



THE GOODSYARD

Sustainability Strategy

September 2019



ballymore.



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1.0 REPORT CONTEXT

1.1 PREFACE

This is a Sustainability Strategy prepared by Hoare Lea LLP.

It is submitted in relation to amendments ("Proposed Amendments") that are being made to the planning applications and applications for listed building consent (the "Applications") for the redevelopment of Bishopsgate Goodsyards. The Applications as amended by the Proposed Amendments form the "Revised Scheme".

On 21st July 2014 Bishopsgate Goodsyards Regeneration Limited (the "Applicant") submitted the Applications to the London Borough of Hackney and the London Borough of Tower Hamlets (the "Boroughs").

On 23rd September 2015 the then Mayor of London directed that he would act as local planning authority for the purposes of determining the Applications.

On 12th April 2016 the then Mayor deferred the determination of the Applications to allow the Applicant to address the issues raised in the Stage III Report.

The Applicant has carefully reviewed the issues raised in the Stage III Report and has liaised closely with the Mayor of London, the Boroughs and other stakeholders and consultees and is now submitting amendments to the Applications to address their feedback.

In broad terms, the Applicant is making the following Proposed Amendments to the Applications:

1.1.1 Plot 1 (Formerly Plots A and B)

The Proposed Amendments maintain the height of the building and the type of uses, as currently proposed and retains the bridging over the East London Line box. The building massing is proposed to be revised to include setbacks at the upper levels as a result of feedback from the GLA and the Boroughs to address the relationship with adjacent buildings.

1.1.2 Plot 2 (Formerly Plots F and G)

The Proposed Amendments replace the two tallest residential buildings with a commercial building with retail at the ground floor. The building would extend up to 29 storeys and would be the tallest building proposed. This building is being submitted with all matters in detail.

The reduction in height of Plot 2 means that no part of the scheme is now visible in views from the South Bastion of Tower Bridge.

1.1.3 Plot 3 (Formerly Plot K)

The Proposed Amendments maintain the height and footprint of the building and the type of uses, as currently proposed. The Proposed Amendments address design comments in respect of the treatment to Phoenix Street and the listed Oriel Wall along Commercial Street.

1.1.4 Plot 4 (Formerly Plot C)

The Proposed Amendments maintain the uses within this building and comprise retail at ground floor with residential above. The height of the building is proposed to be reduced to 19 storeys.

1.1.5 Plot 5 (Formerly Plot D)

The Proposed Amendments maintain the uses within this building and comprise retail at ground floor with residential above. The height of the building is proposed to be reduced to between 6 -13 storeys.

1.1.6 Plot 6 (Formerly Plot E)

The Proposed Amendments change the use of this building to a cultural type use with retail use. The height of the building is proposed to be reduced to up to 5 storeys in order to address comments raised by the GLA in respect of daylight and sunlight impacts along Sclater Street and the massing in the north-east part of the site.

1.1.7 Plots 7, (Formerly Plots H, I, J), 8, 8A, 8B, 10 and 11 (the Pavillion)

The Proposed Amendments maintain the mix of retail uses within the Oriel as well as the potential for Class D1/D2 uses within the Braithwaite arches with public open space above, as currently proposed (Plot 7). Plot 8 introduces hotel and residential uses with access at ground floor level within a 25 storey building to the west of Braithwaite Street, plus 4 storey buildings on top of the existing arches. The Proposed Amendments introduce residential within Plot 10 with retail at ground floor. The Proposed Amendments introduce retail use within a single storey building in Plot 11.

1.1.8 Public Open Space

The overall amount of public space as part of the Proposed Amendments would increase at platform level, including an area of consolidated open space at the eastern end of the platform.

The Proposed Amendments, and the rationale for them, are explained fully in the Planning Statement prepared by DP9 Ltd.

The Proposed Amendments to the Applications have required some changes to be made to the Sustainability Strategy and other documentation originally submitted with the Applications.

Rather than issuing tracked changed documents, the Applicant has issued this revised Sustainability Strategy which replaces in its entirety that submitted previously.

1.2 FOREWORD

1.2.1 Starting with sustainability.

No longer simply ticking boxes, today sustainability is about making real-term impacts. Increasingly, it has become the starting point – and the heart – of ambitious projects. On each and every project, we take an exciting journey together with clients and project teams to help shape a more sustainable world.

It's important to find experts who truly understand the often-complex sustainability standards. It's a complex language that we speak; comfortably interpreting it into simple, clear aims.

1.2.2 A sustainability framework.

Within the built environment, considering five defined factors and their value is key to a connected approach: the people, the building, the social network, the natural environment, and the economic aspects. These form the basis of our sustainability framework which is tailored to the needs of each project.

1.2.3 Stakeholder engagement.

Working with the project team we actively engage with the planning authorities, local community groups and the general public throughout the planning process. We collaborate with the client and project team as well as key stakeholders to create informed innovative strategies. Each strategy responds to the five elements of our framework, and we make sure we articulate it in an accessible and engaging way no matter the complexity.

1.2.4 Ahead of the industry.

Our team is actively shaping the future of sustainable practices. We conduct in-depth research, author industry guidance, build close links with sector-wide organisations, and sit on influential committees. The result is an unrivalled ability to provide informed, strategic advice that stays ahead of industry changes and is pivotal to our successful input to planning.

1.2.5 Purpose of this report

This Sustainability Strategy has been prepared on behalf of Bishopsgate Goodsyrd Regeneration Limited (BGYRL) (hereafter referred to as the 'Applicant') in support of its application for outline planning permission submitted in part with all matters reserved and in part with no matters reserved. Detailed planning application submitted for Plot 2. Listed Building Consent application submitted for Plot 7 - the retail under and adjacent to the Grade II listed areas.

1.3 EXECUTIVE SUMMARY

This report presents the Sustainability Strategy for the Proposed Amendments which has been informed by national, regional and local policies including:

- Building Regulations Part L2A;
- Greater London Authority (GLA) London Plan (2016);
- Supplementary planning guidance (SPG) on Sustainable Design and Construction (2014);
- Planning policies of London Borough of Tower Hamlets (LBTH) and London Borough of Hackney (LBH); and
- Applicant's own sustainability aspirations.

To capture the multi-faceted sustainability benefits and values that the Proposed Amendments potentially brings to the site, local community, surrounding businesses, and future building users, five defined factors; i.e., the people, the building, the social network, the natural environment, and the economic aspects inform our proposed sustainability framework. These are summarised below:

1.3.1 Social Aspect - Key Theme "Placemaking"

An open, accessible and well-connected place that delivers social value to local communities.

The Proposed Amendments will add value to the local community, its activities and economic outputs by taking into account the needs of the local community. Pertinent regulatory and planning policy requirements applicable to the Proposed Amendments as a whole and Plots 2 and 7 in specific have been reviewed; Appendix 2 below sets out how the Proposed Amendments has addressed all policies with regards to sustainability.

The Proposed Amendments adopts a new approach to public spaces, greater emphasis on connectivity and permeability of the site and retains more of the site heritage which helps make this mixed-use development liveable and interactive. Extensive social infrastructure and local services will be provided to help create a community identity.

Initial outreach with regards to the site began in 2011, followed by extensive consultation between 2013-2015, which engaged with over 1,500 local people during the process. This included a wide range of public events, regular newsletters, a steering group made up of local residents and a Community Liaison Group. The consultation recorded the areas of most importance locally, setting community aspirations and tracking where the proposals had and hadn't met these, and why. Consultation involving key stakeholders continued on the updated proposals in Autumn / Winter 2018.

1.3.2 Human Aspect - Key Theme: "People-Centred Design"

Distinctive spaces that enhance health and wellbeing.

The Proposed Amendments will seek to enhance the health and wellbeing of residents, tenants and visitors alike by achieving good levels of internal and external lighting, thermal comfort and air quality. The site will also embrace biophilic design to bridge the gap between people and nature. Opportunities for urban farming will also be maximised to contribute towards urban ecology, healthy diets and also to encourage social interaction. Measures to encourage physical exercise such as the promotion of staircases and provision of cycling facilities will be implemented.

In order to create a healthy development which is also a good place for social interaction the site will seek to incorporate the principles of active design to give occupants opportunities for recreation and physical activity. External lighting will be designed to minimise night time light pollution and provide safe access to the Proposed Amendments.

1.3.3 Natural Aspect - Key Theme: "Enhancing the Environment"

Seamless integration of built and natural environment which promotes resource efficiency.

The Proposed Amendments will explore opportunities to protect and enhance site biodiversity. The existing site's green infrastructure will be reimagined through the provision of a network of green open spaces that run along an axial east west linear route. The development will maximise visual amenity for the occupants whilst contributing to their well-being through re-establishing connections to nature. A suitably qualified ecology expert has been appointed to identify solutions and measures early in the project to influence key planning decisions. The development will be air quality neutral for transport and building emissions as a minimum.

Resource efficiency is a key priority for the site. The Proposed Amendments will consider incorporating reclaimed/recovered rain or grey water system into the design as a water reduction measure. Furthermore, the site will seek to achieve zero waste to landfill for all on-site construction and demolition waste. The recycling and reuse of

materials on site or locally will be maximised. The Main Contractor will be required to implement an Environmental Management System (EMS) as well as a Site Waste Management Plan.

The site will seek to achieve greenfield run-off rates during peak flows plus allowance for climate change.

In support of the Proposed Amendments, a new ecological assessment has been undertaken by a suitably qualified ecologist. This included an extended Phase 1 habitat survey, external and internal bat inspection, bat emergence surveys, black redstart surveys and invertebrate survey. The site will implement the ecological enhancement recommendations set out in the ecologist's report to the extent possible.

The main contractor will be required to source materials in accordance with a sustainable sourcing strategy. Low-impact materials will be prioritised where possible.

1.3.4 Physical Capital - Key Theme: "Mobility and Form"

A low-carbon place which preserves the site's heritage while also embracing innovative solutions.

The site aims to increase the physical value of the area through a design focused on longevity and with mobility in mind. The building heights have been amended and the space planning has been re-thought to respond more effectively to diverse land use needs. Innovative construction methods, materials and processes will be explored to improve efficiency and deliver better building forms.

The Proposed Amendments will be car-free in line with local planning policy with on-site parking limited to delivery vehicle loading bays, as justified through the Transport Assessment. Sustainable modes of transport including walking, cycling and public transport will be encouraged throughout the design including appropriate bicycle network and storage. The site also benefits from excellent public transport connection links reflected in its overall PTAL level of 6b, which indicates the "best" access.

The Energy Strategy is in line with the principles of the Energy Hierarchy, that is "Be Lean", "Be Clean" and "Be Green". For further details on the passive and energy efficiency measures incorporated into the design please refer to the Energy strategy report.

Through the implementation of passive design measures, energy efficiency measures and the incorporation of air source heat pumps (ASHP), a **36%** reduction in the overall CO₂ emissions compared with the Part L 2013 baseline in accordance with GLA policy is anticipated.

The Goodsyard site includes various listed assets and elements with distinctive character including Grade II listed Braithwaite Arches, Grade II listed Oriel gateway and gates as well as a significant number of unlisted arches, and the former Goodsyard boundary wall. Preserving these assets and opening them to the public will enhance their value and help shape a sense of identity for the residents, business and the wider community.

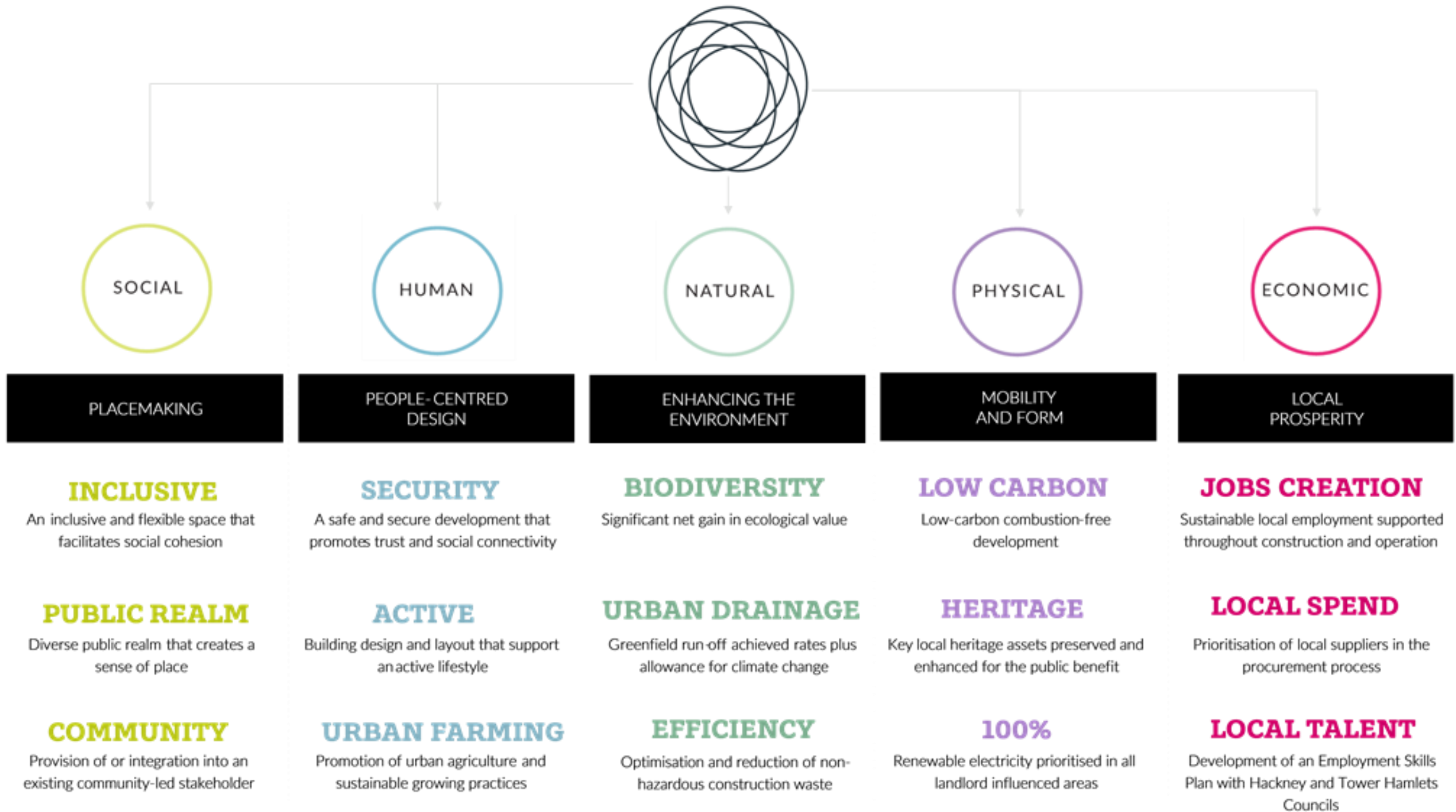
1.3.5 Economic Aspect - Key Theme: "Local Prosperity"

Inclusive growth which creates opportunities for local communities and improves quality of life.

