Sustainability Statement

Artisan Gun Making Workshop Relocation: Ashby Farm

Holland & Holland

P01 13/03/2026

ScotchPartners

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Contents

1 Executive Summary

1.1 Background

Scotch Partners has been instructed by Holland & Holland (herby referred to as 'the Applicant') to produce a Sustainability Statement to support the detailed planning application submitted by 'the Applicant' to the Council for the redevelopment of the land at Ashby Farm, Northwood, London HA62ST (herby referred to as 'the Development').

This report supports the Applicants request for the *"Demolition of the existing site buildings (with central timber framed barn retained), removal of existing hardstanding and menage area and the redevelopment of the site to provide a new high quality workshop facility including associated access improvements, parking, hard and soft landscaping, sustainable drainage and ecological enhancements."*

This report sets out the strategy that has informed the design proposals in order to deliver a high level of sustainability performance and demonstrate compliance with both the planning policy requirements and the applicant's sustainability aspirations.

1.2 Policy Content

The Development has been designed with consideration for the key policies relating to sustainable design and construction, focusing primarily on the London Borough of Hillingdon Local Plan Part 1 (2012) and Part 2 (2020), as well as The London Plan (2021). The Applicant and the project team have fully embraced the strategic objectives of local and national policy.

1.3 Summary of Proposed Measures

Table 1 – Summary of Proposed Measures

Key Sustainability Issue	Proposed Design Measures/Approaches
Health and Wellbeing	• Provide good indoor air quality for occupants; • Provide good levels of thermal comfort; • Incorporate access to nature both internally and externally; • Encourage safety and security on site.
Energy and Carbon	• Achieve GLA targets for "Be Lean, Be Clean, Be Green, Be Seen".
Climate Resilience and Embodied Carbon	• Water efficient sanitaryware fittings; • Leak detection system; • Flow control devices; • Reduce embodied CO_2 emissions through material efficiency and sustainable procurement; • Reduce surface runoff and prevent localised flooding through Sustainable Drainage Systems (SuDS).
Greening and Biodiversity	• Achieve a 42.61% Biodiversity Net Gain (BNG) through new plantings and ecological enhancements • Achieve a UGF above 0.3 for a commercial development (in line with the London Plan); • Protect existing habitats where identified by an ecologist.
Materials, Waste and Circular Economy	• New materials will be selected with consideration for their environmental impact; • Materials procured from responsible sources; • Meet GLA targets for waste and recycled content; • Minimise construction waste where possible
Sustainable Travel	• Car and cycle parking facilities including electrical charging ports; • Relocation provides easy access for testing guns, reduced trips between the two sites, better client access and facilities and staff efficiencies. Reduced trip generation decreases cars on the road; • Hard and soft measures to be implemented to increase site sustainability.
Sustainability Certifications	• Aspire towards BREEAM Excellent rating (New Construction V6.1).

1.4 Conclusion

From the outset, the Development has been designed to achieve a high level of sustainability performance. Design proposals have been carefully considered and robustly developed in consultation with key stakeholders to maximise the potential for multiple environmental and social benefits to be realised. As a result, the Development will deliver a new, vibrant facility that embraces the heritage of a historic brand.

The sustainability strategy developed will be reviewed and monitored throughout the design and construction stages, thereby ensuring the aspirations of the Council and the Applicant are achieved in practice once it is complete.

2 Introduction

2.1 Development Description

This report supports the Applicants request for the *"Demolition of the existing site buildings (with central timber framed barn retained), removal of existing hardstanding and menage area and the redevelopment of the site to provide a new high quality workshop facility including associated access improvements, parking, hard and soft landscaping, sustainable drainage and ecological enhancements."*

The Development is situated in the London Borough of Hillingdon at Ashby Farm, Northwood, London HA62ST.

2.2 ESG Targets

It is important to acknowledge that both environmental and social issues contribute to the sustainability performance of a building. Cost-effectiveness is also a key consideration. The location and nature of the Development will generally determine the viability of some sustainability measures; with planning policy requirements also providing a critical driver.

The sustainability aspirations for the Development are driven by the client brief and planning policy whilst respecting the history and character of the local area. Working to these criteria, the following areas have been identified as the key sustainability principles for the Development:

- Health and wellbeing
- Energy and Carbon
- Climate resilience and embodied carbon
- Ecology and greening
- Materials, waste and circular economy
- Sustainability certification

2.3 Supporting Information

This statement should be read and considered in conjunction with the plans and reports submitted as part of this application. In support of this statement, the following relevant documents have been provided for further context:

- Flood Risk Assessment (MHA Structural Design)
- Drainage Strategy and SuDs (MHA Structural Design)
- Preliminary Ecological Appraisal (Davidson-Watts Ecology)
- Biodiversity Net Gain Report (Davidson-Watts Ecology)
- Landscape Narrative (Andy Sturgeon)
- Air Quality Assessment (Quantum Air)
- Transport Statement (Clewlow Consulting)
- Travel Plan (Velocity)
- Energy Assessment (Environmental Engineering Partnership)
- Security Needs Assessment (CPTED)
- Design and Access Statement (McDonald Architects)
- Pre-Redevelopment Audit (Velocity)
- Pre-Demolition Audit (Velocity)
- Operational Waste Management Strategy (OWMS) (Velocity)
- Outline Site Waste Management Plan (OSWMP) (Velocity)
- Urban Greening Factor Calculator (Andy Sturgeon)
- Whole Life Carbon Assessment (Scotch Partners)
- Circular Economy Statement (Scotch Partners)

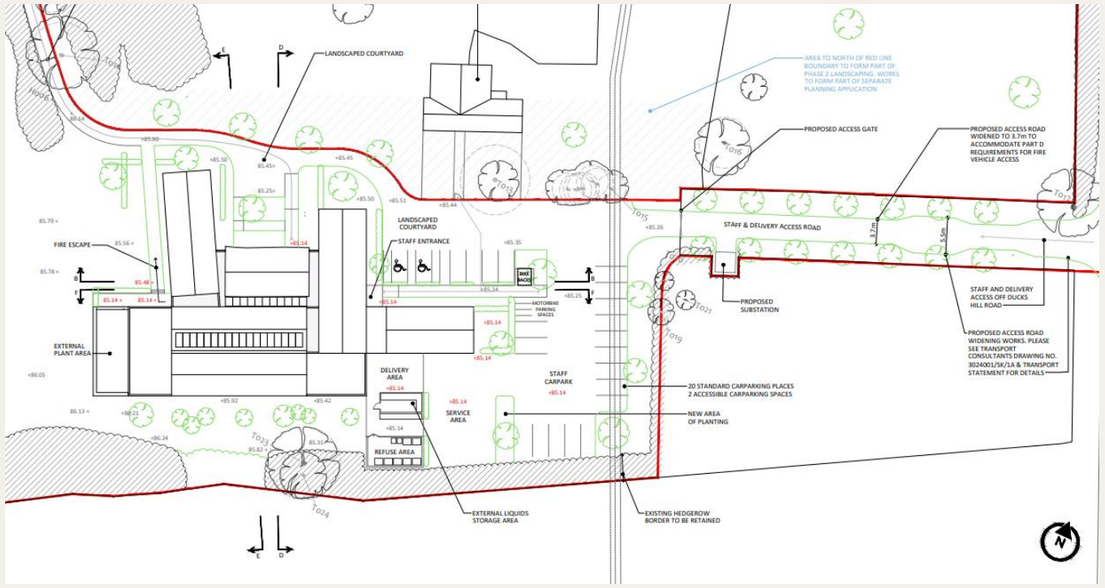

Figure 1 - Proposed Site Plan General Arrangement (Source: McDonald Architects)

3 Key Policies and Requirements

3.1 Introduction of Policies

The Development has been designed with consideration for the key policies relating to sustainable design and construction, focusing primarily on Hillingdon Local Plan Part 1 (2016), Hillingdon Local Plan Part 2 (2020), and The London Plan (2021).

