.

Construction

8.19 During the construction phase, the principal contractor will be required to monitor, report and set targets against water consumption. Targets will be identified by the principal contractor and informed by the Constructing Excellence Key Performance Indicators.

9.0 POLLUTION

Sustainability Objective:

To reduce inequalities in the health of the population by improving air quality and preventing noise and light pollution.

Relevant Policy: London Plan 2021 Policy SI1, SI2; LBTH's Local Plan Policy S.DH1, D.ES9, D.ES2

Context

9.1 There are many forms of environmental pollution arising from building operation, including noise, odours, light, and vibration. A significant proportion of pollution is airborne and is the direct result of: fumes, combustion of materials, chemicals used in industrial processes, or polluted air from ventilation systems and air conditioning plants. Some pollutants can also escape to soil and groundwater courses. Internal noise and disturbance to neighbours are also important considerations; and light spill from external lighting can sometimes be an annoyance and aggravation to neighbours.

9.2 To reduce the depletion of the earth's ozone layer, chlorofluorocarbons (CFCs) are banned under the international 'Montreal Protocol' and hydro chlorofluorocarbons (HCFCs) are being phased out. However, these have often been replaced with hydrofluorocarbons (HFCs), which have an Ozone Depleting Potential (ODP) of zero but have a high potential to contribute to global warming and the greenhouse effect. The measure of a substance's Global Warming Potential (GWP) is relative to 1 unit of CO_2. Some HFCs have a GWP in excess of 4,000.

9.3 Many substances used in the built environment also contain Volatile Organic Compounds (VOCs). Methane VOCs contain greenhouse gases that contribute towards climate change and non-methane VOCs also have an environmental impact principally related to the formation of ground level ozone or 'smog' that can lead to respiratory problems. In addition, some aromatic compounds (non-methane VOCs) are toxic to human health, considered carcinogens, and are thought to be associated with 'sick building syndrome'.

9.4 Policy SI1 '*Improving Air Quality*' of the London Plan 2021, requires air quality assessments to be submitted for all major developments and demonstrate air quality neutrality.

9.5 Further local policies which are relevant include the following within the LBTH's Local Plan:

- Policy D.ES9 Noise and Vibration: requires developments to identity mitigation measures to manage noise and vibration, and to demonstrate that the level of noise emitted from heating or ventilation plant is below the background level by at least 10dBA.

Delivery

9.6 The proposed development will seek to incorporate best practice design measures, addressing the planning policy requirements, including:

- Undertaking air quality testing to ensure that the local air quality does not deteriorate as a result of the proposed development;

- Minimising the potential for night-time light pollution by designing external lighting in accordance with ILP (Institute of Lighting Professionals) guidance notes; and
- Undertaking a noise impact assessment to identify potential for noise nuisance and implement measures for noise attenuation where required.

9.7 Throughout the development, to reduce night-time light pollution and energy usage, external lighting and security light fittings will have energy efficient bulbs/lamps and control systems which will enable them to be controlled to minimise nuisance to neighbouring properties due to lighting.

Noise Assessment

9.8 A Noise Assessment has been carried out by Entran to ensure the impact of any external sources on internal ambient noise levels are within acceptable limits.

9.9 The assessment demonstrates that the proposed development will be suitably protected from, and not give rise to, adverse noise effects through the provision of mitigation measures.

9.10 The proposed mitigation measures include suitable glazing and ventilation options to be adopted in conjunction with typical façade design in order to achieve the BS 8233 and WHO criteria.

9.11 Noise levels at all proposed dwellings are calculated to fall below the BS 8233 criteria with the incorporation of suitable glazing and ventilation units.

9.12 Long Term effects due to changes in road traffic flows are considered to be negligible.

9.13 Further details can be found in the Acoustics EIA chapter prepared by Entran.

Air Quality Assessment

9.14 An Air Quality Assessment has been carried out to determine the impact of the proposed development on local air quality in terms of dust and particulate matter emissions during construction and emissions from road traffic generated by the completed and occupied development.

9.15 The results of the assessment indicate that the impact of the operation of the Proposed Development on existing sensitive receptors and proposed receptors will be negligible. Nonetheless, the units will be mechanically ventilated to ensure that there is no new exposure to poor air quality.

9.16 Following the implementation of best practice dust control measures during demolition and construction, all effects of the Proposed Development on air quality were assessed to be negligible (not significant).