To deliver whole life value from the Proposed Amendments and promote economic sustainability, as well as boost the local economy, the use of local workforce and local suppliers during construction will be encouraged. Consideration will also be given to engaging with small and medium-sized enterprises (SMEs) to stimulate economic activity through Meet the Buyer events or equivalent initiatives.

In addition to employment during construction, the site will also generate long-term employment opportunities associated with a number of the use types it introduces. It will also seek to promote youth employment and talent development through apprenticeships and additional training and upskilling opportunities.

The project is for a commercial-led mixed-use development which will comprise a variety of usage type including retail, office, hotel, residential, non-residential institution, assembly and leisure and sui generis space thus helping to meet a variety of needs across different social groups.



1.4 INTRODUCTION

1.4.1 Description of the 'applications'

It should be noted that references in this Report to 'application' should be taken to read 'applications' reflecting the fact that two identical planning applications were originally submitted – one to the LBH and one to the LBTH with each borough tasked with determining consent for the extent of the Proposed Development that fell within each respective area. Therefore, references to 'planning permission; should be taken to read 'planning permissions' given that two planning permissions will be required for the Proposed Amendments to proceed in its entirety.

This report outlines the proposed approach to sustainability. Please to refer to:

- Appendix 1: for a summary of the proposed sustainability targets for the Goodsyard site
- Appendix 2: for a Sustainability Checklist showing how the scheme responds to the London Plan
- Appendix 3: for an outline BREEAM strategy for the Goodsyard Site
- Appendix 4: for an overview of the sustainability strategy for Plot 2.
- Appendix 5: for a summary BREEAM pre-assessment highlighting a pathway to BREEAM "Excellent" for Plot 2.
- Appendix 6: for an overview of the sustainability strategy for Plot 7
- Appendix 7: for a summary BREEAM pre-assessment highlighting a pathway to BREEAM "Very Good" for Plot 7.
- Appendix 8: for detailed review of relevant planning policy requirements.

1.4.2 Description of Development

The 2015 Amended Scheme proposed the comprehensive mixed-use redevelopment of the site comprising of up to 1,356 residential units (Class C3), up to 65,859 m² Gross Internal Area (GIA), retail (Class A1, A2, A3 and A5) up to 17,499 m² GIA, assorted uses (Class D1, D2, sui generis) and 22,642 m² of new public open space and landscaping.

Following further consultation with the GLA, LBTH and LBH, the Applicant now submits the Proposed Amendments which consist of: a comprehensive redevelopment of the site which will include the provision of up to 139,023 m² Gross External Area (GEA) of commercial floorspace (B1 use), up to 19,547 m² GEA of retail floorspace (A1, A2, A3 and A5 use) the provision of up to 500 residential homes and the provision for up to a 150 room hotel and public realm.

Use type	Gross External Area (GEA) Totals (Maximum Parameter)
Retail (A1, A2, A3 and A5)	19,547 m ²
Office (B1)	139,023 m ²
Hotel (C1)	11,595 m ²
Residential (C3)	48,508 m ²
(Non-resi inst. / Ass / Leisure (D1/D2)	7,074 m ²
Sui Generis	301 m ²
Total (including Plant / Ancillary & Service Yard)	243,856 m²

Table 1: Area schedule

1.4.3 Site Description

The site is approximately 4.4 ha and is centred at Ordnance Survey (OS) National Grid Reference (NGR) TQ 33618 82233. The site has been in a derelict state since a fire in December 1964 and demolition of buildings on-site in 2004. In 2010 the Shoreditch High Street Rail Station opened in the centre of the site, serving the East London Line (London Overground) between Highbury & Islington and several stations south of the River Thames.

The site is bounded by transportation infrastructure in the form of road and rail. The site is bounded by the A1209 Bethnal Green Road and Sclater Street to the north, Brick Lane to the east and the A10 Shoreditch High Street to the west. The Great Eastern Main Line and West Anglia Main Line railways from Liverpool Street station form most of the southern boundary of the site, with the A1202 Commercial Street to the southwest. Wheeler Street / Braithwaite Street run north/south through the centre of the site. Aside from the Shoreditch High Street Rail Station building and associated elevated London Overground rail line, there are currently no other permanent buildings on the site. As of December 2011, there are several temporary 'recycled metal shipping containers' used as a pop-up retail mall known as the 'Boxpark'.

Through the centre of the site in a west/east orientation are multiple games pitches, including eight 'five-a-side' football pitches operated by Powerleague Fives Ltd. The southern section of the site including the listed arches and viaduct is vacant and overgrown with scrub-like vegetation and several low value trees.



Figure 1: Illustrative view over Goodsyrd site, looking West

2.0 POLICY REVIEW

2.1 POLICY CONTEXT AND DRIVERS

2.1.1 Relevant National and Local Policies

A detailed policy review has been undertaken, please see Appendix 8 for details.

As a summary, planning policy documents applicable to the Proposed Amendments have been identified and include the below listed:

- National Planning Policy Framework (2019)
- National Building Regulations (2013)
- Adopted London Plan (2016 amendments)
- City of London Corporation (CC) Local Plan (2015)
- Draft London Plan (2017; not yet adopted)
- London Borough of Tower Hamlets (LBTH) Local Policy including:
 - Core Strategy (2010); and
 - Managing Development Document (2013)
- Tower Hamlets Draft Local Plan 2031 (not yet adopted)
- London Borough of Hackney (LBH) Local Policy including:
 - Core Strategy (2010)
 - Development Management Local Plan (2015)
 - Hackney Local Plan 2033 (not yet adopted)

Key targets from these documents are summarised below:

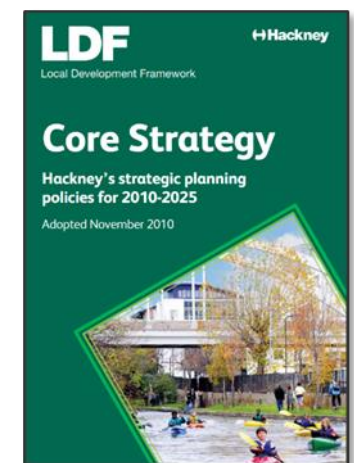
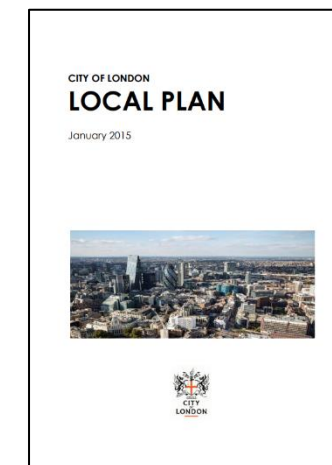
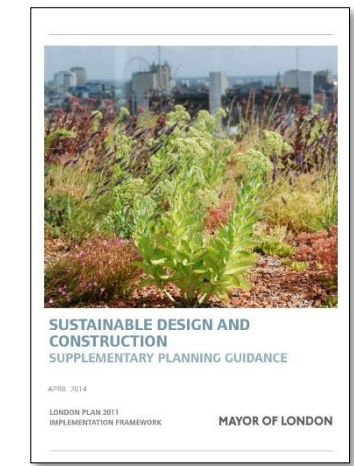
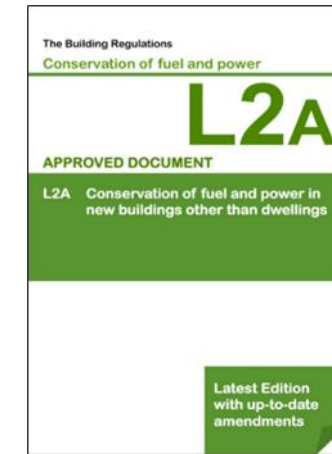
- Site layout and sustainable design principles to reduce energy demand and increase efficiency.
- Target 35% reduction in regulated CO2 beyond the Building Regulations Part L 2013 baseline.
- BREEAM 'Excellent' rating.

2.1.2 Emerging Policy

The draft London Plan was launched for consultation in December 2017. The new London Plan is likely to be adopted in 2019, following the Examination in Public (EIP) currently underway (January – March 2019).

Key policy targets within the draft plan are as follows:

- Major development to be Net Zero Carbon (taken to mean a 100% reduction in regulated CO2 emissions from the relevant Building Regulations baseline).
- Minimum 35% on-site emissions reduction.
- Minimum 10% (commercial)/15% (residential) reduction in regulated CO2 through energy efficiency measures.
- Major development to demonstrate a pathway to zero carbon on-site by 2050.



**3.0 SUSTAINABILITY
STRATEGY REVIEW**

3.1 APPROACH TO SUSTAINABILITY

A holistic, interdisciplinary approach has been adopted to define and communicate the sustainability strategy for the Goodsyard. The proposed framework utilises systems thinking and spans the whole project lifecycle with the project legacy in mind from day one.

The design of the Proposed Amendments is based on sustainable design and construction principles as informed by planning requirements and industry best practice. It is on this basis that we are utilising a sustainability framework based on five defined factors; i.e., the people, the building, the social network, the natural environment, and the economic aspects as illustrated in Figure 3 to capture the multi-faceted sustainability benefits and values that the Proposed Amendments potentially brings to the:

- Application Site,
- Local community,
- Surrounding businesses, and
- Future building users.

3.1.1 The Delivery Framework

Working with all key stakeholders an overall vision for the development has been defined and agreed. Workshops have been held in collaboration with the client and project team to help create a charter including innovative strategies and key objectives to be delivered as a result of the project. As illustrated in Figures 2 and 3 the strategy responds to the five elements of our defined framework; and is intended that the agreed objectives are tracked and monitored throughout project delivery and operational phases.

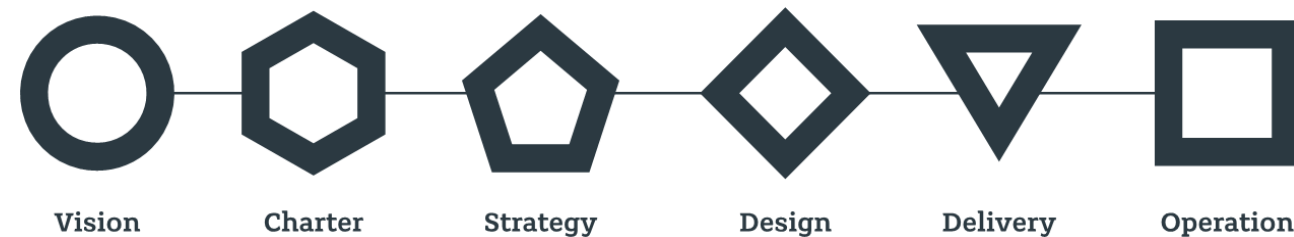


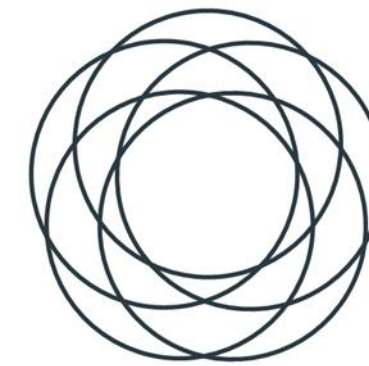
Figure 2: Sustainability Strategy – Delivery Phase (Inception to Completion)

3.1.2 Environmental Assessment

In line with policy, an outline BREEAM strategy for the Proposed Amendments has been prepared which described the site’s overall ambitions – please refer to Appendix 3 for more details. In addition, BREEAM pre-assessments have been produced for the two plots that go into detailed design, i.e. Plots 2 and 7. These have been assessed under the New Construction and Refurbishment and Fit out (RFO) schemes respectively. The pre-assessment for Plot 2 highlights how the proposed office space seeks to achieve a BREEAM ‘Excellent’ rating as a minimum. The pre-assessment for Plot 7 (refurbishment of listed arches) demonstrates an ambition for the proposed retail space to achieve a BREEAM ‘Very Good’ rating as a minimum. Please refer to Appendix 5 and 7 for summary of the pre-assessment reports for the two plots with a schedule of the targeted credits and anticipated performance score/rating.

3.1.3 Health and Wellbeing Assessment

In light of the emerging awareness of the impact of the built environment on occupant health and wellbeing, a number of assessment methodologies such as the WELL Building Standard were considered for the Proposed Amendments. While the decision whether to pursue formal certification will be made on a plot by plot basis, the masterplan sustainability strategy set out in this document incorporates some of the key principles of these standards



A FRAMEWORK FOR SUSTAINABLE DEVELOPMENT

CREATING VALUE



Social Capital	Placemaking By enabling community identity, SOCIAL VALUE is increased where a great place brings people together, and creates a community.
Human Capital	People-centred design With a focus on people, HUMAN VALUE is increased where quality and longevity of life is improved and happiness is increased.
Natural Capital	Enhancing the environment By seeking to achieve positive gain, NATURAL VALUE is increased where existing quality is protected and new complimentary resources are introduced.
Physical Capital	Mobility and form Creating high quality buildings ensures PHYSICAL VALUE is increased where buildings and infrastructure project an image of design for longevity, and allow people to navigate easily on foot/by bicycle.
Economic Capital	Local prosperity By ensuring equity for all, ECONOMIC VALUE is increased where all users of a place feel they have a level of ownership of the asset and buy-in to the outcomes it is seeking to achieve.

Figure 3: Proposed Framework for Sustainability – Creating Value

3.2 PROPOSED SUSTAINABILITY STRATEGY

The five key outcomes which the Goodsyard is seeking to achieve include the following:

- An open, accessible and well-connected place that delivers social value to local communities.
- Distinctive spaces that enhance health and wellbeing.
- Seamless integration of built and natural environment which promotes resource efficiency.
- A low-carbon place which preserves the site's heritage while also embracing innovative solutions.
- Inclusive growth which creates opportunities for local communities and improves quality of life

As illustrated in Figure 4, the goal of the framework is to realise a shift from “sustainability on paper” to “sustainability in practice”; hence, the focus is on creating value from sustainable development; i.e., real terms and tangible benefits across five key defined factors/aspects, namely:

1. Social capital – key theme: “Placemaking”.
2. Human capital – key theme: “People-centred design”.
3. Natural capital – key theme: “Enhancing the environment”.
4. Physical capital – key theme: “Mobility and form”.
5. Economic capital – key theme: “Local prosperity”.