The Applicant and the project team have fully embraced the strategic objectives of local and national policy. They are keen for the Development to fully support these and to go further by carrying out a formal BREEAM assessment plus Life Cycle Assessments (LCA) to ensure opportunities for sustainability are maximised and carbon emissions are reduced wherever possible.

Key policies can be found in Table 1 on the following page.

3.2 The London Plan (2021)

In alignment with national requirements of greenhouse gas emissions reduction, The London Plan sets out various requirements for new developments to achieve in order to not only reduce their carbon footprint, but also be resilient to future climate impacts. Developing a sustainability strategy that incorporates climate change mitigation and adaptation strategies is essential to the Plan, as sustainability should be built into designs from their inception. The London Plan serves as guidance for all council plans to apply the broad policies at a borough level.

3.3 Hillingdon Local Plan Part 1 (2016) and Part 2 (2020)

The London Borough of Hillingdon Local Plan Part 1 and Part 2 work in conjunction to guide new developments in coordination with the vision of Hillingdon Council for the future of the borough. Part 1 is designed to set out the spatial vision and framework for delivery, while Part 2 focuses on Development Management Policies. Both parts support the long-term delivery and objectives of new developments, in which sustainability is at the forefront of future growth. This sustainability strategy aims to overview the council policies as they apply to the development, and ensure that the site contributes to growth in the borough.

To satisfy the objectives of both Part 1 and Part 2, the new developments incorporates energy efficiency through low or zero carbon sources, minimising waste production during construction, and increases in site biodiversity to not only support the local area, but the region as whole. All of these methods have the ultimate goal of impacting the area beyond the site boundaries, and will assist in the national targets of reducing carbon emissions and climate change.

Table 2 - Key Policies

Policy Document	Policy Reference	Requirements
The London Plan (2021)	Policy SI 1 Improving air quality	• Major development proposals must submit an Air Quality Assessment (AQA). • Mitigation measures required where a development would cause harm. • Construction dust and emissions to be assessed.
	Policy SI 2 Minimising greenhouse gas emissions	• Follow the energy hierarchy. • Minimum overall CO2 reduction of 35% to be achieved; Target is net zero carbon in operation. • Cash-in-lieu contribution will be required for residual onsite CO2. (Note that New London Plan suggests £95 tCO2 calculated against 30 years). • Minimum 'lean' (energy efficiency) target of 10% for residential and 15% for non-domestic. • Monitor and report on energy performance for at least 5 years. • Carry out whole life carbon emissions assessment.
	Policy SI 3 Energy infrastructure	• Engage at an early stage with relevant energy companies and bodies to establish the future energy and infrastructure requirements arising from large-scale development. • Connect to existing heat network where possible
	Policy SI 4 Managing heat risk	• Measures to reduce impact of urban and dwelling overheating (apply 'cooling hierarchy' and demonstrate mitigation through CIBSE modelling). • Minimise overheating risk in accordance with cooling hierarchy (passive design first; active cooling to be avoided as far as possible). Use CIBSE methodology to demonstrate overheating risk has been reduced as far as possible.
	Policy SI 5 Water infrastructure	• Incorporate smart metering, water saving and recycling measures. • Avoid harm to water environment and improve water quality. • Ensure adequate water supply and wastewater infrastructure capacity is provided. • Incorporate smart metering, water saving and recycling measures.
	Policy SI 7 Reducing waste and supporting the circular economy	• Developments will need to provide adequate, flexible, and easily accessible storage space and collection systems to support, as a minimum, the separate collection of dry recyclables (card, paper, mixed plastics, metals, glass) and food. • A "whole life-cycle" approach to materials specification is encouraged which considers what happens at the end of a building's life. Specification of sustainable materials should be considered at the earliest opportunity of all new development. • Help enable achievement of Mayor's waste targets: zero biodegradable or recyclable waste to landfill by 2026; municipal waste recycling target of 65% by 2030; 95% recycling/recovery rate of excavation, construction & demolition waste. • Developments should aim to be net zero waste.
	Policy SI 12 Flood risk management	• Incorporate flood resilient measures in areas prone to flooding. • Utility services should be designed to remain operational under flood conditions and buildings should be designed for quick recovery following a flood.
	Policy SI 13 Sustainable Drainage	• There should be a preference for green over grey features, in line with the drainage hierarchy. • Use SuDS that promote multiple benefits including increased water use efficiency, improved water quality, and enhanced biodiversity, urban greening, amenity and recreation. • Utilise sustainable drainages systems to achieve greenfield runoff rate where feasible. • Living Roofs (also known as Green Roofs) is strongly encouraged as a method of sustainable drainage. Due to the many benefits of living roofs, the London Plan now highlights the expectation for major developments to incorporate living roofs and walls where feasible.
	Policy G5 Urban greening	• Major development proposals should contribute to the greening of London by including urban greening as a fundamental element of site and building design, and by incorporating measures such as high-quality landscaping (including trees), green roofs, green walls and nature-based sustainable drainage
	Policy G6 Biodiversity and access to Nature	• Development proposals should 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. • Secure net biodiversity gain.

	Policy D5 Inclusive Design	• The development must adopt the principles and practices of the 'Secure by Design' Award Scheme displayed through a Design and Access statement. • Measures that will help contribute to healthier communities and reduce health inequalities should be incorporated in developments. • Demonstrate appropriate security and community safety measures in buildings, streets, public spaces and transport systems. • All buildings, places and routes between to meet highest practicable standards of accessibility and inclusive design.
	Policy D11 Safety, security and resilience to emergency	• Maximise building resilience and minimise potential physical risks, including those arising as a result of extreme weather, fire, flood and related hazards
	Policy D14 Noise	• Improve and enhance the acoustic environment and promote appropriate soundscapes (including Quiet Areas and spaces of relative tranquillity)
Hillingdon Local Plan Part 1 (2016)	Policy BE1: Built Environment	• Achieve high quality design in new builds that contributes to community cohesion • Design new developments in accordance with local landscape and views • Improve environment and public realm quality
	Policy EM1: Climate Change Adaptation and Mitigation	• Promote use of decentralised energy and improve local air quality • Incorporate low carbon strategies and minimise other pollutants • Encourage bioremediation and sustainable techniques in design to reduce landfill waste • Encourage installation of renewable energy for all new developments to meet London Plan reduction targets • Consider water cycle impacts through flood risk management, surface water drainage and water consumption • Development preference of previously developed land to avoid loss of green areas • Promote use of living walls and roofs with sustainable drainage to increase amount of carbon sinks • Incorporate passive design measures to reduce urban heat island effects
	Policy EM6: Flood Risk Management	• New developments to be directed away from Flood Zones 2 and 3 • SuDS to be implemented unless not considered viable on site
	Policy EM7: Biodiversity and Geological Conservation	• Provision of biodiversity improvements where feasible • Incorporation of green roofs and living walls to contribute to increased biodiversity and climate change mitigation • Use of SuDS to promote ecological connectivity and natural habitats
	Policy EM8: Land, Water, Air and Noise	• New developments should not cause negative impacts on the local air quality • Adequate control of noise where necessary • Water efficiency measures to be implemented within new developments • Incorporate water recycling and collection unless it is demonstrated to be inappropriate
	Policy EM11: Sustainable Waste Management	• Waste management good practices to be incorporated and addressed at all stages of construction through end use • Waste hierarchy to be followed on site
Hillingdon Local Plan Part 2 (2020)	DMEI 1	• All major developments should incorporate living roofs and/or walls, or provide justification where not provided
	DMEI 2	• Incorporate measures that minimise carbon dioxide emissions to the fullest extent possible • Conduct an energy assessment to show how these reductions should be achieved • If the council requirements cannot be met, off-site contributions may be approved to make up the shortfalls
	DMEI 3	• New developments to be connectable to a Decentralised Energy Network • If new developments are located in close proximity to a DEN, they will be required to connect
	DMEI 7	• New developments should retain and enhance any existing biodiversity features, and replace any unavoidable loss of significant value
	DMEI 9	• Provide flood defences if located in Flood Zone 2 or 3A • Develop a Flood Risk Assessment to show resilience against all forms of flooding