9.17 For further details please refer to the Air Quality EIA chapter prepared by Entran.

11.0 ECOLOGY & BIODIVERSITY

Sustainability Objective:

To conserve and enhance the biodiversity of the local area by conserving and enhancing areas valued for their diversity of wildlife, habitats, and landscape value.

Relevant Policy: London Plan 2021 Policy G1, G4, G5, G6; LBTH's Local Plan Policy D.ES3

Context

11.1 Biodiversity is the variability among living organisms within an ecosystem; a highly diverse ecosystem is an indicator of a healthy and thriving natural environment. Biodiverse areas have a number of benefits for animals, plants and humans, so it is key that biodiversity measures are integral to the design of a new development.

11.2 The UK has seen a dramatic loss in biodiversity and ecosystem integrity especially through the latter half of the twentieth century, therefore, the protection and enhancement of biodiversity is a key component throughout the development process.

11.3 In Policy G5 of the London Plan 2021, the new method of calculating urban greenery is set out with the likely new targets. The mayor recommends an Urban Greening Factor (UGF) of 0.3 being achieved for mostly commercial development.

11.4 Policy G1 'Green Infrastructure' states that proposals should incorporate appropriate elements of green infrastructure that are integrated into London's wider green infrastructure network.

11.5 Policy G4 'Open Space' promotes the creation of new areas of publicly-accessible open space particularly green space, ensuring that future open space needs are planned for, especially in areas with the potential for substantial change.

11.6 Policy G6 'Biodiversity and Access to Nature' requires proposals to manage impacts on biodiversity and aim to secure net biodiversity gain. This should be informed by the best available ecological information and addressed from the start of the development process.

Delivery

Landscape & Ecology

11.7 A Landscape Design Statement has been prepared by LDA Design for the Development.

11.8 The ecology on site will be improved through the introduction of multi-stemmed trees, screening plants, lawns, native hedge planting and wildflowers.

11.9 Soft landscaping will be incorporated across the site to provide opportunities for habitat creation, which will enhance biodiversity and promote native species.

11.10 Ecological recommendations such as wildflower meadows, species-rich lawns, raingardens, bird nest and bat boxes along with an extent of biodiverse roof (green and brown roof) will

be incorporated within the proposed scheme. Further details can be found in the accompanying Preliminary Ecological Appraisal.

UGF & BNG

11.11 Greengage have calculated the Urban Greening Factor (UGF) and Biodiversity Net Gain (BNG) for the Aberfeldy Masterplan.

11.12 As existing habitats are deemed of low distinctiveness and dominated by urban sealed surfaces, the Development will provide large green areas and the resulting predicted net gain is 30.47%, exceeding the 10% mandate.

11.13 Policy G5 of the Publication London Plan sets out a UGF target of 0.3 for mostly commercial development and 0.4 for residential development.

11.14 Greengage have undertaken calculations based upon the proposed landscape drawings and concluded that the proposals have maximised urban greening as far as possible within the constraints of the site. The development is achieving an Urban Greening Factor Rating of 0.4.

11.15 The Proposed Development represent a significant improvement over the existing ecological value of the site. Extensive greening is provided at numerous vertical levels, across all available roof space, terraces and in the ground floor public realm areas. Mature trees are retained insofar as possible, wildflower meadows are proposed and all planting to be flower-rich to improve ecological value.

11.16 For further details please refer to the accompanying Greengage reports (Biodiversity Impact Assessment and Urban Greening Factor Assessment).

Arboriculture

11.17 An Arboricultural Impact Assessment (AIA) has been undertaken by Arbeco, to assess the potential impact to existing trees from the proposed development, and to highlight the need for the retention of specific trees during construction.

11.18 As assessment of the potential impacts of the proposed development and recommendations to help avoid, minimise or compensate for this impact is outlined in the accompanying AIA report.

Construction Phase

11.19 Prior to the construction phase, mitigation measures shall be implemented through a Construction Site Waste Management Plan to ensure appropriate measures are implemented as necessary, to avoid adverse impact on any flora and fauna within the construction zone.

12.0 WELLBEING & SOCIO-ECONOMICS

Sustainability Objective:

To create and sustain vibrant communities, addressing a deficiency in the provision of services to the local community and recognising the needs of everyone.