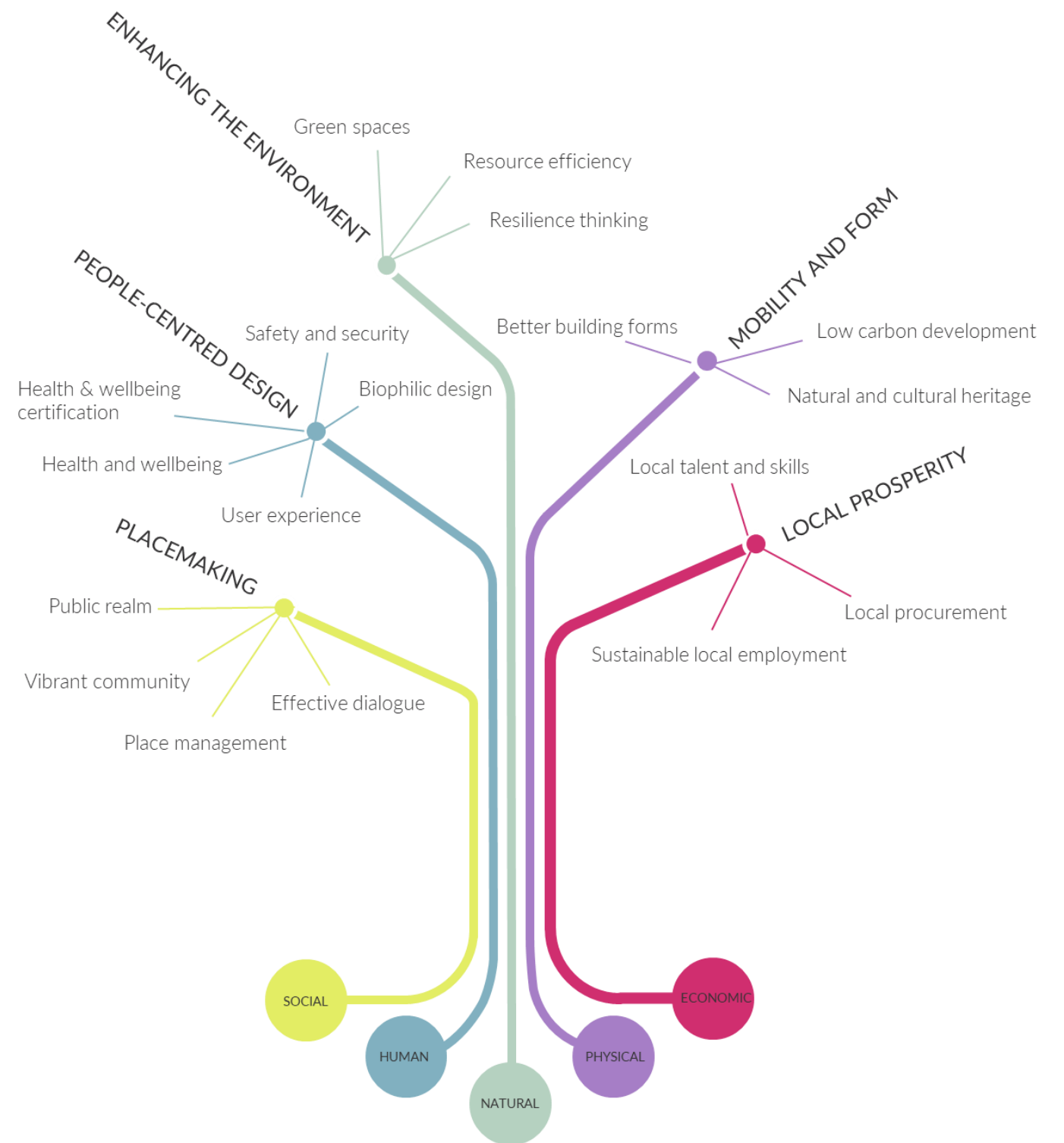
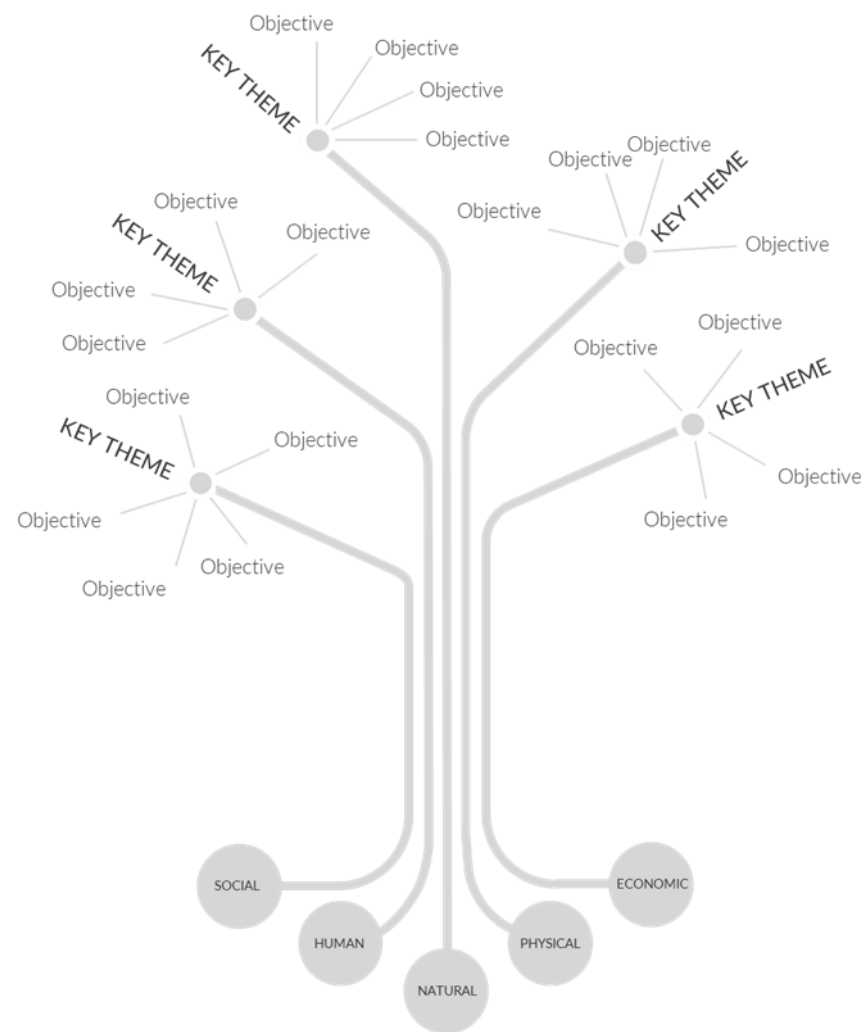
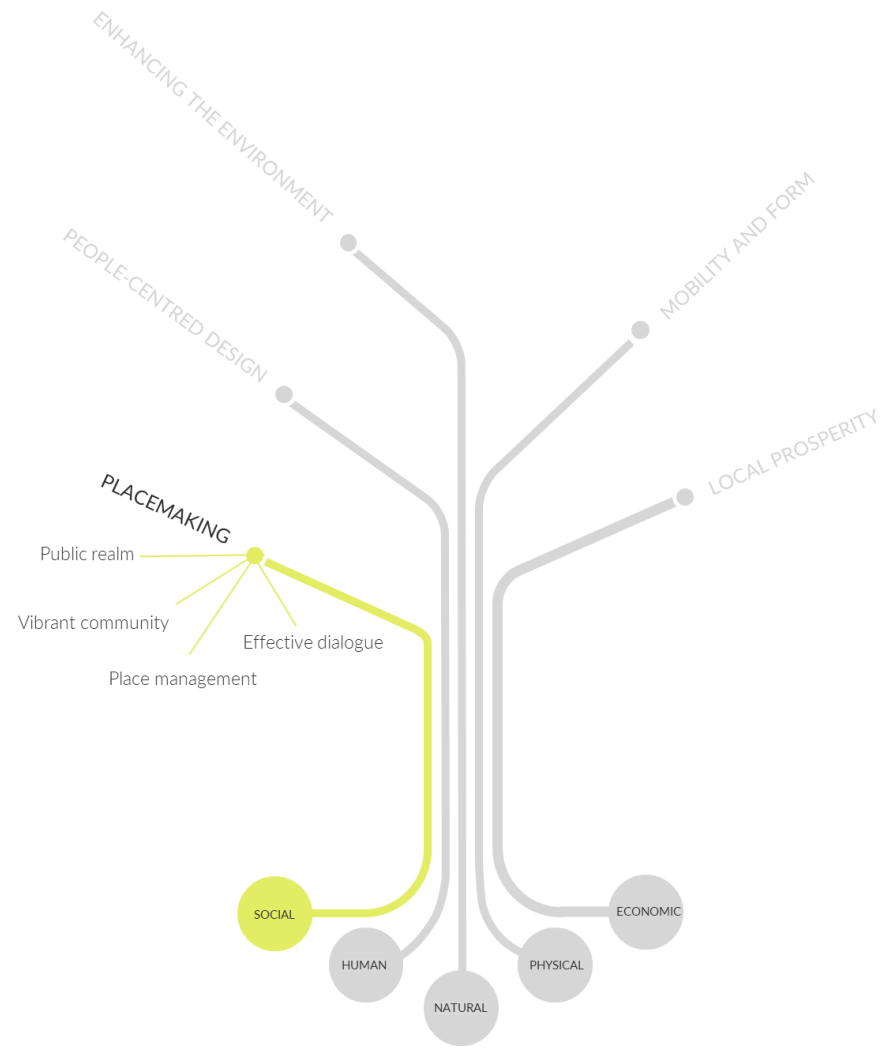


Figure 4: The Sustainability Strategy Illustrated – Key Themes and Focus Areas.

3.2.1 Placemaking



3.2.1.1 Public Realm

The space between buildings has been re-thought to respond more effectively to the needs of the local community and improve the permeability of the site.

The Proposed Amendments adopts a new approach to public spaces, greater emphasis on connectivity and permeability of the site and retains more of the site heritage which helps make this mixed-use development liveable and interactive. It encourages links between people through the provision of a network of public spaces that facilitate the inclusion of and communication between diverse social groups

3.2.1.2 Vibrant Community

The Goodsyrd Site aims to create a strong cohesive community with high quality of life of residents, workers and visitors alike. A range of new public spaces and organised activities open to the community across the estate will promote social interaction and inclusivity. For example, the Hydraulic Accumulator which represents the largest and most significant piece of existing engineering remaining on site within Plot 7 will be restored and opened to the public as a visitor attraction with education and visitor offering to the public. This will help increase the attractiveness of the site for the benefit of users and visitors and create a sense of place.

As new businesses start operating on site, the population will grow and the community will become diverse, vibrant and outward looking.

The cultural heritage and unique character of the site will be preserved and enhanced. The Proposed Amendments sees the opening of this abandoned site to the local residents and the wider community.

3.2.1.3 Place Management

The Goodsyrd site seeks to maximise the social value it generates by creating a great place which bring people together and foster a community identity. The development has at its heart design solutions which help create a liveable, safe and interactive environment. Effective management and maintenance of public spaces is a key element of a resilient, forward looking development.

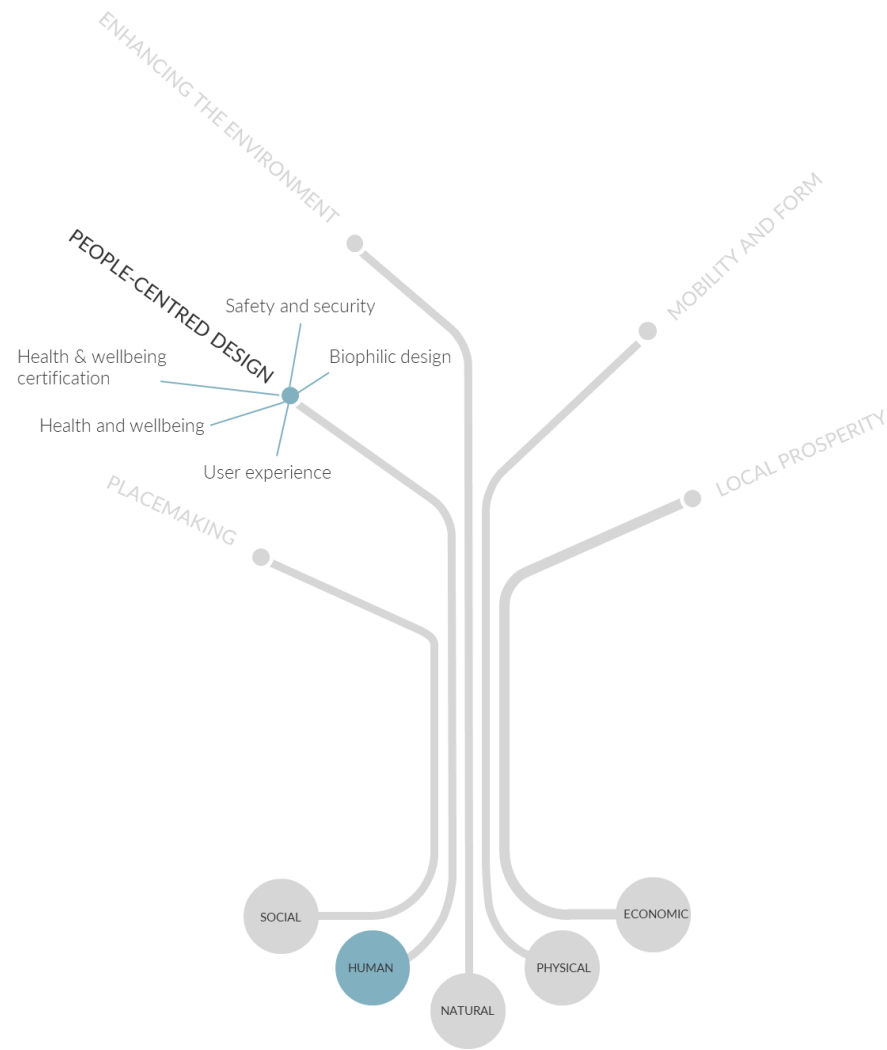
A collaborative effort between an expert estate management team and neighbourhood forums will be promoted to keep public spaces safe and lively to ensure design performance and longevity of the development.