	DMEI 10	• New developments are required to incorporate SuDS into their design • Reduce run-off rates to be no higher than pre-developed greenfield run-of rate in a 1:100 year flood • Provide mitigation measures to prevent flood water contamination and pollution of water • Water efficiency measures to be included in design such as rainwater and greywater reuse
	DMEI 11	• Protection and mitigation measures to be included for groundwater resources during construction and operational phases of development
	DMEI 14	• New developments should demonstrate appropriate reductions in emissions to meet national and EU air quality objectives • As a minimum, sites should be air quality neutral, have no negative impact on air pollution receptors, and actively contribute to improvement of air quality

4 Health and Wellbeing

4.1 Key Issues

The physical health & mental wellbeing of people is a complex connected and inter-dependent system, affected by genes, social and economic circumstances, the quality of relationships and the value and purpose of work. Wellness is greatly affected by our physical environment, both indoors and outdoors, and by our connection to nature. Promoting wellbeing will enable individuals to live healthy and happy lives. For the development this means ensuring occupants have a healthy place to work in, good access to multiple amenities and open green space.

4.2 Designing for Health and Wellbeing

On average people spend 90% of their lives in and around buildings and so it is becoming ever more important to measure and recognise health and wellbeing elements of building design, construction and operation in the context of a holistic assessment of environmental and social impacts within the built environment. The site's remote nature lends itself to excellent nature access, and the landscape aims to use simplistic designs to allow the site to blend into the wider grassland of the surrounding site.

Many factors have been considered in order to promote physical and mental health and wellbeing:

- Access to natural amenity e.g. good air quality, daylight and sunlight.
- Access to nature (internal and external): greening and biophilia, natural materials.
- Comfort conditions (internal and external): temperature, humidity.
- Safety and security of building occupants and visitors.

4.3 Indoor Air Quality

An Air Quality Assessment was conducted to overview the sites baseline air quality, and potential impacts to it such as construction dust and traffic changes. The study found that the site's current air quality is well within the borough's average and far below the national requirements for N02, PM10 and PM2.5.

The largest drivers of potential change are dust arisings from construction and alterations of traffic increasing air pollutants. It was found that general there is low risk for dust emissions to occur on site based on the soil type, but with medium risk coming from earthworks. To mitigate any potential harm, it is recommend that particularly dusty works are enclosed, and to make contact information available for complaints if needed so adjustments can be made.

There is not expected to be any impact from traffic changes due to the new development, as the weekly trip generation will be decreasing from where the site currently stands. As such, no further assessment on roadside air quality was needed.

The site's baseline condition is well within the national standards, and the new development is not expected to have any impact on the surrounding air quality, and therefore air quality risk is considered "not significant".

4.4 Access to Nature

The site sits within an established farm setting and the landscape strategy adopts a low-key, sensitive and restrained approach that respects the rural character. Landscape intervention is deliberately limited in extent and concentrated within the immediate setting of the proposed buildings, which are themselves designed to respond sensitively to the scale, materials and grain of the surrounding context. The objective is to create a subtle sense of arrival without introducing unnecessary formality, structure or visual prominence.

Planting is deliberately simple and naturalistic, using a restrained palette that allows the development to blend into the wider open grasslands. Further from the buildings, planting merges seamlessly with the existing landscape character, transitioning gradually to more ornamental grass block planting as one approaches the reception courtyard, providing gentle definition and legibility without undermining the rural setting.

Low-key, permeable path finishes such as loose gravel and hoggin reinforce the informal agricultural character and minimise visual impact. Tree planting comprises a mix of indigenous and selected non-indigenous species arranged in a naturalistic pattern across the site and extending into the wider grasslands to strengthen landscape continuity and support areas requiring rehabilitation. In addition, clumps of infill hedgerow planting are introduced in the wider landscape to rebuild the field structure, enhance ecological connectivity and reinforce the site's rural grain.

Green roofs are proposed as a further layer of softening and integration, reducing visual mass, improving seasonal interest and allowing the buildings to sit more comfortably within the landscape when viewed from surrounding land. Together with the tree and hedgerow planting, the green roofs contribute to the overall rehabilitative ambition of the scheme.

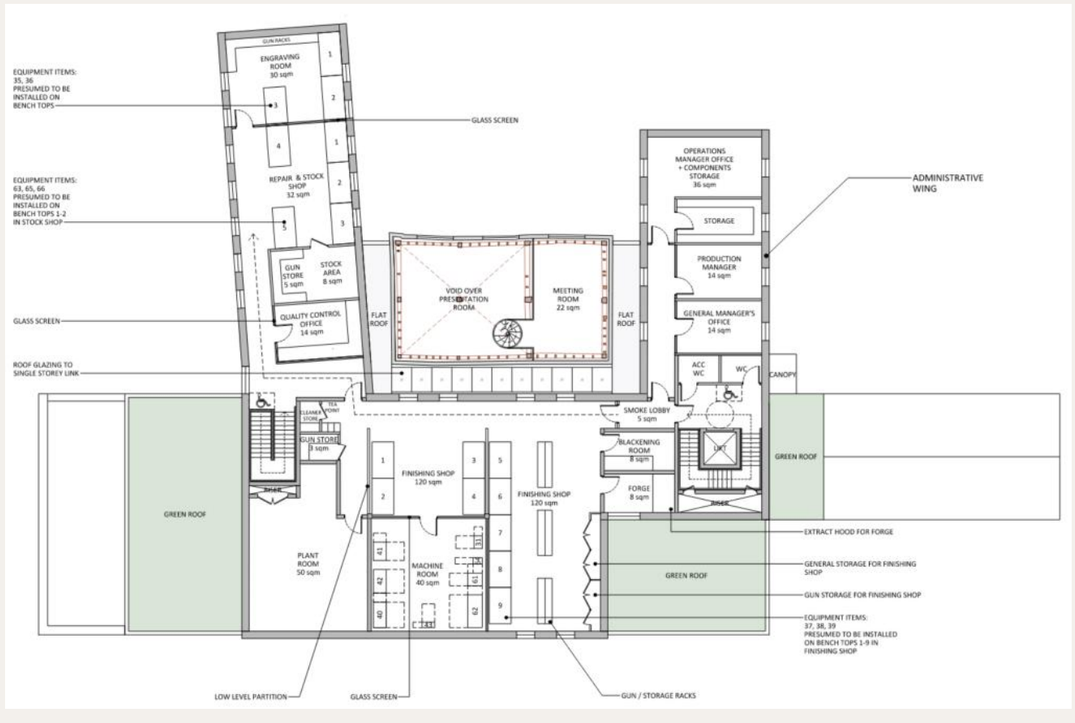

Figure 2 – Proposed First Floor Plan (Source: McDonald Architects)

4.5 Thermal Comfort

Thermal modelling was undertaken to assess the risk of overheating within the proposed development using the TM52 criteria for evaluating thermal comfort:

- Criterion 1 – assess the frequency of overheating by limiting the number of occupied hours during which the operative temperature exceeds the adaptive comfort threshold by more than 1k
- Criterion 2 – considers the severity of overheating by restricting the daily weighted exceedance of comfort temperature, thereby accounting for both the magnitude and duration of overheating events
- Criterion 3 – addresses extreme overheating by limiting the maximum allowable temperature exceedance to ensure occupant safety and wellbeing during peak conditions. Failure of any two of the three criteria indicates an unacceptable risk of overheating

As found in the modelling, all 46 occupied spaces of the building failed to meet at least 2 of the above criteria, indicating a requirement for mechanical cooling. In line with the London Plan guidance, efficient mechanical cooling will only be introduced where necessary to maintain suitable internal conditions. The proposed air-handling units will have heat recovery to ensure that energy efficiency is optimised while maintain indoor air quality.