Relevant Policy: London Plan 2021 Policy D5, D8, D11; LBTH's Local Plan Policy S.DH1, D.ES10, D.DH2, D.DH8, S.OWS1, S.OWS2

Context

12.1 Wellbeing differentiates itself from considerations such as standard of living by not focussing solely on economic factors; rather, it is closer in definition to quality-of-life and so takes a more holistic approach. As such, promoting well-being focuses on enabling communities and individuals to live healthy, happy lives. In relation to the proposed development, this includes ensuring that individuals have good access to healthcare services, education, employment opportunities, open space and a range of amenities, but also that their pursuit of these is not at the detriment of the wellbeing of the wider community. In this sense, wellbeing embodies true sustainability in all its three facets: environmental, economic, and social.

12.2 Wellbeing covers a number of policy areas. Particular policies in the London Plan not covered elsewhere in this statement that are relevant to wellbeing include:

- Policy D5 Inclusive Design – Design & Access (D&A) statements should demonstrate inclusive design, including the specific needs of older and disabled people.
- Policy D8 Public Realm - Developments should make the public realm comprehensible at a human scale, using gateways, focal points and landmarks as appropriate to help people find their way. Landscape, street furniture and infrastructure should be of the highest quality. Opportunities for greening should be maximised. Incorporate local social infrastructure such as public toilets, drinking water fountains and seating where possible.
- Policy D11 Safety, security and resilience to emergency - Developments should reduce the opportunities for criminal behaviour and contribute to a sense of security without being overbearing or intimidating.

Delivery

Design

12.3 The proposed development has been designed to maximise the wellbeing benefits to residents, without detriment to the surrounding buildings, users and wider community. The building design also takes full advantage of the site's potential and incorporates passive design measures to further optimise solar radiation and daylight availability in all spaces.

12.4 The following features will be considered:

- Design to minimise the concentration and recirculation of pollutants in the building, including specifying use of low VOC content products;
- Heating, cooling and ventilation systems/strategies designed for resident control and comfort, specified in accordance with the outcomes from energy modelling which account for the potential for overheating; and
- Design of internal environments to meet appropriate acoustic performance standards to provide residents with appropriate conditions for comfort and wellbeing.

Daylight and Sunlight

12.5 The proposed scheme has been designed with suitable levels of glazing to ensure all occupied spaces have sufficient levels of daylight and sunlight as a way of improving the health and wellbeing of its occupants and minimising the use of artificial lighting.

12.6 An initial daylighting study has been undertaken for Phase A to analyse the internal daylight and sunlight levels within the proposed development.

12.7 Overall, as a result of the design optimisation carried out throughout the design process and the design solutions adopted, it was found that the Detailed Proposals will provide good or acceptable levels of daylight and sunlight to future residents.

12.8 Further details can be found in the Daylight, Sunlight and Overshadowing Report prepared by GIA.

Overheating

12.9 An Overheating Risk Assessment has been carried out by Meinhardt for the proposed development to assess the potential risk of overheating.

Detailed Proposals

12.10 The results of the dynamic modelling overheating assessment for residential areas show that CIBSE compliance criteria are met in all rooms modelled for the 2020s DSY1 weather scenario, through the use of natural ventilation and increased mechanical ventilation together with an improvement of glazing g-value to 0.33.

12.11 Recommended measures to mitigate the overheating risk include:

- Openable windows and increased mechanical ventilation
- Optimisation of glazing g-value
- For residents, it is recommended in summer months to:
- Use portable fans to increase airflow
- Minimise internal heat gains
- Keep windows open as long as possible

12.12 Guidance will be provided to residents on reducing the overheating risk in their home in line with the cooling hierarchy.

12.13 For the retail units, marketing suite and other appropriate areas will require active cooling to mitigate overheating risk.

12.14 Mechanical Ventilation with Heat Recovery (MVHR) has been proposed throughout the proposed development to supplement natural ventilation via openable windows providing additional ventilation to ensure thermal comfort is maintained in the summer months.

Outline Proposals

12.15 The results of the dynamic modelling overheating assessment for residential areas show that CIBSE compliance criteria are met in almost all rooms modelled for the 2020s DSY1 weather scenario, through the use of natural ventilation and increased mechanical ventilation together with an improvement of glazing g-value to 0.33.