3.2.1.4 Effective Dialogue

Initial outreach with regards to the site began in 2011, followed by extensive consultation between 2013-2015, which engaged with over 1,500 local people during the process. This included a wide range of public events, regular newsletters, a steering group made up of local residents and a Community Liaison Group. The consultation recorded the areas of most importance locally, setting community aspirations and tracking where the proposals had and hadn't met these, and why. Consultation involving key stakeholders continued on the updated proposals in Autumn / Winter 2018.

The Goodsyrd aims to blend seamlessly into the local cityscape and social fabric of the area. It will hold community led design workshops and explore opportunities to create or integrate into an existing community-led stakeholder forum which enables the local community to take an active role in the strategy for the scheme.

3.2.2 People-Centred Design



3.2.2.1 Health and Wellbeing

The Goodsyard site will create distinctive spaces that enhance physical and mental health and wellbeing.

It adopts a building design and layout that support an active lifestyle. The Proposed Amendments will follow the principles for active design formulated by Public Health England and Sport England. Particular focus will be placed on creating active buildings through the provision of opportunities for activity inside and around them. The internal layout will promote the use of stairs by making them prominent and easy to access.

The masterplan design has been informed by a range of considerations with direct impact on the user experience including air quality and noise levels optimisation, circadian lighting as well as incorporation of nature.

3.2.2.2 Biophilic Design

Rapid urbanisation often results in dense, overpopulated built environments dominated by buildings and the hard infrastructure that services them. This leads to disconnect of humans from living elements. There is an overwhelming consensus that access to nature correlates with increase in wellbeing, productivity and creativity.

Therefore, the Goodsyard seeks to maximise the incorporation of nature in the design through environmental elements, lighting and space layout considerations. In addition, the Proposed Amendments will promote urban agriculture and sustainable growing practices creating opportunities for residents to grow food locally in private or communal areas.

3.2.2.3 Safety and Security

Safety and security are essential to a successful and sustainable community. A safe and secure development promotes trust and social connectivity. The Goodsyard will follow best practice crime prevention principles including consideration of layout of roads and footpaths, orientation of dwellings and street lighting to create a well-designed and attractive environment inviting residents, workers and the wider community to live in and enjoy without fear of crime and anti-social behaviour.

3.2.2.4 User Experience

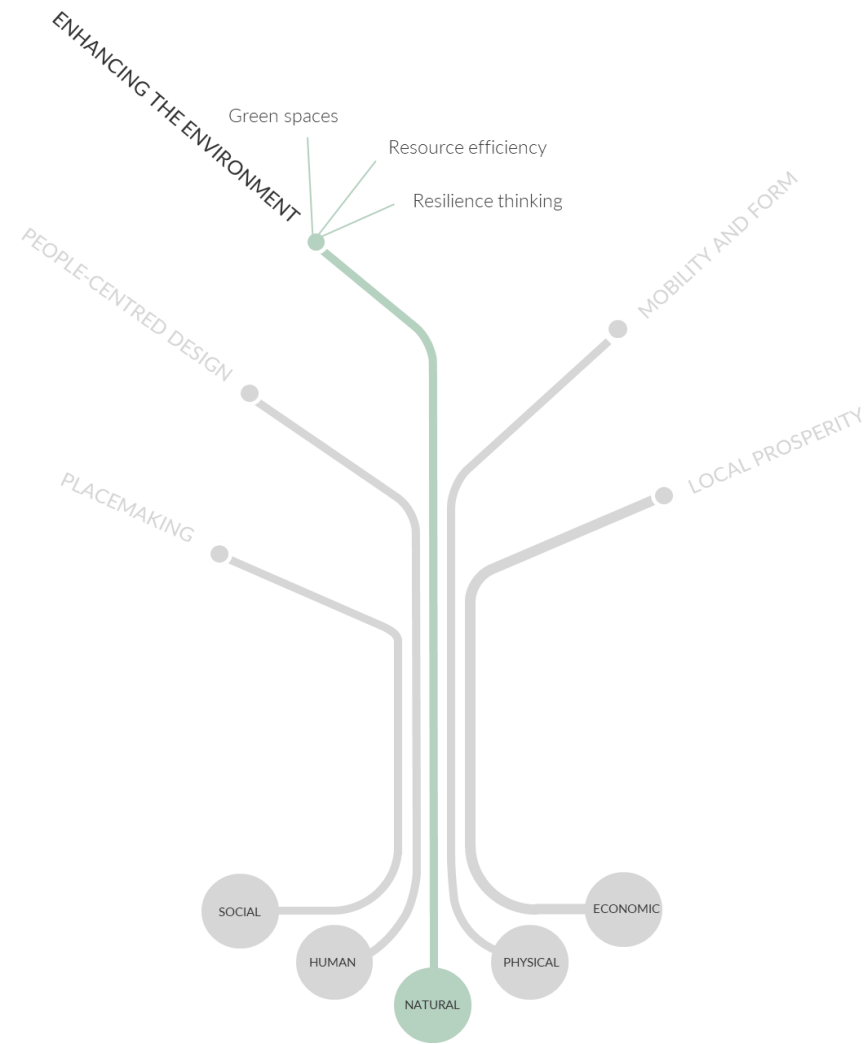
Creating a positive user experience lies at the heart of the Proposed Amendments. To this end, in addition to comprehensive consultation with the local community during design, the Goodsyard will take the necessary measures to deliver fully functional and efficient buildings.

Residential users will be provided with building user guides from day one covering all applicable home information including the type of development delivered. A Soft Landings Plan will also be produced to ensure the smooth transition from construction to occupation. The need and format of post occupancy evaluation will be assessed on a plot by plot basis to gather feedback from residents and create a positive feedback loop.

3.2.2.5 Health and Wellbeing Certification

The masterplan sustainability strategy has been informed by key principles and targets contained within leading health and wellbeing assessment methodologies such as the WELL Building Standard and FitWell Standard. The decision whether to pursue formal certification with health and wellbeing assessment methods will be made on a plot by plot basis.

3.2.3 Enhancing the Environment



climate change. Due to multiple constraints across the site, the most feasible SuDS solutions for the wider site are considered to be:

- Blue / Green roof systems
- Rainwater harvesting
- Geo-cellular attenuation tanks; and
- Permeable paving

Resilience to major potential risks associated with climate change including heatwaves, temperature variation, flooding, extreme wind will be embedded in the design of the Goodsyard. The design will consider measures such as for example the potential reduction of the impermeable areas of the site where possible.

3.2.3.1 Green Spaces

The Proposed Amendments will provide a network of green open spaces that run along an axial east west linear route. Overall, the Proposed Amendments will make a positive contribution to biodiversity through planting a combination of native and wildlife-friendly species. It will also include the provision of bird and bat boxes, in addition to a 29m tall 'eco-chimney', located in the historic boiler room. The Goodsyard will target a net gain of 25% in the quality and quantity of the biodiversity on site.

3.2.3.2 Resource Efficiency

Resource efficiency is one of the cornerstones of the building design for the Goodsyard. Water consumption will be minimised for both commercial and residential properties. The utilisation of rain or grey water harvesting facilities to supplement irrigation demands and flushing as an additional measure to reduce water will be promoted where feasible.

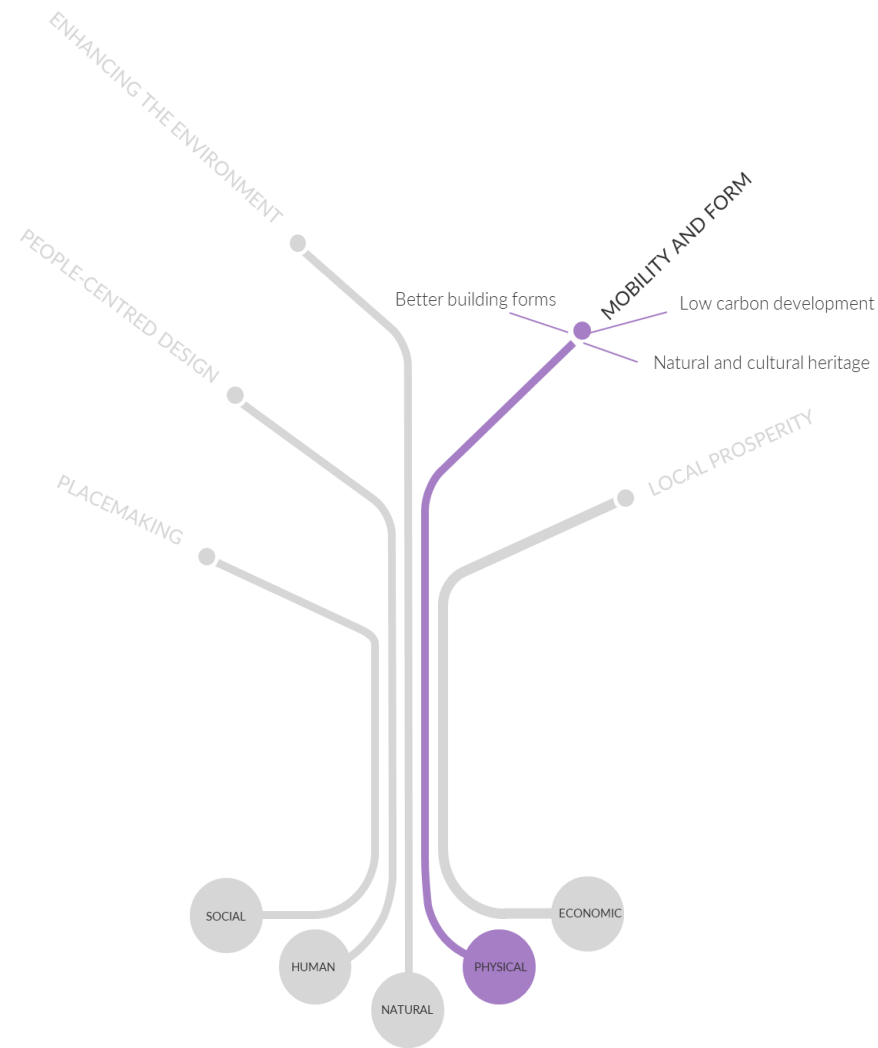
An approach to reduce, reuse and recycle materials in alignment with the principles of circular economy throughout design, construction and operation will be applied, minimising waste generation and the use of virgin materials.

Low-impact and renewable materials such as timber will be prioritised where possible. A strict sustainable sourcing strategy aligned with industry best practice such as the ISO 20400 Sustainable procurement guidance will be implemented to deliver sustainable outcomes through the whole value chain.

3.2.3.3 Resilience Thinking

The Goodsyard site lies in Zone 1 – the zone of lowest fluvial and tidal flood risk. The surface water runoff from the development will be restricted to greenfield run-off rate during peak flows including allowance for

3.2.4 Mobility and Form



3.2.4.1 Low-Carbon Development

An overall 36% reduction is targeted for on-site regulated emissions through passive design and Air Source Heat Pump technologies. The Goodsyard will introduce low-carbon combustion-free buildings supplemented by renewable technologies where possible to aid in transitioning to a carbon neutral development.

The Proposed Development will aim to procure 100% renewable electricity in all landlord influenced areas and will encourage tenants to also source renewable electricity through targeted sustainability engagement with commercial tenants and the application of "green lease" arrangements where deemed appropriate.

The Goodsyard will also seek to reduce the supply chain carbon intensity from materials and manufacturing and will prioritise the use carbon neutral certified products where feasible.

On-site energy consumption data during construction will be collated, reviewed and verified to promote transparency and accountability.

3.2.4.2 Building Better Forms

The blending of housing types responds to the evolving sociological needs of occupants including the desire for connectivity with the community and creation of spaces where people interact intentionally or by chance. The proposed mix-used development offers the opportunity to create vibrant co-living and co-working spaces with all the essential local services, public realm and urban greening to enable the creation of a self-sufficient micro-cluster in the heart of the city.

The Goodsyard will explore alternative construction methods, materials and processes including off-site pre-fabrication. It will also prioritise re-use and recycling.

The site will be an accessible microcosm that connects residents and the wider community. It seeks to create a pedestrian and cycle friendly environment. The Goodsyard will be a car-free development with on-site parking limited to delivery vehicle loading bays as justified through the Transport Assessment. It will also provide the required sustainable transport infrastructure and facilities.

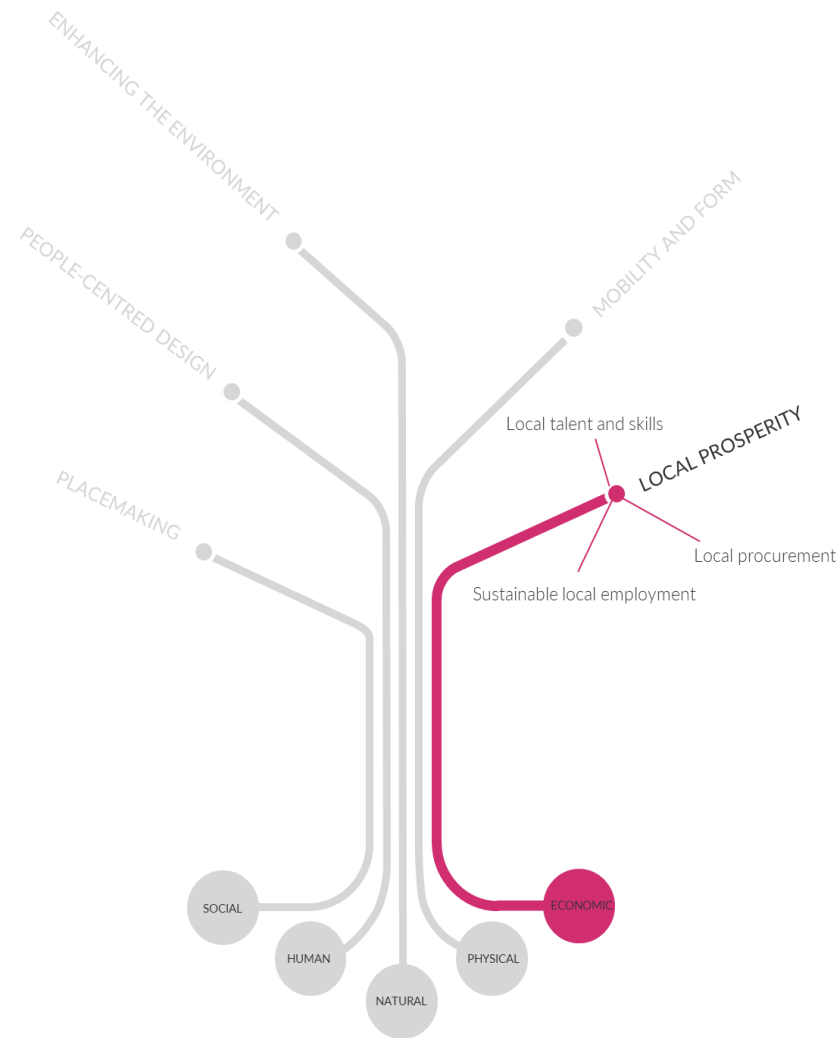
The Goodsyard will comply with the London Plan cycle storage minimum standards providing cycle parking for at least 5% of regular building occupants. It will improve cycle routes within the site to establish connections with existing or proposed cycle routes near the site that join at least one Cycle Superhighway route.