For more detailed information, refer to the Energy Assessment by Environmental Engineering Partnership submitted as part of the planning application.

4.6 Safety and Security

A Security Needs Assessment was undertaken by CPTED to understand the safety risks to the site and mitigation measures to protect occupants and visitors.

Safety concerns of transporting guns and materials currently exist given the distance between the shooting grounds and artisan facility in central London. Developing the site and placing the facility in close proximity to the grounds significantly reduces these risks and threats. From a site evaluation, the site is expected to be relatively safe, with the primary potential crimes being cyber threats and burglary/theft. While the general risk is low, a variety of recommendations have been made to ensure site safety. These include:

- Security layering and zoning
- Car parking designed with methods from Police Crime Prevention Initiative owned Safer Parking Scheme
- Sufficient exterior lighting on footpaths, access roads, and parking bays
- Strong external and internal door sets
- Security glazing
- Panic button and alarm installed at reception desk
- Locking refuse store
- CCTV and access control
- Intruder alarms

Incorporating these measures allows for a reduced risk of crime and severe damage, and creates an overall safe workspace.

5 Energy and Carbon Strategy

5.1 Key Issues

With an emphasis on the global climate crisis many local authorities, institutions and businesses have declared a 'Climate Emergency'. There is a growing commitment to achieving Zero Carbon and Net Zero Carbon (NZC) buildings by 2030, meaning many new developments need to consider now how far they can go to design in features to enable the lowest carbon performance possible.

As part of the London Plan requirements, new developments must follow the energy hierarchy comprising of:

- Be Lean – reducing energy demand through passive design and fabric efficiency
- Be Clean – supplying energy efficiently
- Be Green – using renewable energy
- Be Seen – energy monitoring

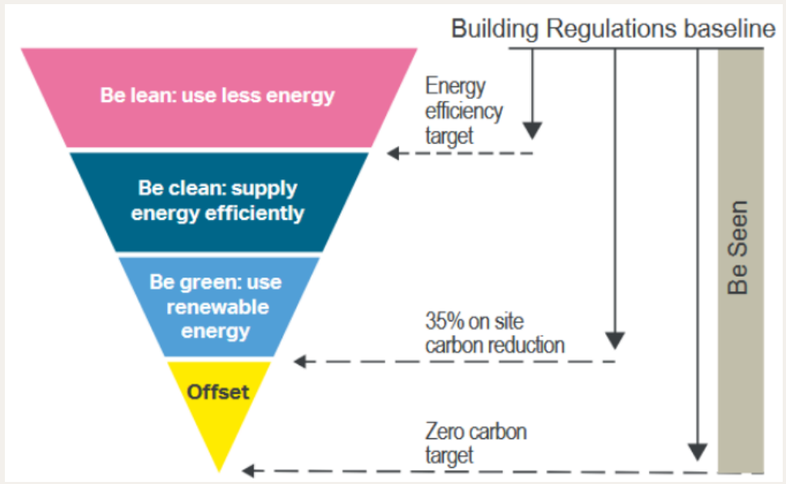

Figure 3 – Be Lean, Be Clean, Be Green Approach (Source: Energy Assessment by Environmental Engineering Partnership)

Through these methods, the site will potentially achieve a total carbon dioxide reduction of up to 37.3%, exceeding the London Plan requirement of 35%.

5.2 Energy Hierarchy

The energy strategy for the Development follows the energy hierarchy of, 'Be Lean', 'Be Clean', 'Be Green', and 'Be Seen', as set out within the London Plan. At each stage of the hierarchy the proposed Site's CO_2 emissions are evaluated and the percentage reduction achieved for the measures applied are reported.

5.2.1 Be Lean

Be Lean incorporates passive design and efficiency measures to reduce the carbon footprint of the building within the building design. Using appropriate building orientation, glazing ratio analysis, enhanced thermal insulation, and improved airtightness, the building achieved a 16.2% reduction in regulated CO_2 emissions relative to Part L.

5.2.2 Be Clean

In line with the Be Clean guidance of supplying energy efficiently, modelling was conducted with heating, cooling and domestic hot water were provided by air source heat pumps with seasonal efficiencies incorporated to optimise the design. The resulting model had a 24.7% reduction in regulated CO_2 emissions relative to Part L, further improving the reduction from the last stage.

5.2.3 Be Green

Be Green focuses on further reductions in carbon emissions through the usage of renewable energy technologies. Photovoltaic (PV) panels are to be installed on site, leading to a potential reduction of 37.3% of regulated CO_2 emissions.

5.2.4 Be Seen

As part of the Be Seen commitment, as-built energy modelling will be carried out, as well as the installation of meters and submeters to track the building's energy consumption against the predicted values. This can be used to identify gaps and inform opportunities for improvement in the actual site.

For more detailed information, refer to the Energy Assessment by Environmental Engineering Partnership submitted as part of the planning application.

5.3 Life Cycle Embodied Carbon

Global climate change is widely considered to be one of the most pressing challenges at a regional, national and international level. Industrialisation has resulted in the use of refined and unrefined fossil fuels as an energy source and since the start of the industrial revolution, use of fossil fuels and their resultant release of carbon dioxide into the atmosphere has caused an exponential increase in the concentration of carbon dioxide and other pollutants that are generally agreed to result in increasing global average surface temperature.

To assess the life cycle embodied carbon for the project, a Life Cycle Assessment (LCA) tool – One Click LCA – was used to calculate the projected Global Warming Potential (GWP) for the Site based on the anticipated material quantities in an inventory analysis. The materials will be represented within the model by using materials with associated Environmental Product Declarations (EPDs). EPDs are produced by manufacturers and identify the carbon emissions of a product. By scheduling the materials proposed for the Site, the overall carbon emissions can be approximated.

The Upfront Carbon emissions (Modules A1–A5) estimated for the Ashby Farm Artisan Factory Relocation are within the limits outlined by the GLA benchmarks, although they do not achieve the aspirational benchmark values. Additionally, the decarbonised and non-decarbonised Life Cycle Embodied Carbon (Modules A–C, excluding B6 & B7) results are within the GLA benchmark limits but exceed the aspirational benchmarks. The decarbonised and non-decarbonised Modules B–C estimated emissions exceed both the GLA benchmark and aspirational limits, reflecting the industrial nature and operational requirements of the building. The GLA does not currently publish specific benchmarks for industrial buildings; therefore, a retail building has been chosen as the closest available typology for benchmarking purposes. As an industrial facility with heavy machinery, specialised functions, and additional requirements for fire safety, indoor air quality, and acoustics, the Ashby Farm Artisan Factory Relocation is expected to have higher embodied carbon emissions than a typical retail building. Overall, the project aligns with GLA Whole Life Carbon guidance

(London Plan 2021). See Table 3 for summary of results. For more detailed information, refer to the Whole Life Carbon Report by Scotch Partners submitted as part of the planning application.

Table 3 – Whole Life Carbon Assessment Results (Stage 2)

Benchmark	**Upfront Carbon** (Modules A1-A5) ($kgCO_2e/m^2$)	**Modules B-C** (excluding B6 & B7) ($kgCO_2e/m^2$)	**Life Cycle Embodied Carbon** (Modules A-C, excluding B6 & B7) ($kgCO_2e/m^2$)
Ashby Farm Non-Decarbonised	624	413	908
Ashby Farm Decarbonised	624	281	776
GLA Baseline (Retail)	<850	<200	<1,050
GLA Aspirational (Retail)	<550	<140	<690

5.4 BREEAM Mat 01 Life Cycle Assessment

Under BREEAM Mat01, a building Life-Cycle Assessment has been undertaken for the Development. This type of assessment requires the design team to consider options for the building's substructure, superstructure and hard landscaping. The purpose of this assessment is to assess the carbon associated with certain design decisions and seek opportunities to reduce embodied carbon at an early stage in the development's design. For the purpose of this LCA, the EPDs utilised within OneClick LCA are BREEAM Impact LCA compliant.