12.16 Recommended measures to mitigate the overheating risk include:

- Optimisation of window sizes and opening areas
- Optimisation of glazing g-value
- Maximising cross-ventilation
- Consideration of lighter colour palette for reflection
- Maximising floor to floor height

12.17 Further modelling will be carried out at later stage to assess the overheating risk for retail areas and explore all available passive measures for the proposed development.

Accessibility

12.18 The Proposed Development has been designed with access to wheelchair in mind, to be wheelchair fully adapted or wheelchair adaptable housing.

12.19 A provision for parking has been provided and spaces will be reserved for blue badge holders only.

12.20 All WCs and showers have been designed to BS8300:2009, the requirements of Part M of the Building Regulations, and Lifetime Homes.

Local Amenities

12.21 The proposed development is located in Poplar, in the southeast of the London Borough of Tower Hamlets. The site benefits from being located within close proximity, and accessible to, local amenities which are likely to be frequently required and used by the building occupants. These include basketball courts, NHS centres, a primary school and community centres like Burcham Street Community Centre among others.

12.22 There are also several green open spaces including parks nearby including Jolly's Green, Aberfeldy Millennium Green, Leven Road Green, Braithwaite Park, All Saints Churchyard, Landgon Park.

Security

12.23 The proposed development will comply with Secured by Design standards, to provide safe and secure spaces to all building users.

Open Spaces & Public Realm

12.24 External amenity spaces will be provided for all residential units, to allow residents to gather, socialise and connect. This will enhance the residents' wellbeing and improve mood and happiness.

12.25 The Development will provide new public open space - 3757m^2 delivered as part of Highland Place – and will upgrade existing open spaces as part of the redevelopment of the Aberfeldy Site (include Millennium Green, Leven Road Open Space and Braithwaite Park), in line with LBTH planning policies.

12.26 By creating pedestrian focused healthy streets, it will help reduce traffic on Abbott Road and provide an improved walking and cycling experience.

12.27 The Development will propose a network of permeable walking and cycling routes that connect with surrounding existing and planned neighbourhoods, as well as providing good access to public transport networks.

12.28 The Development will comprise streets that safely provide access and space for servicing the proposed buildings.

Socioeconomic value

12.29 The Outline Proposals will revitalise High Street with 1,244m^2 of new retail space and create new employment opportunities with 3,200m^2 of new workspace.

Construction phase

12.30 As highlighted within the Pollution chapter, the proposed development is to commit to achieving Considerate Constructors Scheme certification meaning the site will be following best practice measures with regards to appearance, community engagement, environmental consideration, safety measures and workforce wellbeing throughout the construction phase.

13.0 SUMMARY

13.1 This Sustainability Statement has been written to demonstrate compliance with the various local and regional planning policies supports the planning application for the proposed development at Aberfeldy Village Masterplan, within the administrative boundary of the London Borough of Tower Hamlets.

13.2 The statement demonstrates how the development proposals are meeting key policy objectives, responding to local needs and requirements, and conforming to best practice sustainability criteria applicable to this development.

13.3 The proposed development satisfies policy objectives by optimising sustainability through the incorporation of best practice design, construction and operation measures. Some of key features highlighted in this sustainability statement include:

- Commitment to building design in accordance with the principles of the energy hierarchy, using fabric efficiency measures and low carbon and renewable technologies. The proposed development achieves **28% (Detailed Proposals)** and **73% (Outline Proposals) reduction in CO_2** over the Part L baseline;
- A **Whole Life Carbon Assessment** has been carried out to compare the development against an industry baseline. Embodied carbon will be reduced through the reduction in use of materials and through the procurement of low carbon building materials;
- Incorporation of water efficiency measures in design to reduce potable water consumption to **105 l/p/d**;
- Incorporation of **sustainable transport measures**, such as cycle storage spaces and facilities to ensure building users can make use of the existing transport network;
- Undertaking a **circular economy statement** and implementing waste hierarchy and responsible sourcing principles in the design, specification and construction process for the Proposed Development;
- Incorporation of **SuDS** measures to reduce surface water run-off to as close to Greenfield run-off rates as feasible under the site restrictions;
- Commitment to ensuring all forms of pollution are minimised in design and construction, in particular acoustics and air quality;
- Commitment to positively enhancing the site biodiversity through the incorporation ecological enhancement measures achieving **30.47% BNG** and a **UGF of 0.4**; and,
- Maximising the wellbeing for users of the proposed development through the undertaking of **thermal and daylight modelling**.

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