3.2.4.3 Natural and Cultural Heritage

Heritage lies at the heart of the Goodsyard site re-development. The site comprises various listed assets and elements with distinctive character. Preserving these assets and opening them to the public will enhance their value and help shape a sense of identity and continuity in a fast-changing world for future generations.

The Proposed Amendments will retain existing Grade II listed Braithwaite Arches, Grade II listed Oriel gateway and gates as well as a significant number of unlisted arches, and former Goodsyard boundary wall. The project will also see the preservation and refurbishment of the existing Victorian building, Weavers cottages and Chapel on Sclater Street.

3.2.5 Local Prosperity



3.2.5.1 Sustainable Local Employment

It is increasingly acknowledged that a sustainable resilient place needs more than just housing. Forward-thinking places need an economic driver. Developments don't exist in isolation. The number one driver of

economic growth is job creation. The Goodsyard aspires to turn into a social and economic generator attracting new flows of social and economic benefits to the local area which will improve the quality of life of the people who live, work and socialise there.

The Proposed Amendments will support a significant number of employments opportunities during construction and operation associated primarily with the office, hotel and retail space.

The Goodsyard will also support, upskill and/or contract small and medium-sized enterprises (SMEs) for relevant construction/consultation work. Moreover, all main contractor staff working on the project will be paid at or above the Living Wage for London as defined by the Living Wage Foundation.

3.2.5.2 Local Procurement

The Goodsyard will prioritise local suppliers, preferably small and medium sized businesses based within LBH and LBTH as well as the surrounding boroughs when possible. Apart from the obvious benefit of supporting

local business, local procurement offers a wide range of other potential advantages. Local sourcing can offer greater control over the supply chain, higher levels of flexibility and predictability, lower environmental footprint and reduced supply chain cost.

Meet the Buyer events will be organised to explore opportunities for prioritising locally based suppliers at each phase of the project.

3.2.5.3 Local Talent and Skills

The Goodsyard will support a number of initiatives dedicated to training and skills development.

The socio-economic environmental impact assessment (EIA) will identify socio-economic impacts from the Proposed Amendments on key metrics including:

- Employment, skills and enterprise; and
- Crime levels, liveability, reduced isolation

Building on the findings from the Socio-Economic chapter, the joint venture will work with Hackney and Tower Hamlets Councils to identify the most significant socio-economic issues and ambitions for the area and develop a strategy including an Employment Skill Plan to deliver adequate training and create additional opportunities for the local community with particular focus on youth employment and business innovation.

4.0 CONCLUSION

4.1 CONCLUDING REMARKS

This report presents the Sustainability Strategy for the Proposed Amendments which has been informed by national, regional and local policies – that is, Building Regulations Part L2A, the Greater London Authority (GLA) London Plan (2016), the supplementary planning guidance (SPG) on Sustainable Design and Construction (2014), the relevant planning policies of London Borough of Tower Hamlets (LBTH) and London Borough of Hackney (LBH) as well as the Applicant's own sustainability aspirations.

The design of the Proposed Amendments is based on sustainable design and construction principles as informed by planning requirements and industry best practice. It is on this basis that we are utilising a sustainability framework based on five defined factors; i.e., the people, the building, the social network, the natural environment, and the economic aspects – some key performance indices are summarised below:

Social Capital – Placemaking:

- An inclusive and flexible space that facilitates social cohesion
- Diverse public realm that creates a sense of place
- Provision of or integration into an existing community-led stakeholder forum

Human Capital – People-centred design:

- A safe and secure development that promotes trust and social connectivity
- Building design and layout that support an active lifestyle
- Promotion of urban agriculture and sustainable growing practices

Natural Capital – Enhancing the environment:

- Significant net gain in ecological value
- Greenfield run-off achieved rates plus allowance for climate change
- Optimisation and reduction of non-hazardous construction waste

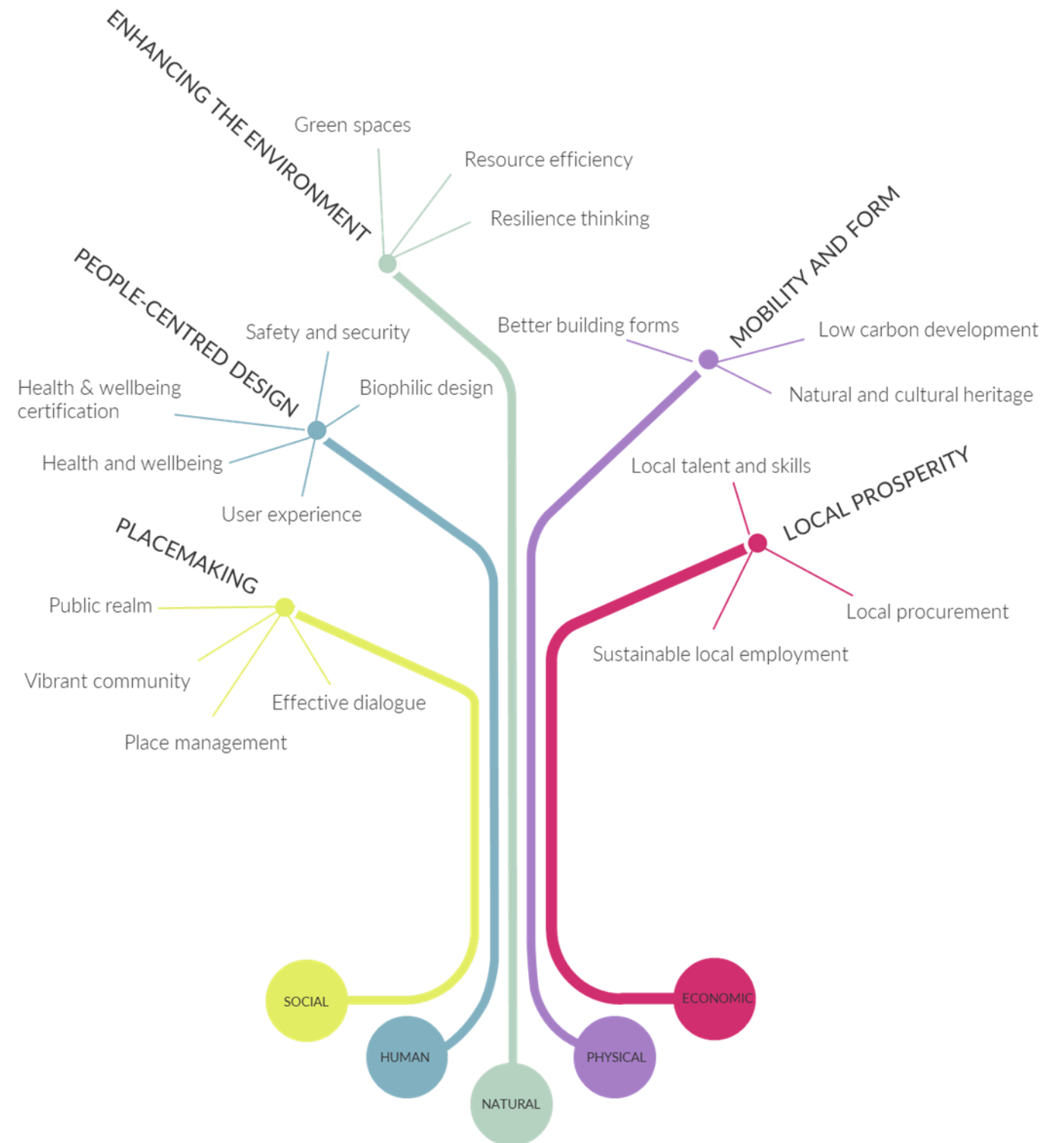
Physical Capital – Mobility and form:

- Low-carbon combustion-free development
- Key local heritage assets preserved and enhanced for the public benefit
- Renewable electricity prioritised in all landlord influenced areas

Economic Capital – Local prosperity:

- Sustainable local employment supported throughout construction and operation
- Prioritisation of local suppliers in the procurement process
- Development of an Employment Skills Plan with Hackney and Tower Hamlets

Please refer to a separate Energy Strategy report for the Proposed Amendments' anticipated performance against the energy/carbon reduction targets.



5.0 APPENDICES

5.1 APPENDIX 1: PROPOSED SUSTAINABILITY TARGETS FOR THE GOODSYARD

5.1.1 Placemaking



PLACEMAKING

An open, accessible and well-connected place that delivers social value to local communities.

PUBLIC REALM

Ensure that a significant amount of total development is designated public space

PEDESTRIAN ACCESSIBILITY

Achieve average value of Pedestrian Route Directness Index of 1.5

SOCIAL VALUE

Measure social impacts from the development using the London Benchmarking Group (LBG) model

ACTIVITIES IN PUBLIC SPACES

Host or permit residents, businesses and organisations to host no-cost entry events at least once per quarter

STREET FURNITURE

Install locally distinctive and durable street furniture appropriate to the character of the local area to encourage social interaction

LOCAL AMENITIES

Ensure access to essential amenities such as post office, pharmacy and bank/ATM within 500m

PARTNERSHIPS

Organise sustainability engagement forums or equivalent with commercial tenants at least once a year

INCLUSIVE DESIGN

Meet at least 4/5 of the principles of inclusive design

AFFORDABLE HOUSING

Provide 35% of all dwellings dedicated to affordable housing

PLACE MANAGEMENT

Define a management plan that promotes ways to keep spaces safe and lively

PUBLIC CONSULTATION

Undertake consultation with LBTH/LBH and potential occupants to understand preferred uses for the public realm

WORKSHOPS

Organise community led design workshops

PUBLIC CONSULTATION

Provide or integrate into an existing community-led stakeholder forum



PEOPLE-CENTRED DESIGN

Distinctive spaces that enhance health and wellbeing.

ACTIVE DESIGN

Achieve 8/10 of the principles for active design.

NOISE

Achieve internal night time noise levels of 30dB in bedrooms + 55dB in external functional spaces

LIGHT POLLUTION

Install 100% high efficiency lighting with limited upward light transmission

CIRCADIAN LIGHTING

Consider melanopic light intensity within workplace lighting strategies

OVERHEATING

Ensure that all habitable spaces are designed in line with CIBSE TM59 guidance

BIOPHILIC DESIGN

Develop a biophilia plan including a description of how the project incorporates nature

HEALTH & SAFETY

Aim for zero health and safety accidents reported during the project

SAFETY & SECURITY

Ensure compliance of public realm with 'Secured by design' guidance and incorporate security specialist recommendations

URBAN FARMING

Create opportunities for people to grow their own food in private or communal areas

BUILDING USER GUIDE

Produce a guide including all applicable home information available to residents from day 1

USER EXPERIENCE

Undertake Post Occupancy Evaluation

SOFT LANDINGS PLAN

Produce a Project Soft Landings Plan and nominate a Soft Landings Champion

AIR QUALITY SENSORS

Install air quality sensors to enable real time monitoring in all office and retail spaces (landlord areas)

INDUSTRY BEST PRACTICE

Pursue alignment with the main principles of the WELL and FitWel Standards



ENHANCING THE ENVIRONMENT

Seamless integration of built and natural environment which promotes resource efficiency.

GREEN SPACE

Provide a network of green open spaces that run along an axial east west linear route

ECOLOGICAL PLAN

Appoint a suitably qualified expert to develop an Ecological Management Plan

BIODIVERSITY NET GAIN

Achieve net gain in ecological value

WATER EFFICIENCY

Limit residential water consumption to ≤ 105 l/p/day and improve the performance of non-residential elements by at least 25% over BREEAM baselines

WATER RECYCLING

Install grey and/or rain water harvesting facilities to supplement irrigation demands

AIR QUALITY NEUTRAL

Ensure that the development does not have adverse impact on local air

WASTE STORAGE

Provide adequate internal facilities for waste recycling and composting

DIVERSION FROM LANDFILL

Achieve 99% on-site demolition and 97% construction waste diversion as a minimum

RESOURCE EFFICIENCY

Generate ≤ 3.2 t per 100 m² GIFA of non-hazardous construction waste

LOW-IMPACT MATERIALS

Source all construction materials in accordance with a sustainable sourcing strategy aligned with ISO 20400

URBAN DRAINAGE

Achieve greenfield run-off rates and aim to reduce the site impermeable area by at least 25%

STRUCTURAL AND FABRIC RESILIENCE

Conduct a climate change adaptation strategy appraisal by the end of RIBA Stage 2

FUTURE-PROOF DEVELOPMENT

Consider IoT enabled combined rainwater harvesting and attenuation tanks

LIFECYCLE ASSESSMENT

Conduct a building life cycle assessment (LCA) and integrate its outcomes in design decision-making

SUSTAINABLE AGGREGATES

Maximise the use of recycled or secondary aggregates

STRUCTURAL AND FABRIC RESILIENCE

Promote the use of renewable materials



MOBILITY AND FORM

A low-carbon place which preserves the site's heritage while also embracing innovative solutions.

LOW CARBON

35% reduction in on-site regulated emissions over gas boiler baseline

LOW ZERO CARBON TECHNOLOGIES

Conduct a feasibility study that identifies the most feasible low zero carbon technologies for the site

RENEWABLE ELECTRICITY

Aim to procure 100% renewable electricity in all landlord influenced areas

ENERGY MONITORING

Collate, review and verify on-site energy consumption data during construction

LOCAL HERITAGE

Preserve and enhance existing historic heritage assets

INNOVATIVE CONSTRUCTION

Explore alternative construction methods, materials and processes, e.g. offsite pre-fabrication

WIRELESS CONNECTIVITY

Aim to achieve 'Wired Score' Gold rating for all non-domestic buildings

LIFETIME HOMES

Incorporate the principles of Lifetime Homes to support healthy, independent living for residents of all ages

BICYCLE NETWORK

Improve cycle routes within the site to establish connections with cycle routes that join Cycle Superhighway route(s)

BICYCLE STORAGE

Comply with the London Plan minimum standards providing cycle parking for at least 5% of regular building occupants

PRIVATE CARS

Deliver a car-free development

SUPPLY CHAIN

Aim to reduce supply chain carbon intensity by 20% and/or use carbon neutral certified products



LOCAL PROSPERITY

Inclusive growth which creates opportunities for local communities and improves quality of life.