6 Climate Resilience

6.1 Key Issues

In 2019, the UK became the first major economy to pass legislation to commit the UK to a legally binding target of net zero emissions by 2050[1]. Net zero means any emissions would be balanced by schemes to offset an equivalent amount of greenhouse gases from the atmosphere, such as planting trees or using technology like carbon capture and storage.

Additionally, in 2015 the UK signed up to the Paris Agreement along with 178 other countries. The aim was to try to limit the global average temperature rise to 1.5°C above pre-industrial levels. The IPCC Special Report highlighted the huge impacts there would be if average temperature increases exceed 1.5°C. It would affect weather patterns, sea level rise, create food and water shortages, and affect human security and economic growth.

The UK's second Climate Change Risk Assessment (CCRA)[2] was published in January 2022 by the government in accordance with the requirements of the Climate Change Act 2008. The report highlights that climate change is not purely a challenge of the future. The UK has already experienced an average temperature rise of around 1°C over the last century. There is already a trend towards warmer winters and hotter summers, sea levels around the coast are rising by around 3mm a year and there is emerging evidence of changing rainfall patterns. The heavy rainfall and flooding over the winter of 2015/16 - although they cannot yet be attributed to climate change - illustrate the costs and disruption that can be caused by extreme weather.

The CCRA identifies the following key risks for UK where more action is needed:

- Flooding and coastal change risks to communities, businesses and infrastructure;
- Risks to health, well-being and productivity from high temperatures;
- Risks of shortages in the public water supply, and for agriculture, energy generation and industry, with impacts on freshwater ecology;
- Risks to natural capital, including terrestrial, coastal, marine and freshwater ecosystems, soils and biodiversity;
- Risks to domestic and international food production and trade.

This chapter addresses the risks outlined above and demonstrates how the Development is designed to be resilient to the impact of a changing climate.

6.2 Water Efficiency

While there are no specific requirements for water efficiency outlined by the Council, the Development has targeted 2 Wat01 credit under BREEAM in alignment with the water efficiency goals of EM8 and DMEI 10 of the Hillingdon Local Plan. Leak detection and flow control devices are also under discussion with the team as a part of BREEAM Wat03.

6.3 Water Demand

Water efficient sanitaryware is the most cost effective means of achieving water reduction targets and would be considered a priority at the detailed design stage to help achieve compliance with consumption targets.

Reducing demand for water not only reduces the burden on mains supply, it subsequently reduces the volume of waste water requiring disposal. In particular, where foul water is discharged to sewers, it can reduce the burden on the local drainage network and at the treatment facility, thereby providing a double benefit in terms of resource use, including energy, and environmental impact.

6.4 Sustainable Drainage

Sustainable drainage systems (SuDs) are encouraged throughout policy contexts at all levels, and the same can be said for Policy EM7 and DMEI 10 of the Hillingdon Local Plan Part 1 and Part 2. It is important therefore to incorporate a sustainable drainage strategy into the Development. The Flood Risk Assessment by MHA Structural Design incorporated an Outfall Assessment in alignment with the drainage hierarchy to identify the best strategies for drainage on site. This includes:

- Collection for non-potable use
- Discharge into the ground
- Watercourse
- Surface water, sewer or highway drainage
- Combined sewers

The above assessment has been adhered to in designing the most suitable method of water dispersion for the proposed development. For this development, watercourse distribution will be the primary method of sustainable drainage. There is an existing watercourse 100m west of the site, which will be able to serve as an outfall for excess surface water.

The following SuDS systems will be used on site to ensure surface water is properly managed based on the site layout and geology:

- Rainwater harvesting
- Green roofs
- Filter drains
- Porous pavements
- Ponds and wetlands

The SuDS has been designed to withstand the 1 in 100 year event with a +40% allowance for climate change, and is expected to meet greenfield run-off rates with the attenuation measures described in the Flood Risk Assessment.

For more detailed information, refer to the Flood Risk Assessment by MHA Structural Design submitted as part of the planning application.

[1] https://www.gov.uk/government/news/uk-becomes-first-major-economy-to-pass-net-zero-emissions-law

[2] https://www.gov.uk/government/publications/uk-climate-change-risk-assessment-2022

7 Greening & Biodiversity

7.1 Key Issues

Biodiversity enhancement and green space expansion are key priorities for the future of the London Borough of Hillingdon (LBH). LBH consists of a wide variety of important wildlife habitats, including several sites which have national and international protection. A highly diverse ecosystem is an indicator of a healthy and thriving natural environment and it is therefore crucial that this biodiversity is both protected and enhanced.

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 construction process.

This chapter will outline the current ecological value of the site and demonstrate how it will be enhanced in line with the sustainability objective and planning policy.

7.2 Ecological Appraisal

A Preliminary Ecological Appraisal was undertaken by Davidson-Watts Ecology in April 2024 to determine the baseline ecological condition of the Ashby Farms site. The protected areas in close proximity were noted, with statutory sites, non-statutory sites, ancient woodlands, habitats of principle importance, and aquatic habitats being located within 2km. While various invertebrates were recorded within a 2km area, only 4 records in the previous 10 years were noted within 500m of the site. Recommendations to protect sensitive species and habitats during construction and occupation are included in the report, such as conducting work at restricted times of year, conducting species surveys, and mitigating risk of contamination to water sources. Additionally, the ecologist recommends the installation of bird and bat boxes, removal of invasive species, and a more relaxed mowing scheme where feasible.

7.3 Ecological Enhancements

The existing site survey found the ecology to contain a mix of scrubland, grassland, bare ground, and paved surfaces, as well as several scattered urban trees. The new site will include SuDS, green roofs, ornamental planning, and hedgerow planting in addition to enhancement to the existing scrub and grasslands. With this proposed plantings, the Biodiversity Net Gain on site is expected to be 42.61% of habit units and 21.61% of hedgerow units, greatly exceeding the minimum requirements of 10% from the National Planning Policy.

For more detailed information, refer to the Biodiversity Net Gain Report by Davidson-Watts Ecology submitted as part of the planning application.

The site currently meets an urban greening factor score of 0.49 which exceeds the target score of 0.3 for predominately commercial development as outlined in the London Plan. This is due to the incorporation of high-quality landscaping (including trees), green roofs and nature-based sustainable drainage into the landscape design.

For more detailed information, refer to the Urban Greening Factor calculator by Andy Sturgeon Design submitted as part of the planning application.

7.4 Landscape Design Principles

The landscape strategy adopts a restrained, design-led approach that aims to work with the site's existing farm character while providing a subtle sense of arrival. Interventions are intentionally limited to the immediate setting of the buildings, with simple, naturalistic planting that blends into the surrounding grasslands and transitions to more structured planting within the reception courtyard. Low-key permeable materials, dispersed tree planting, rehabilitative infill hedgerows and integrated green roofs collectively soften built form, strengthen landscape continuity and enhance ecological value, ensuring the development is well assimilated into its rural setting.

Overall, the landscape strategy is guided by three principles:

- to keep intervention simple and sensitive;
- to work cohesively with the architecture; and
- to blend and reintegrate the development into its rural setting.

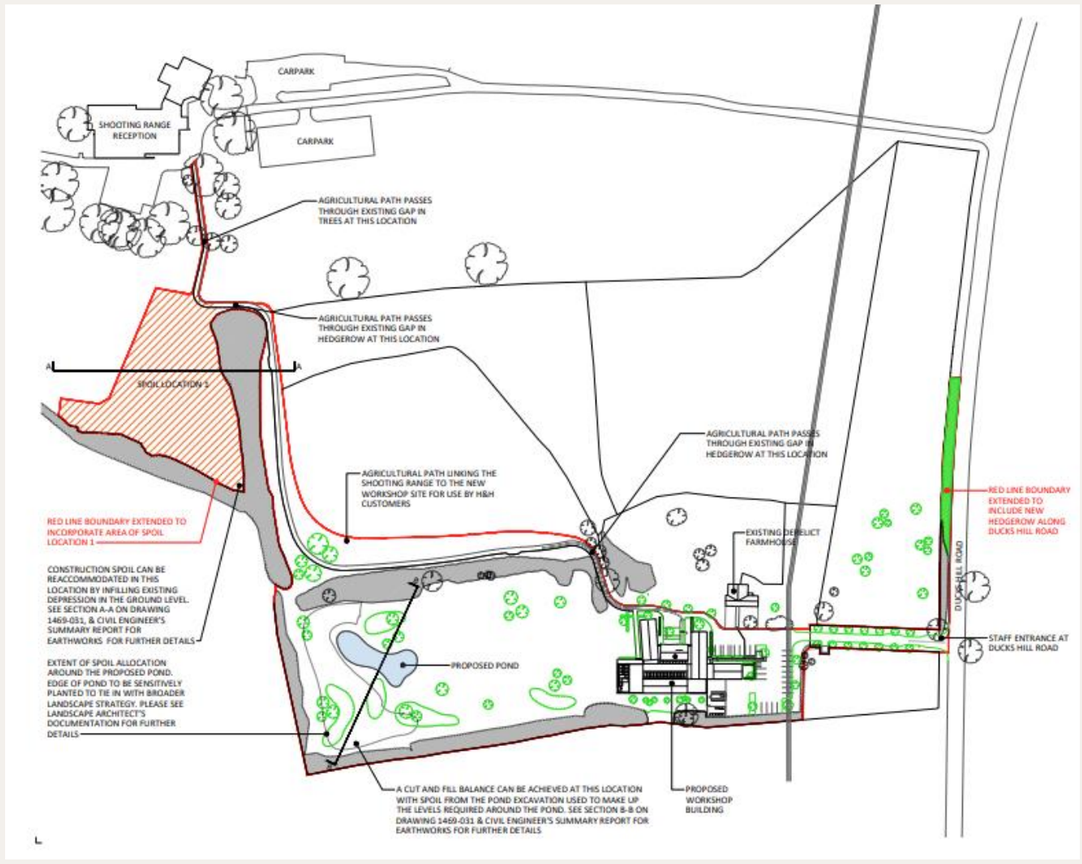

Figure 4 - Proposed Site Layout with Planting View (Source: McDonald Architects)

8 Materials, Waste & Circular Economy

8.1 Key Issues

The Applicant places high importance on waste reduction and this has been taken into account for this development. Waste would be generated by the proposed development at two stages. Firstly, during the demolition of the existing buildings on site and during the construction phase of the scheme. Secondly, occupants and visitors to the completed site would also generate waste as phases become operational.

Reducing materials consumption, minimising waste and transitioning to a circular economy will play a vital role in future proofing our buildings and protecting the environment.

Transitioning to a circular economy, in which the greatest possible value is extracted from resources before they become waste, is both socially and environmentally responsible, and will save money and limit the likelihood of environmental threats.

Building materials have a vast environmental impact in terms of energy and resources in their production, use and disposal. The embodied energy of a building material can be taken as the total primary energy consumed (the amount of carbon released over its life cycle). Therefore, if environmentally responsive building materials are chosen, a significant amount of CO_2 can be saved during construction as well as during operation.

This chapter aims to demonstrate how the development will meet the materials, waste and circular economy objective and in doing so comply with planning policy.

8.2 Circular Economy

The following project specific Circular Economy targets have been established for the site have been coordinated in line with the GLA and Hillingdon's policies, BREEAM requirements, and engagement with the project team. These have also been supported with findings from the Pre-Redevelopment Audit, Pre-Demolition Audit, Outline Site Waste Management Plan, Operational Waste Management Plan and Whole Life Carbon Assessment.

Table 4 – Circular Economy Targets

Focus Area	Key Performance Indicator	London Plan Target	Project Target	How will performance against this metric be secured through design, implementation and monitoring?
Demolition waste materials (non-hazardous)	Diversion from landfill for reuse, recycling or recovery.	95%	95%	The Pre-Demolition Audit carried out by Velocity has been reviewed and the various demolition protocols and waste hierarchy will be followed. If feasible, a strategy of re-use on site will be pursued. The demolition contractor will be required to report the waste consumption against the BREEAM Wst01 requirements.
Excavation waste materials	Minimum of 95% diverted from landfill for beneficial reuse.	95%	95%	An Outline Site Waste Management Plan (OSWMP) was prepared by Velocity. A SWMP documenting measures to reduce construction, demolition and excavation waste will be produced and implemented by the contractor post-planning. The contractor for below grounds work will put procedures in place for segregating and storing excavation waste prior to collection by a licenced waste contractor. Subject to chemical and physical testing for requirements, excavated materials can be used for material infill at suitably licenced facilities. Inert materials will be reported against the targets in line with BREEAM credit Wst01.
Construction waste materials	Minimum of 95% diverted from landfill for reuse, recycling or recovery.	95%	95%	An OSWMP was prepared by Velocity. A SWMP will be prepared for the proposed development by the contractor post-planning. Construction waste will be separated into recyclable waste streams before removal from site for reuse or disposal The Principal Contractor will provide a monthly report to the Client on the progress of the Waste Management Strategy.
Recycled Content	Minimum 20% of the building material elements to be comprised of recycled or reused content.	20%	20%	Following a Circularity Assessment, 18% of the Development's building materials comprise of recycled content. Recycled content requirements will be detailed in designer specifications and Contractor Employer Requirements.
Operational Waste	Minimum 65% Recycling rate by 2030	65%	65%	An OSWMP confirms that the refuse store sizes and capacities have been determined using the London Plan Guidance on waste management. The waste store is large enough for the volume of waste produced, so the ratio of recycling bins can be altered in the future to allow tenants to meet the GLA's target of a 65% municipal recycling rate as performance improves.

For more detailed information, refer to the Circular Economy Statement by Scotch Partners submitted as part of the planning application.

8.3 Pre-Redevelopment Audit

A Pre-Redevelopment Audit (PRA) was undertaken by Velocity in line with the GLA requirements in order to understand whether existing building elements can be retained, furbished or incorporated into the new development to any extent. The audit considers three refurbishment options:

Table 5 – Pre-Redevelopment Audit Scenarios

Scenario 1: Light Refurbishment	Scenario 2: Refurbishment and Extension	Scenario 3: Full Redevelopment
Reuse of existing structures on site in their current form with only minor enhancements for cosmetic purposes and repairs as necessary	Reuse of some elements and structure, with additional refurbishment compared to scenario 1. Some replacement and improvements of existing structures, with a mix of some entirely new elements.	Full demolition of existing structures to facilitate construction of new development

It was found that while scenarios 1 and 2 have short term carbon savings compared to scenario 3, the poor condition and non-compliance of the existing structures make scenario 3 the only viable option for the development. While this option has the highest upfront carbon costs, the long term footprint and sustainability of a full redevelopment ensure that the site will be in alignment with the GLA and Council's circular economy targets.

For more detailed information, refer to the Pre-Redevelopment Audit by Velocity submitted as part of the planning application.

8.4 Pre-Demolition Audit

A Pre-Demolition Audit (PDA) has been undertaken by Velocity in line with BREEAM criteria and GLA requirements. The PDA proposes that all structures in the scope of the audit should be demolished (including all hardstanding). Although this advice was provided in the PDA, one out of the three historic barns onsite is being partially retained as part of the proposed scheme.