JOBS SUPPORTED

Support at least 400 full-time equivalent construction jobs per year

LIVING WAGE

Ensure that all main Contractor Staff are paid at or above the London Living Wage

SMEs

Consider collaboration with and support of relevant small and medium-sized enterprises (SMEs)

LOCAL GROWTH

Research local needs to identify the most suitable socio-economic support measures for the area

LOCAL SPEND

Dedicate 10% of procurement budget to SMEs based within LBH, LBTH and the surrounding boroughs

MEET THE BUYER EVENT

Hold at least one Meet the Buyer event to explore opportunities for prioritising local suppliers in each project phase

ECONOMIC LEGACY

Support over 8700 full-time equivalent employment opportunities during operation

SOCIO-ECONOMIC IMPACT ANALYSIS

Identify impacts on issues such as employment, skills and enterprise and liveability

FAIR OPERATING PRACTICES

Provide anti-bribery, corruption and modern slavery training to all employees in a procurement role

TARGETED NEW EMPLOYMENT

Ensure that at least 12% of the construction workforce is newly created employment, apprentices and trainees

TRAINING AND SKILLS

Develop an Employment Skills and Enterprise Plan with local stakeholders including LBH & LBTH

CARBON OFFSET MECHANISMS

Explore opportunities for partnership with LBH & LBTH to discuss ways to best utilise any carbon offset payments

5.2 APPENDIX 2: SUSTAINABILITY CHECKLIST

The following checklist is written in reference to the applicable Priority and Best Practice standards as outlined in the Mayor of London's supplementary planning guidance on Sustainable Design and Construction (2014), as required by Policy 5.3 of the London Plan (2016). Note priority standards are highlighted in grey.

Table 2: Policy Targets

Policy Targets	Proposed Amendments Response
<p>Optimising the Use of Land Through both their Local Plans and planning decisions, boroughs should aim for 100% of development to be delivered on previously developed land.</p> <p><i>Priority LP Policy Ref: 1.1, 3.3</i></p>	<p><i>Optimising the Use of Land</i> The Site is entirely on a brownfield site and a previously occupied land.</p>
<p>Optimising the Use of Land Developers should optimise the scale and density of their development, considering the local context, to make efficient use of London's limited land.</p> <p><i>Priority LP Policy Ref: 3.4, 4.3, 7.6</i></p>	<p><i>Optimising the Use of Land</i> The Proposed Amendments is a redevelopment of a largely unused and derelict site since the 1960s to meet diverse local needs. The project will see the introduction of a comprehensive office-led mixed-use development to provide:</p> <ol style="list-style-type: none"> 1) Retail, shop and restaurant space across Plots 1-5 and 7-10 2) Office space across Plots 1-3 3) Hotel in Plot 8 4) Residential accommodation consisting of 452 dwellings across Plots 4-5, 8 and 10 5) Non-residential institution space in Plot 5 6) Assembly and leisure space in Plots 3 and 6 7) Sui generis space in Plots 7 and 10.
<p>Basements and Lightwells When planning a basement development, developers should consider the geological and hydrological conditions of the Site and surrounding area, proportionate to the local conditions, the size of the basement and lightwell and the sensitivity of adjoining buildings and uses, including green infrastructure.</p> <p><i>Priority LP Policy Ref: 5.12, 5.13, 7.13, 7.19</i></p>	<p><i>Basements and Lightwells</i> There is one basement level (B1) part of the Proposed Amendments situated on Plots 1, 2 and 7. No residential dwellings have been proposed on this level. The proposed basements (B1) will not have a significant effect on the surrounding area's hydrogeology. The Site is located in an area with a low probability of flooding (Flood Zone 1). The biggest basement proposed as part of Plot 2 is envisaged to have a depth of 6-7m below street level.</p> <p>The proposed basement (B1) sits below the footprint of the buildings on Plots 1 and 2 (largely occupied by a mix of office space, leisure and retail on ground floor). Only plant / ancillary uses are proposed for the B1 level.</p> <p>As for Plot 7, it is proposed that the hydraulic accumulator within arch V36 is restored and opened to the public as a visitor attraction, with a new visitor platform proposed off London Road. This will be supported by a designated education and visitor offering, located in the adjoining spaces at basement level. There are no sensitive adjoining buildings and the new basement does not extend below surrounding green infrastructure.</p>
<p>Basements and Lightwells When planning and constructing a basement development, developers should consider the amenity of neighbours.</p>	<p><i>Basements and Lightwells</i> The proposed basements are not expected to have a significant adverse effect on the surrounding area's geology and hydrogeology. The risk from groundwater flooding to basement levels will be engineered out by designing the</p>

Policy Targets	Proposed Amendments Response
<p><i>Priority LP Policy Ref: 5.3, 5.18, 6.3, 7.14, 7.15</i></p> <p>Local Food Growing To protect existing established food growing spaces.</p> <p><i>Priority LP Policy Ref: 2.18, 3.2, 5.3, 5.10, 5.11, 7.18, 7.22.</i></p>	<p>basements to the appropriate level of waterproofing, such as BS8102's Grades 1 to 2 (Standard for car parking and plant rooms). The Contractor will be expected to achieve a high score against the Considerate Constructors Scheme in accordance with BREEAM. Impact to the amenity of neighbours is expected to be minimised as a direct result.</p> <p><i>Local Food Growing</i> The 'Field' at the eastern end of the platform is considered to be the most appropriate location for local food growing. This will be explored in more detail at the next stage of design.</p>
<p>Local Food Growing To provide space for individual or communal food growing, where possible and appropriate.</p> <p><i>Best Practice LP Policy Ref: 2.18, 3.2, 5.3, 5.10, 5.11, 5.21, 7.18, 7.22.</i></p>	<p><i>Local Food Growing</i> As explained above.</p>
<p>Local Food Growing To take advantage of existing spaces to grow food, including adapting temporary spaces for food growing.</p> <p><i>Best Practice LP Policy Ref: 2.18, 3.2, 5.3, 5.10, 5.11, 5.21, 7.18, 7.22.</i></p>	<p><i>Local Food Growing</i> As explained above.</p>
<p>Site Layout & Building Design Any existing buildings that can be practically refurbished, retrofitted, altered, or extended should be retained and reused.</p> <p><i>Best Practice LP Policy: 5.3, 5.4</i></p>	<p><i>Site Layout & Building Design</i> The site-wide restoration and reuse of the existing historic fabric has been promoted throughout the process of developing an amended Goodsyard masterplan. The Proposed Amendments will retain existing Grade II listed Braithwaite Arches, Grade II listed Oriel gateway and gates as well as a significant number of unlisted arches, and former Goodsyard boundary wall. The project will also see the preservation and refurbishment of the existing Victorian building, Weavers cottages and Chapel on Sclater Street.</p>
<p>Building Design A mix of uses, where suitable should be included to provide a range of services commensurate to the public transport accessibility.</p> <p><i>Best Practice LP Policy Ref: 4.3,</i></p>	<p><i>Site Layout & Building Design</i> The proposed project for the Goodsyard site presents a development that blends commercial, residential and hospitality uses, where these functions will be physically and functionally integrated to ensure adequate mobility and transport connections. It sees the introduction of A, B, C, D class and sui generis floorspace to ensure the scheme provides a range of services to meet the needs of the local community and the wider public.</p>
<p>Site Layout & Building Design The design of the Site and building layout, footprint, scale and height of buildings as well as the location of land uses should consider:</p> <p><i>Priority LP Policy Ref: 2.18, 5.2, 5.3, 5.4, 5.6, 5.7, 5.9, 5.10, 5.11, 5.12, 5.13, 5.16, 5.18, 5.21, 6.1, 6.7, 6.9, 6.10,</i></p>	<p><i>Site Layout & Building Design</i> The Site is the redevelopment of a largely empty plot containing two temporary uses on the site including Powerleague football pitches and Boxpark. It will make use of previously developed land, demonstrated by the architectural plans included in the planning application.</p>

Policy Targets	Proposed Amendments Response
6.11. 6.13, 7.1, 7.6, 7.14, 7.15, 7.18, 7.19, 7.21, 7.22	
Existing Features The possible retention and reuse of existing buildings and structures; The retention of existing green infrastructure, including trees and other ecological features, and potential for its improvement and extension; and Access routes to public transport and other facilities that minimise the use of private transport.	<p><i>Existing Features</i></p> <p>The Proposed Amendments will retain existing Grade II listed Braithwaite Arches, Grade II listed Oriel gateway and gates as well as a significant number of unlisted arches, and former Goodsyrd boundary wall. The project will also see the preservation and refurbishment of the existing Victorian building, Weavers cottages and Chapel on Sclater Street.</p> <p>The existing site's green infrastructure will be reimagined through the provision of a network of green open spaces that run along an axial east west linear route. The development will maximise visual amenity for the occupants whilst contributing to their well-being through re-establishing connections to nature.</p> <p>Due to the high public transport accessibility of the Site, it achieves an overall PTAL level of 6b, which indicates the "best" access to the site by public transport. The Proposed Amendments will cause no change of access to local public transport and no on-site or on-street parking will be provided as part of the Proposed Amendments except parking for disabled users and essential operational or servicing needs as justified through the Transport Assessment.</p> <p>In addition, the site includes the provision of a minimum of 2853 long-stay and 331 short-stay cycle parking spaces throughout the development in safe, secure and convenient locations. Additional visitor cycle parking capacity will be sought within the cycle hubs subject to demand during use. Moreover, there is TfL hire docking station infrastructure on/around the site with plans to increase it.</p> <p>The surrounding area also benefits from several amenities including multiple food outlets, schools and public parks within walking distance. Furthermore, the new development itself will introduce over 18,000 m² of retail and 1,632 m² of assembly and leisure space.</p>
New Design of Development The existing landform; The potential to take advantage of natural systems such as wind, sun and shading; The principles sets out London Plan policies 7.1 and 7.6; The potential for adaption and reuse in the future; Potential for incorporating green infrastructure, including enhancing biodiversity; Potential for incorporating open space, recreation space and child play space; Energy demands and the ability to take advantage of natural systems and low and zero carbon energy sources; Site wide infrastructure; Access to low carbon transport modes; The promotion of low carbon transport modes, including walking and cycling; Potential to address any local air quality, noise disturbance, flooding and land contamination issues; and The potential effect on the micro-climate.	<p><i>New Design of Development</i></p> <p>Regarding LP Policy 7.1, it is considered that the Proposed Amendments will:</p> <ul style="list-style-type: none"> • Enable people to live healthy and active lifestyles due to the incorporation of the principles for active design including network of high quality multifunctional open space, connected walking and cycling routes and internal and external layout which creates "active" buildings. • Allow visitors and residents of all ages and stages of life to enjoy the surroundings by ensuring suitable access provisions. <p>Regarding LP Policy 7.6, it is considered that the Proposed Amendments is of high architectural quality and is of a proportion, composition, scale and orientation that enhances, activates and defines public realm. The Site will comprise details and materials that complement the character of the local cityscape and will incorporate good practice in terms of resource efficiency and climate change adaptation measures.</p> <p>The development will incorporate a significant amount of carefully designed public realm that will transform the existing island plot of land into an attractive, highly connected and safe environment to create a sense of place. It will also provide recreational space to support the occupant wellbeing in the form of positive roofscapes with well managed open spaces for the occupants, through the use of biodiverse and green roofs, The Site will also include a significant park area and private realm gardens.</p>

Policy Targets	Proposed Amendments Response
Energy and CO₂ Emissions The overall carbon dioxide emissions from a development should be minimised through the implementation of the energy hierarchy set out in London Plan Policy 5.2. <i>Priority LP Policy Ref: 5.2, 5.3</i>	<p><i>Energy and CO₂ Emissions</i></p> <p>The Proposed Amendments has been assessed in accordance with the requirements of LP Policy 5.2, and the guidance within the GLA document on preparing energy strategies (March 2016, October 2018). The site-wide target CO₂ emissions reduction applicable to the Proposed Amendments is 35% beyond the requirements of the Building Regulations Part L 2013.</p> <p>A CO₂ emissions reduction of 36% beyond the requirements of the Building Regulations Part L (2013) is targeted through a combination of passive design, energy efficiency measures, and LZC technologies. SAP10 carbon factors have been utilised in the assessment.</p> <p>Please refer to the Energy Strategy for further details.</p>
Energy and CO₂ Emissions Developments should be designed to meet the regulated carbon dioxide standards, in line with London Plan Policy 5.2. <i>Priority LP Policy Ref: 5.2</i>	
Energy and CO₂ Emissions Developments should contribute to ensuring resilient energy infrastructure and a reliable energy supply, including from local low and zero carbon sources. <i>Best Practice LP Policy Ref: 5.1, 5.5, 5.6, 5.7, 5.8, 5.17</i>	<p><i>Energy and CO₂ Emissions</i></p> <p>Passive design and energy efficiency measures will provide the cornerstone to the energy demand and CO₂ emission reduction achieved for the Proposed Amendments.</p> <p>In line with current GLA guidance, carbon emission reductions have been evaluated using the carbon factors set out in the SAP10 guidance.</p> <p>Given the outline nature of the proposals, carbon reductions are based on indicative energy assessments and the Illustrative Masterplan at this stage (except for plots 2 and 7 which are brought forward in detail and for which detailed energy assessments have been undertaken).</p> <p>The feasibility of connecting to any existing district heating networks has been reviewed, but no opportunities have been identified in the vicinity of the site. Future-proofing measures will be implemented to enable connection to any future low carbon district heating network.</p> <p>On-site CHP is not proposed due to limited carbon reduction potential in light of recent grid decarbonisation (i.e. SAP10 carbon factors), and the adverse impact on air quality from flue emissions.</p>
Energy and CO₂ Emissions Developers are encouraged to include innovative low and zero carbon technologies to minimise carbon dioxide emissions within developments and keep up to date with rapidly improving technologies. <i>Best Practice LP Policy Ref: 5.2, 5.1, 7</i>	<p><i>Energy and CO₂ Emissions</i></p> <p>A low zero carbon feasibility study has been carried out by the completion of RIBA Stage 2 by an energy specialist to establish and confirm the specifications the most appropriate recognised local low or zero carbon energy sources for the development.</p> <p>A feasibility assessment of integrating low and zero carbon energy systems has been undertaken. It has been found that Air Source Heat Pumps (ASHP) and Photovoltaic panels (PVs) would be the most suitable options.</p> <p>It is proposed that ASHP technology will be utilised on a plot-by-plot basis to provide space heating and a proportion of domestic hot water. PV provision will be determined on a building by building basis within subsequent reserved matters applications, dependant on available roof space once ASHP plant is accommodated.</p>