The major drivers of demolition material generated on site are:

- 82.3% (by weight) of concrete/binders
- 9% (by weight) of steel
- 3.9% (by weight) wood/timber

The key demolition products (KDPs) identified on-site are inert materials, metals and wood/timber. The three KDPs present represent an estimated 99.3% of all waste, with a landfill diversion rate expected to be 100% with proper recycling protocols. Reuse and recycling guidance is summarised below:

Table 6 – Key Demolition Products

Key materials	Opportunities for recycling/reuse
Inert Materials (slabs, hardstanding and paving)	Inert materials are the predominant KDP generated by the demolition process on the Site. The potential for reclamation of inert materials is relatively low due to their use, composition, and material qualities. It is expected that all the inert materials generated by the demolition process will be recycled to form secondary aggregate either on- or off-site. Inert materials are processed using a crusher which reduces their fraction size. Crushed materials could be used for engineered fill on- or off-site, and it is expected that the material would be processed in accordance with prevailing guidance to ensure the secondary aggregate meets all requirements with regard to material properties. The most efficient method of processing the materials would be to phase the demolition to allow space for on-site crushing, with consideration for the proximity to neighbouring residential properties. If it is not possible to crush the inert materials on site, they would be transferred to an appropriately licensed nearby facility for processing and subsequent use.
Metals (access gates, roofing and facades)	It is recommended that segregated containers for metal generated by the demolition process are used to ensure that all waste metal is captured. Scrap metal is usually stored in skips or roll-on roll-off containers on site before transfer to an appropriately licensed facility. Scrap metal has a value by weight and will generate a rebate based on the quality of the material.
Wood/timber (stable facades, roof rafters/ joists and doors)	It is possible to reclaim wood for reuse within another structure, though for this to be feasible the wood is required to be of high quality to justify the resource and space required to recover them on site. Reclaimed wood materials should be sent to reclaim retailers or re-use community schemes. Wooden products not able to be reclaimed should go to a wood reprocessor for chipping to be used in biomass boilers or other suitable energy schemes.

For more detailed information, refer to the Pre-Demolition Audit by Velocity submitted as part of the planning application.

8.5 Outline Site Waste Management Plan

A pre-construction Outline Site Waste Management Plan (OSWMP) has been developed for the Site by Velocity to forecast how much waste will be produced by the project during demolition, groundworks and construction and identify waste diversion targets. The report estimates that 92 tonnes of waste may arise from the construction phase of the proposed development equating to 6.47 tonnes per 100m2 of floor area.

A recycling, reuse and recovery target of at least 95% of construction waste has been set for the site. This will be achieved through minimisation practices such as:

- Segregating demolition waste on-site to improve recycling and reuse.
- Reusing demolition materials, like hardcore, in construction.
- Encouraging subcontractors to order efficiently to minimize surplus materials.

- Where it is not possible to reuse or recycle construction waste, contractors will be expected to seek disposal routes that divert material from landfill, such as Energy from Waste (EfW), as Refuse Derived Fuel (RDF) or Solid Recovered Fuel (SRF).

For more detailed information, refer to the Outline Site Waste Management Plan by Velocity submitted as part of the planning application.

8.6 Operational Waste Management Strategy

The Operational Waste Management Strategy (OWMS) for the Site has been prepared in accordance with LBH's refuse guidance and the BS 5906:2005 methodology. More specifically, commercial waste recycling rates are calculated based on the metrics provided by BS5906:2005 Waste Management in Buildings – Code of Practice, while facilities have been designed in accordance with LBH requirements stated in their guidance.

A total of 80 tonnes of municipal waste is estimated to be generated by the Proposed Development per annum once operational based on the storage capacity and proposed collection frequencies. It is anticipated that the volume of waste generated will be significantly less than estimated as the calculation for assumes 100% fill levels of all containers on site.

For more detailed information, refer to the Operational Waste Management Strategy by Velocity submitted as part of the planning application.

8.7 Sustainable Procurement of Materials

A Sustainable Procurement Plan has been developed in line with BS ISO 20400:2017 Sustainable Procurement Guidance and the BREEAM New Construction Mat03 requirements. This sets out a framework for the responsible sourcing of materials for the development, and defines requirements for material specifications. The key targets of the SPP include:

- 100% of timber and timber based products will be legal and sustainable as per the UK Governments Timber Procurement Policy
- Suppliers will demonstrate compliance with all requirements on human rights, discrimination and global labour standards
- Procure materials that have been certified to accreditations such as ISO14001 or BES 6001
- Ensure that at least 1 credit is achieved under Mat03 Responsible Sourcing for BREEAM but aim to achieve 2 credits
- Minimising demand for resources (e.g., by reducing purchases, using resource efficient products, considering end of life, etc)
- Minimising any negative impacts of goods, works, or services across their life cycle and through the supply chain (e.g., impacts on health, air quality, etc)
- Ensuring that fair contract prices and terms are applied and respected and that minimum ethical, human rights and employment standards are met
- Providing opportunities for small and medium businesses, voluntary sector organisations
- Procure construction materials locally, where possible
- Procedure to check and verify the effective implementation of this Sustainable Procurement Plan
- Procure materials with Environmental Product Declarations (EPD) or low carbon alternatives to business-as-usual materials and equipment

It will be expected for the contractor to use suppliers who share these values.

For more detailed information, refer to the Sustainable Procurement Plan by Scotch Partners submitted as part of the planning application.

8.8 Material Specification

The material specification and products proposed for the Development have been chosen to meet the principles of sustainable material use as outlined in planning policy and where possible will have the following characteristics:

- Low embodied carbon;
- High recycled content;
- Responsibly sourced and accredited to a recognised standard such as Forestry Stewardship Council (FSC), Environmental Management System (EMS) and BES 6001 certification;
- Refrigerants and insulations to have a low or zero Global Warming Potential (GWP);
- External materials to have low albedo and high conductivity;
- Low or zero Volatile Organic Compounds (VOCs).

The whole site is aspiring to achieve the GLA target of 20% recycled content. Following a GLA Circularity Assessment on One Click, it was found that the recycled content of the building materials equates to approximately 18%. While this is slightly below the target, there is room for uplift through the specification of materials with high recycled content. The final choice of materials, and therefore contents, is decided by the appointed contractor, the target will aim to achieve a minimum of 20% recycled content at post construction. The contractor will be responsible for implementing this goal in practice.

For more detailed information, refer to the Circular Economy Statement by Scotch Partners submitted as part of the planning application.

9 Sustainable Travel

9.1 Key Issues

Transport currently accounts for a quarter of the UK's carbon emissions. Ninety percent 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.

Given the remote nature of the site, it is expected that cars will be the primary source of travel for occupants and visitors, however all efforts will be made to ensure these journeys are as green as possible.

9.2 Transport Statement

The site has direct access from Ducks Hill Road, with the intention of the development being to link the shooting grounds and gun making facilities. This will ultimately reduce car travel, as transportation from the factory (currently in central London) to the grounds for testing can now be done by foot—significantly reducing car trips and distance between the sites.

The existing site currently serves as a horse keeping facility for individual owners, and between welfare, exercise, feeding and other management activities there is an estimated 319 trips generated per week. As the site transitions to the artisan facility, it is expected that the weekly trip generation will drop by 96 trips per week. This is particularly driven by the lack of weekend trips and fewer Friday trips for staff.

Further, the site is planning to expand the site access to allow for two-way traffic which would therefore reduce traffic build up on the Ducks Hill Road carriageway. Vehicles will be able to exit the site without obstructing entering vehicles as two vehicles will be able to fit within the widened entrance/exit point.

The site is expected to reduce traffic intensity and trip generation on the Ashby Farm site and surrounding Hillingdon area.