Policy Targets	Proposed Amendments Response
<p>Energy Demand Assessment Development applications are to be accompanied by an energy demand assessment</p> <p><i>Priority LP Policy Ref: 5.2</i></p>	<p><i>Energy Demand Assessment</i></p> <p>An energy demand assessment has been carried out for the Proposed Amendments.</p> <p>Opportunities for thermal energy sharing utilising heat-pumps have been investigated for the Proposed Amendments. To determine the scope for the repurposing of heat from cooling (or vice versa), simultaneous heating and cooling demand have been calculated across the masterplan. The simultaneous heating and cooling has been assessed on an hourly basis throughout the year, incorporating changes in demand throughout the day and year, capturing seasonal variation.</p>
<p>Use Less Energy The design of developments should prioritise passive measures.</p> <p><i>Priority LP Policy Ref: 5.2, 5.3, 5.9</i></p>	<p><i>Use Less Energy</i></p> <p>Overall the Proposed Amendments would be anticipated to achieve up to a 2% reduction in annual regulated CO₂ emissions beyond the gas boiler baseline via passive design and energy efficiency measures (utilising SAP10 carbon factors).</p>
<p>Best Practice Policies Developers should aim to achieve Part L 2013 Building Regulations requirements through design and energy efficiency alone, as far as is practical.</p> <p><i>Best Practice LP Policy Ref: 5.2, 5.3</i></p>	
<p>Energy Efficient Supply Developers should assess the potential for their development to:</p> <p>Connect to an existing district heating or cooling network; Expand an existing district heating or cooling network, and connect to it; or Establish a Site wide network, and enable the connection of existing buildings in the vicinity of the development.</p> <p><i>Priority LP Policy Ref: 5.5, 5.6</i></p>	<p><i>Energy Efficient Supply</i></p> <p>The nearest existing heat network, Citigen, is currently operated by E.On which utilises CHP units to deliver heat to various landmarks such as Smithfield Market, Museum of London and Guildhall.</p> <p>Consultation with the operator has confirmed that no plans current exist to extend this network towards the vicinity of the Proposed Amendments. The London Heat Map highlights a potential network "City 2", which is proposed to extend up Bishopsgate, towards the vicinity of the site. This potential network was originally part of the expansion plan of the Citigen network. However, engagement with E.On has confirmed that this expansion of the network is no longer being progressed, and so is not thought to represent a viable connection opportunity at this stage for the project. Potential Tower Hamlets networks to the east of the site are not projected to extend towards the site but this should continue to be monitored.</p> <p>Therefore, no connection opportunities to existing district heating networks in the vicinity of the site have been identified.</p> <p>Opportunities would exist for future connection to any low carbon district heating network (subject to detailed technical, practical and economic feasibility evaluation, beyond the scope of this outline appraisal). CHP is not proposed due to poor carbon reduction and adverse air quality impacts.</p>
<p>Renewable Energy Major developments should incorporate renewable energy technologies to minimise overall carbon dioxide emissions, where feasible.</p> <p><i>Priority LP Policy Ref: 5.7</i></p>	<p><i>Renewable Energy</i></p> <p>The feasibility for inclusion of low and zero carbon technologies has been assessed. It has been found that Air Source Heat Pumps (ASHP) and Photovoltaic panels (PVs) would be the most suitable options.</p> <p>It is proposed that ASHP technology will be utilised on a plot-by-plot basis to provide space heating and a proportion of domestic hot water. PV provision will be determined on a building by building basis within subsequent reserved matters applications, dependant on available roof space once ASHP plant is accommodated.</p>

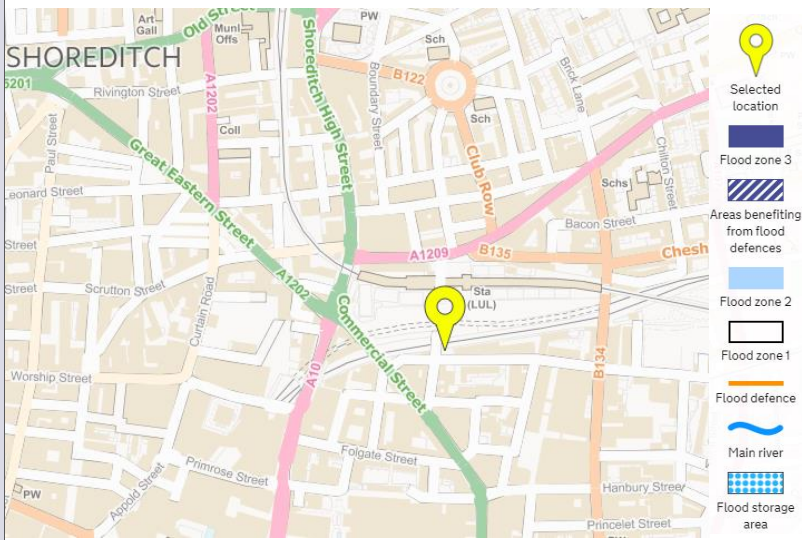
Policy Targets	Proposed Amendments Response
<p>Carbon Offsetting Where developments do not achieve the Mayor's carbon dioxide reduction targets set out in London Plan Policy 5.2, the developer should make a contribution to the local borough's carbon dioxide off-setting fund.</p> <p><i>Priority LP Policy Ref: 5.2, 5.4</i></p>	<p><i>Carbon Offsetting</i></p> <p>The Proposed Amendments is targeting a 36% CO₂ emissions reduction beyond Part L 2013, which is in line with the London Plan.</p> <p>A CO₂ emissions reduction of 36% beyond the requirements of the Building Regulations Part L (2013) is targeted through a combination of passive design, energy efficiency measures, and LZC technologies. SAP10 carbon factors have been utilised in the assessment.</p> <p>Please refer to the Energy Strategy for further details.</p>
<p>Retrofitting Where works to existing developments are proposed developers should retrofit carbon dioxide and water saving measures.</p> <p><i>Priority LP Policy Ref: 5.4, 5.1, 5</i></p>	<p><i>Retrofitting</i></p> <p>While the Proposed Amendments will retain existing listed and unlisted elements including the Braithwaite Arches, Oriol gateway and gates as well as the Victorian building, Weavers cottages and Chapel on Sclater Street, the project is not considered to be a refurbishment or include major works to existing development, and, therefore, this Policy is not applicable in this instance.</p>
<p>Monitoring Energy Use Developers are encouraged to incorporate monitoring equipment, and systems where appropriate to enable occupiers to monitor and reduce their energy use.</p> <p><i>Best Practice LP Policy Ref: 5.2, 5.3</i></p>	<p><i>Monitoring Energy Use</i></p> <p>All major energy consuming systems are expected to be connected to a Building Management System (BMS) that will record energy use and feedback to facilities management. Energy metering of lighting, small power and all central systems will be included. Metering to allow billing of individual dwellings and commercial tenants of the building will be installed.</p>
<p>Monitoring Energy Use Developers are encouraged to incorporate equipment that would enable their schemes to participate in demand side response opportunities.</p> <p><i>Best Practice LP Policy Ref: 5.2, 5.3</i></p>	<p><i>Monitoring Energy Use</i></p> <p>Demand Side response opportunities will be considered during the detailed design stages and in liaison with the future occupants.</p>
<p>Water Efficiency Developers should maximise the opportunities for water saving measures and appliances in all developments, including the reuse and using alternative sources of water.</p> <p><i>Priority LP Policy 5.3, 5.13, 5.15</i></p>	<p><i>Water Efficiency</i></p> <p>The Site will be provided with water efficient fixtures, fittings and appliances, and include measures to encourage efficient water use, such as:</p> <ul style="list-style-type: none"> • Installation of water meters for the main areas with pulsed or other open protocol communication output to enable connection to a utility monitoring and management system • A leak detection system on the mains water supply between the building and the utilities water meter • Processes to reduce unregulated water consumption <p>The soft landscape area will be irrigated using best practice including water towers on the platform level to assist water storage for this purpose. Additional measures to reduce water usage (e.g. utilising rain or grey water storage) will be explored at the next stage of design.</p>
<p>Water Efficiency Developers should design residential schemes to meet a water consumption rate of 105 litres per person per day.</p> <p><i>Priority LP Policy 5.3, 5.1, 5</i></p>	<p><i>Water Efficiency</i></p> <p>The design of the residential component of the Proposed Amendments will meet a water consumption rate of 105 litres / person / day in line with Building Regulations Part G.</p>
<p>Water Efficiency New non-residential developments, including refurbishments, should aim to achieve the maximum number of water credits in a BREEAM assessment or the 'best practice'</p>	<p><i>Water Efficiency</i></p> <p>Water credits have been targeted as part of the BREEAM pre-assessment for Plot 2, which includes:</p>

Policy Targets	Proposed Amendments Response
<p>level of the AECB (Association of Environment Conscious Building) water standards.</p> <p><i>Priority LP Policy 5.3, 5.1, 5</i></p>	<ul style="list-style-type: none"> • Installation of water meters with pulsed or other open protocol communication output to enable connection to a utility monitoring and management system. • A leak detection system on the mains water supply between the building and the utilities water meter. • Processes to reduce unregulated water demand. <p>BREEAM water credits are also an integral component of the holistic BREEAM strategy for the Proposed Amendments which aims to achieve a minimum “Excellent” rating for the commercial element and a “Very Good” rating for all retail spaces as set out in Appendix 3.</p>
<p>Water Efficiency Where a building is to be retained, water efficiency measures should be retrofitted.</p> <p><i>Priority LP Policy 5.3, 5.4, 5.1, 5</i></p>	<p><i>Water Efficiency</i></p> <p>While the Proposed Amendments will retain existing listed and unlisted elements including the Braithwaite Arches, Oriel gateway and gates as well as the Victorian building, Weavers cottages and Chapel on Sclater Street, the project is not considered to be a refurbishment or include major works to existing development, and, therefore, this Policy is not applicable in this instance.</p>
<p>Water Efficiency All developments should be designed to incorporate rainwater harvesting.</p> <p><i>Priority LP Policy 5.3, 5.4, 5.1, 5</i></p>	<p><i>Water Efficiency</i></p> <p>Rainwater storage is among the SuDS solutions proposed for the development. The detailed application of greywater harvesting will be explored at the next stage of design.</p>
<p>Design Phase The design of development should prioritise materials that:</p> <p>Have a low embodied energy, including those that can be re-used intact or recycled; At least three of the key elements of the building envelope (external walls, windows roof, upper floor slabs, internal walls, floor finishes / coverings) are to achieve a rating of A+ to D in the BRE’s The Green Guide of specification; Can be sustainably sourced; At least 50% of timber and timber products should be sourced from accredited Forest Stewardship Council (FSC) or Programme for the Endorsement of forestry Certification (PEFC) source; Are durable to cater for their level of use and exposure; and Will not release toxins into the internal and external environment, including those that deplete stratospheric ozone.</p> <p><i>Priority LP Policy Ref: 5.3, 5.20, 7.6, 7.14</i></p>	<p><i>Design Phase</i></p> <p>The project will aim for 100% of the timber used at the Site to be FSC certified.</p> <p>The Proposed Amendments will seek to utilise insulation materials with an Ozone Depletion Potential (ODP) of zero, and a Global Warming Potential (GWP) of less than five in accordance with BREEAM. This will be assessed in detail at the next design stages.</p> <p>Wherever feasible, selected materials will be in the range of A+ to D as confirmed by the BRE Green Guide to Specification.</p> <p>Where feasible, low volatile organic compound (VOC) materials will be specified for finishes and other materials.</p>
<p>Design Phase The design of developments should maximise the potential to use pre-fabrication elements.</p> <p><i>Best practice LP Policy Ref: 5.3, 7.6</i></p>	<p><i>Design Phase</i></p> <p>During detailed design stages, consideration will be given to the use of elements of pre-fabrication. Where practical and suitable, it is intended that prefabricated materials will be used to improve construction time and reduce on-site waste. This will be assessed in detail at the next design stages.</p>

Policy Targets	Proposed Amendments Response
<p>Construction Phase Developers should maximise the use of existing resources and materials and minimise waste generated during the demolition and construction process through the implementation of the waste hierarchy.</p> <p><i>Priority LP Policy Ref: 5.3, 5.20</i></p>	<p><i>Construction Phase</i></p> <p>The Proposed Amendments will seek to maximise the recycling and reuse of waste materials on site or locally.</p> <p>The main contractor will be required to produce a Site Waste Management Plan prior to commencement of any demolition or construction works on site.</p> <p>One of the aims of the document will be to investigate how recycling of construction, demolition and excavation material can be maximised, and to highlight means to divert specific waste streams from landfill.</p>
<p>Occupation Phase Developers should provide sufficient internal space for the storage of recyclable and compostable materials and waste in their schemes.</p> <p><i>Priority LP Policy Ref: 5.3, 5.17</i></p>	<p><i>Occupation Phase</i></p> <p>A waste strategy will be prepared to provide a high-quality service.</p> <p>A dedicated centralised recyclable waste storage facility will be provided as required under the BREEAM Wst 03 credit requirements. Organic waste will also be segregated and stored separately.</p>
<p>Occupation Phase The design of development should meet borough requirements for the size and location of recycling, composting and refuse storage, and its removal.</p> <p><i>Priority LP Policy Ref: 5.3, 5.17</i></p>	
<p>Nature & Biodiversity There is no net loss in the quality and quantity of biodiversity.</p> <p><i>Priority LP Policy Ref: 5.3, 7.19</i></p>	<p><i>Nature & Biodiversity</i></p> <p>An ecological assessment including a full site survey has been undertaken by a suitably qualified ecologist, to identify ecological features within the Site and the wider potential zone of influence of the Proposed Amendments.</p> <p>The existing habitat is not recognised as being of high value, although there is a local value importance associated with the open mosaic habitat located on site (for LBTH only). During construction there will likely be a negligible effect on habitat damage, although a minor – moderate adverse effect associated with habitat loss is expected. This is expected to turn into a minor beneficial effect as a result of habitat creation.</p> <p>The Site will implement the ecological enhancement recommendations set out in the ecologist's report to ensure that not only there is no net loss in the quality and quantity of biodiversity on site but that there is an overall net gain.</p>
<p>Nature & Biodiversity Developers make a contribution to biodiversity on their development Site.</p> <p><i>Priority LP Policy Ref: 5.3, 7.19</i></p>	<p><i>Nature & Biodiversity</i></p> <p>Overall, the Proposed Amendments will make a positive contribution to biodiversity through planting a combination of native and wildlife-friendly species. It will also include the provision of bird and bat boxes, in addition to a 29m tall ‘eco-chimney’, located in the historic boiler room. It will also include the provision of bird and bat boxes. This will result in a net gain in the quality and quantity of the biodiversity on site.</p> <p>Bats are not present on site so no effects are expected during construction or as a result of habitat loss.</p>
<p>Tackling Increased Temperature and Drought</p>	
<p>Overheating Developers should include measures, in the design of their schemes, in line with the cooling hierarchy set out in London Plan Policy 5.9 to prevent overheating over the scheme’s lifetime.</p>	<p><i>Overheating</i></p> <p>The Proposed Amendments will be designed in accordance with the cooling hierarchy as set out in LP Policy 5.9.</p> <p>The cooling hierarchy principles will be followed as a means of reducing the amount of solar and internal gains, reducing the risk of overheating, and subsequently reducing the demand placed upon active systems.</p>