For more detailed information, refer to the Transport Statement by Clewlow Consulting submitted as part of the planning application.

9.3 Travel Plan

To increase the sustainability of site travel as much as possible, a Travel Plan has been developed with input from Holland & Holland to create measures to be implemented on site. Hard measures, such as those built into the design, and soft measures, such as those that encourage a change in behaviour, were outlined in the Travel Plan and are summarised below:

- Hard measures for the site include provision of accessible and electric vehicle parking spaces on site in alignment with the LBH plan. Measures to encourage car-sharing, such as priority parking spaces, are also being considered for the final design. A screen that relays public transportation information is also being considered on site.
- Soft measures include the provision of a travel pack for employees upon induction, which raises awareness of sustainable travel opportunities and initiatives available for use. Other measures include a staff notice board to show public transportation information and any other travel news or initiatives. Holland & Holland is also considering engaging with local transport operators to identify areas of travel opportunity and incentives for staff.

Given the inherent nature of the site, cars will be the primary form of transportation, but through the use change, access alterations, and travel measures the site will be as sustainable as possible with its location restraints.

For more detailed information, refer to the Travel Plan by Velocity submitted as part of the planning application.

10 Sustainability Certification

10.1 BREEAM Certification

BREEAM (Building Research Establishment's Environmental Assessment Method) was the world's first sustainability rating scheme for the built environment, focusing on sustainability in building design, construction and use. BREEAM helps clients measure and reduce the environmental impacts of their buildings and in doing so create higher value, lower risk assets.

A BREEAM UK Non-Domestic New Construction v6.1 scheme will used to assess the development against to further that the project delivers a sustainable site for the local community and the wider Hillingdon area. The project is targeting a rating of "Excellent" under the industrial building use type.

A preliminary pre-assessment was undertaken by an accredited BREEAM Assessor to identify which credits will be feasible for this scheme and potential credits to investigate as the design develops. This will allow the design to develop in line with sustainable design measures.

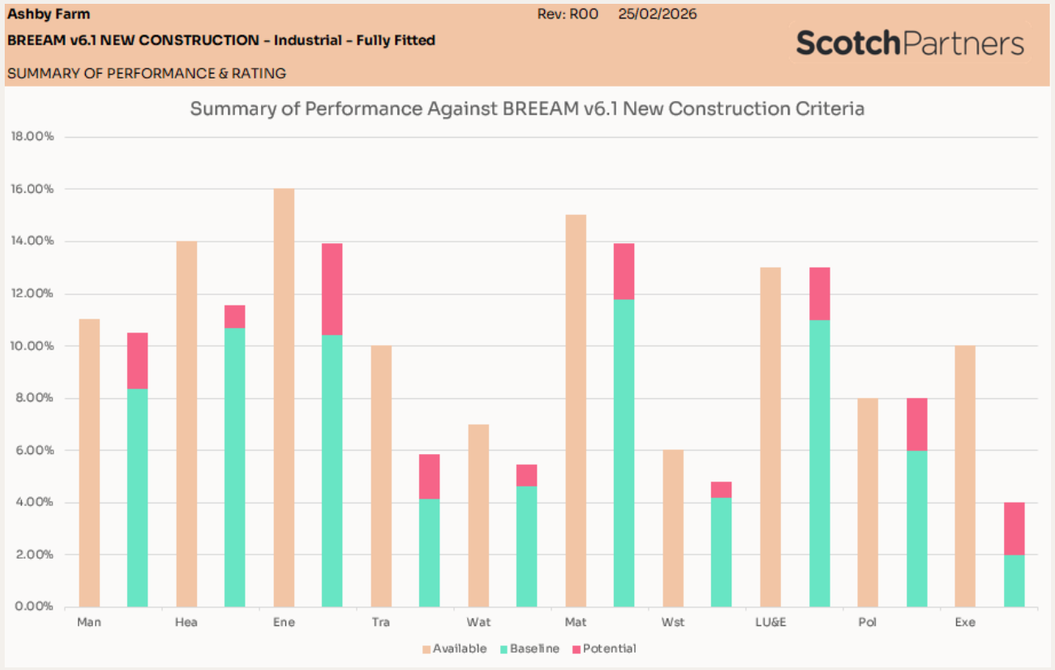

Figure 5 – BREEAM v6.1 Pre-Assessment Summary of Performance

11 Conclusion

A sustainability strategy has been developed for the proposed Holland & Holland Factory Relocation: Ashby Farms in accordance with the sustainability objectives of the relevant regional and national policy; all of which have set out a comprehensive range of policies to underpin response to climate change and resource management.

Key opportunities for implementing sustainability measures appropriate to the commercial development have been identified through workshops and discussions held with the design team and applicant. The key sustainability targets and standards identified for the project are outlined in the table below.

Table 7 - Proposed Design Measures

Key Sustainability Issue	Proposed Design Measures/Approaches
Health and Wellbeing	• Provide good indoor air quality for occupants; • Provide good levels of thermal comfort; • Incorporate access to nature both internally and externally; • Encourage safety and security on site.
Energy and Carbon	• Achieve GLA targets for “Be Lean, Be Clean, Be Green, Be Seen”.
Climate Resilience and Embodied Carbon	• Water efficient sanitaryware fittings; • Leak detection system; • Flow control devices; • Reduce embodied CO_2 emissions through material efficiency and sustainable procurement; • Reduce surface runoff and prevent localised flooding through Sustainable Drainage Systems (SuDS).
Greening and Biodiversity	• Achieve a 42.61% Biodiversity Net Gain (BNG) through new plantings and ecological enhancements; • Achieve a UGF above 0.3 for a commercial development (in line with the London Plan); • Protect existing habitats where identified by an ecologist.
Materials, Waste and Circular Economy	• New materials will be selected with consideration for their environmental impact; • Materials procured from responsible sources; • Meet GLA targets for waste and recycled content • Minimise construction waste where possible
Sustainable Travel	• Car and cycle parking facilities including electrical charging ports; • Relocation provides easy access for testing guns, reduced trips between the two sites, better client access and facilities and staff efficiencies. Reduced trip generation decreases cars on the road; • Hard and soft measures to be implemented to increase site sustainability.
Sustainability Certifications	• Aspire towards BREEAM Excellent rating (New Construction V6.1).

11.1 Health and Wellbeing

The proposals look to provide indoor and outdoor environments that are safe, healthy and comfortable for occupants and visitors, with the overarching aim of blending the new development into the existing rural landscape.

11.2 Energy and Carbon

Overall, the development will achieve a total carbon dioxide reduction of up to 37.3%, exceeding the London Plan requirement of 35%.

11.3 Climate Resilience

Design measures to enable the site and the buildings to adapt to changes in climate have been explored throughout the design.

11.4 Greening and Biodiversity

Biodiversity net gain of 42.61% was achieved along with a UGF of 0.49. Measures to maintain and revive current habitats and ecosystems will be put in place to adhere to The London Plan and London Borough of Hillingdon targets related to biodiversity and urban greening.

11.5 Materials, Waste and Circular Economy

The design has considered ways in which material waste can be minimised at each stage (including during building occupancy) and within each building layer. Sustainable procurement and material specification have also been considered by the design team to ensure a circular approach.

11.6 Sustainable Travel

The proposed development is expected to reduce trip generation from the existing site, and will limit the need for driving between the existing factory and shooting grounds. Electric vehicle parking will be provided, and the widening of the access will reduce traffic on Ducks Hill Road.

11.7 Certifications

The scheme is aspiring to achieve a BREEAM New Construction v6.1 (industrial) ‘Excellent’ Rating.

11.8 Conclusion

Ashby Farms is expected to enhance the local community and contribute towards the Council’s sustainability goals and aspirations, considering: health and wellbeing, energy and carbon, climate resilience, greening and biodiversity, materials, waste, circular economy, sustainable travel and sustainability certifications.

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