Policy Targets	Proposed Amendments Response
<i>Priority LP Policy Ref: 5.3, 5.9</i>	Overheating risk assessments utilising dynamic thermal modelling will be undertaken for the residential areas, and included within reserved matters applications. The risk assessments will follow the appropriate CIBSE guidance (TM59) and weather files as specified in GLA guidance, including consideration of the urban heat island effect, future weather, and any acoustic and security constraints which may impact on the likely operation of openable windows.
Heat and Drought Resistant Planting The design of developments should prioritise landscape planting that is drought resistant and has a low water demand for supplementary watering. <i>Best Practice LP Policy Ref: 5.3, 5.15</i>	<i>Heat and Drought Resistant Planting</i> During detailed design stages, consideration will be given to the planting strategy to select heat and drought tolerant and/or resistant species to reduce irrigation demands.
Resilient Foundations Developers should consider any long term potential for extreme weather events to affect a building's foundations and to ensure they are robust. <i>Best Practice LP Policy Ref: 5.3, 7.6</i>	<i>Resilient Foundations</i> The Structural Engineers will consider all applicable geological and hydrological conditions in accordance with relevant design guidance and standards.
Urban Greening Developers should integrate green infrastructure into development schemes, including by creating links with wider green infrastructure network. <i>Priority LP Policy Ref: 2.18, 5.3, 5.10, 5.11</i>	<i>Urban Greening</i> The existing site's green infrastructure will be reimagined through the provision of a network of green open spaces that run along an axial east west linear route. The development will maximise visual amenity for the occupants whilst contributing to their well-being through re-establishing connections to nature. The Goodsyard will create significant new green infrastructure. The strategy for the soft landscape is to deliver a broad range of planting and green spaces across the site that will enhance wildlife, improve local biodiversity and create a compliment to the built environment, both existing and new. The intention is to provide a long-term structure, of predominantly native species planting, and within that to provide for diversity of habitat, character and visual amenity in response to the design and function of the particular area. The variety is designed to provide year-round seasonal interest, spatial structure, visual amenity, biodiversity, play and educational resource.
Urban Greening Major developments in the Central London Activity Area (CAZ) should be designed to contribute to the Mayor's target to increase green cover by 5% in this zone by 2030. <i>Priority LP Policy Ref: 5.10</i>	<i>Urban Greening</i> The soft landscape area will consist of a broad range of planting and green species across the site including the following: <u>Ground Level – The Shoreditch Tapestry</u> <ul style="list-style-type: none"> • 18 street trees (subject to existing services audit) • Vertical greening • 1 retained tree <u>Platform Level – The Platform</u> The design features platform gardens extending over 12,850 m ² , The planting strategy will include: <ul style="list-style-type: none"> • The Woodland Garden - variety of tree and understorey planting with central clearing to create spatial and visual interest as well as ecological diversity. • The Field - creation of large wildflower lawn to provide flexible use open space with good biodiversity value. Additional interest with specimen tree planting. • Over 200 trees <u>Roof Level – Residential Gardens</u>

Policy Targets	Proposed Amendments Response
	<ul style="list-style-type: none"> • Variety of planting to create verdant gardens which are highly visible as extension of the platform level garden planting. • Creation of visual amenity for residents along with horticultural interest and variety of colour, texture, scent and character <u>Roof Level – Office Gardens & Biodiverse Roofs</u> <ul style="list-style-type: none"> • Planting for visual amenity and biodiversity. • Low maintenance design.
Trees Developments should contribute to the Mayor's target to increase tree cover across London by 5% by 2025.	<i>Trees</i> As outlined above, the scheme will incorporate over 220 trees. These will be of various forms including clear stem for open view requirements, standards, multi-stem and other types for character variety to suit design requirements. Sizes will vary from small standards to semi-mature specimens to create a substantial long-term tree structure for The Goodsyard. The indicative species below are listed to provide a general guide for the type of trees that the scheme can be expected to include: <ul style="list-style-type: none"> • Acer griseum • Acer campestre • Alnus glutinosa • Amelanchier lamarckii • Betula spp. • Catalpa bignonioides • Carpinus betulus • Cercis siliquastrum • Fagus sylvatica • Gingko biloba • Jugland regias • Liriodendron tulipifera • Liquidambar styraciflua • Malus domestica • Morus nigra • Parrotia persica • Prunus spp. • Quercus spp. • Sorbus spp. • Tilia spp
Trees Any loss of a tree/s resulting from development should be replaced with an appropriate tree or group of trees for the location, with the aim of providing the same canopy cover as that provided by the original tree/s.	<i>Trees</i> Where possible the Proposed Amendments will avoid the removal of trees. Any tree loss resulting from the development will be compensated accordingly.
Surface Water / Sustainable Drainage Developers should maximise all opportunities to achieve greenfield runoff rates in their developments. <i>Priority LP Policy Ref: 5.12, 5.13</i>	<i>Surface Water / Sustainable Drainage</i> A Flood Risk Assessment and Drainage Assessment Report have been produced. Due to multiple constraints across the site, there are limited opportunities to incorporate a variety of SuDS features. The most feasible SuDS solutions for the wider site are considered to be: Blue / Green roof systems <ul style="list-style-type: none"> • Rainwater harvesting • Geo-cellular attenuation tanks; and • Permeable paving
Surface Water / Sustainable Drainage When designing their schemes developers should follow the drainage hierarchy set out in London Plan Policy 5.13. <i>Priority LP Policy Ref: 5.13</i>	The surface water disposal system will be designed to ensure the drainage hierarchy has been implemented in the most practical and viable approach to

Policy Targets	Proposed Amendments Response
<p>Surface Water / Sustainable Drainage Developers should design Sustainable Drainage Systems (SuDS) into their schemes that incorporate attenuation for surface water runoff as well as habitat, water quality and amenity benefits.</p> <p><i>Priority LP Policy Ref: 5.3, 5.13, 5.14</i></p>	<p>benefit to the site; as per the SuDS Manual 2015. The following drainage hierarchy will therefore be considered when preparing the surface water disposal strategy:</p> <ol style="list-style-type: none"> 1. Store water for later use 2. Use infiltration techniques such as porous surfaces in non-clay area 3. Attenuate rainwater in ponds or open water features for gradual release to a watercourse 4. Attenuate rainwater by storing in tanks or sealed water features for gradual release to a watercourse 5. Discharge rainwater direct to a watercourse 6. Discharge rainwater to a surface water drain 7. Discharge rainwater to a combined sewer.
<p>Flood Resilience Development in areas at risk from any form of flooding should include flood resistance and resilience measures in line with industry best practice.</p> <p><i>Priority LP Policy Ref: 5.3, 5.12, 5.13</i></p>	<p>Flood Resilience</p> <p>The Environment Agency's Flood Map for Planning shows that the site lies in Zone 1 – the zone of lowest fluvial and tidal flood risk (see yellow circle below).</p> <p>A site-specific Flood Risk Assessment (FRA) was undertaken by a qualified specialist. The FRA takes all current and future sources of flooding into consideration. It confirms that the probability of the site flooding from sewers, artificial waterbodies and groundwater sources is considered to be low.</p> <p>The risk from groundwater flooding to basement levels will be engineered out by designing the basements to the appropriate level of waterproofing, such as BS8102's Grades 1 to 2 (Standard for car parking and plant rooms).</p> <p>Based upon the Drain London modelling study, the Proposed Amendments site is not located within a Critical Drainage Area or within a Local Flood Risk Zone, however, based on surface water mapping for the site, which shows possible depths of surface water flooding of 1m within the site boundary, the site is considered to be at moderate risk of surface water flooding.</p> <p>The Proposed Amendments includes 'Less Vulnerable' uses, i.e. office and retail at ground level, with 'More Vulnerable' development, including residential units, above ground floor levels. Flood resilient construction measures will be implemented at the ground floor and basement levels, to reduce the impact of a flood event on the structure of the building in the event of flooding from groundwater, sewer of surface water sources.</p> 

Policy Targets	Proposed Amendments Response
<p>Flood Risk Management Developments incorporate the recommendation of the TE2100 plan for the future tidal flood risk management in the Thames estuary.</p> <p><i>Priority LP Policy Ref: 5.3, 5.12</i></p>	<p>Flood Risk Management</p> <p>The site is located in Flood Zone 1 corresponding to a low annual risk of flooding. The Site will incorporate all relevant recommendations of the TE2100 plan for tidal flood risk management for London and the Thames Estuary.</p>
<p>Flood Risk Management Where development is permitted in a flood risk zone, appropriate residual risk management measures are to be incorporated into the design to ensure resilience and the safety of occupiers.</p> <p><i>Priority LP Policy Ref: 5.3, 5.12</i></p>	<p>Flood Risk Management</p> <p>The Proposed Amendments is located in Flood Zone 1 corresponding to a low annual risk of flooding.</p>
<p>Other Flooding All sources of flooding need to be considered when designing and constructing developments.</p> <p><i>Priority LP Policy Ref: 5.3, 5.12</i></p>	<p>Other Flooding</p> <p>The FRA confirms that all sources of flooding have been considered, which includes:</p> <ul style="list-style-type: none"> • Fluvial sources (river flooding) • Tidal sources (flooding from the sea) • Groundwater sources • Pluvial sources (flooding resulting from overland flows) • Artificial sources, canals, reservoirs <p>In line with the NPPF requirements, the FRA also assessed the risk from increases in surface water discharge (surface water management).</p>
<p>Land Contamination</p>	
<p>Land Contamination Developers should set out how existing land contamination will be addressed prior to the commencement of their development.</p> <p><i>Priority LP Policy Ref: 3.2, 5.3, 5.21</i></p>	<p>Land Contamination</p> <p>The Ground Contamination Risk Assessment and Outline Remediation Strategy conducted by Arup confirms that there is no significant or widespread contamination identified on site. Although concentrations of lead above both residential and commercial screening criteria have been identified on Made Ground, their risk assessment indicated that this does not result in a significant risk of harm to end users.</p> <p>While risk is still present for development workers likely to come into direct contact with ground soil, this potential risk will be mitigated adhering to relevant H&S legislation, and in particular using specific precautions to minimise exposure of construction workers.</p>
<p>Land Contamination Potentially polluting uses are to incorporate suitable mitigation measures.</p> <p><i>Priority LP Policy Ref: 3.2, 5.3, 5.21</i></p>	<p>Land Contamination</p> <p>The Proposed Amendments is not proposing to include uses that would lead to land contamination.</p>

Policy Targets	Proposed Amendments Response
<p>Air Quality Developers are to design their schemes so that they are at least 'air quality neutral'.</p> <p><i>Priority LP Policy Ref: 7.14</i></p>	<p><i>Air Quality</i></p> <p>An Air Quality Neutral Assessment has been conducted by a suitably qualified specialist. This confirms that the Site has incorporated suitable emission limits.</p> <p>As the Revised Scheme will not feature any boilers or centralised combustion processes, with heating provided by air source heat pumps, it is fully compliant with the requirement for air quality neutrality for pollutant emissions associated with buildings (NOx).</p> <p>The Revised Scheme also meets the requirements for air quality neutrality in terms of transport emissions (NOx and PM10). The total transport emissions for the retail base plan were calculated to be 1,131,760 g/annum for NOx and 196,397 g/annum for PM10. The total transport emissions for the office base plan were calculated to be 1,067,977 g/annum for NOx and 185,328 g/annum for PM10. Both are well below the benchmarked emissions.</p> <p>The Revised Scheme actively reduces air pollution through implementation of air source heat pumps instead of combustion processes to provide heating. Overall, this means that the Revised Scheme will be air quality positive.</p>
<p>Air Quality Developments should be designed to minimise the generation of air pollution.</p> <p><i>Priority LP Policy Ref: 5.3, 7.14</i></p>	<p><i>Air Quality</i></p> <p>The Proposed Amendments will retain all existing access routes to public transport. The Site has excellent accessibility and public transport links with a Public Transport Accessibility Level (PTAL) of 6b, which indicates the "best" access.</p> <p>The development achieves the air quality neutral (AQN) benchmarks for transport and building emissions. Moreover, the Revised Scheme is considered to be "air quality positive" as it actively reduces air pollution through implementation of air source heat pumps instead of combustion processes to provide heating.</p> <p>The proposed energy strategy reduces the overall energy demand as far as practically and economically possible, by implementing energy efficiency measures suitable for the development. The remaining energy demand during standard building operation conditions is to be met with grid electricity, an ASHP system and PV panels.</p> <p>During the construction phase, emissions of dust and exhaust gases from construction activities will be effectively controlled through the use of suitable mitigation measures implemented through the Construction Environmental Management Plan and a dedicated Dust Management Plan, which would be agreed with LBTH and LBH prior to the start of construction.</p>
<p>Air Quality Developments should be designed to minimise and mitigate against increased exposure to poor air quality.</p> <p><i>Priority LP Policy Ref: 3.2, 5.3, 7.14</i></p>	<p><i>Air Quality</i></p> <p>The development achieves the air quality neutral (AQN) benchmarks for transport and building emissions. Moreover, the Revised Scheme is considered to be "air quality positive" as it actively reduces air pollution through implementation of air source heat pumps instead of combustion processes to provide heating.</p>
<p>Air Quality Developers should select plant that meets the standards for emissions from combined heat and power and biomass plants set out in Appendix 7.</p> <p><i>Priority LP Policy Ref: 7.14</i></p>	<p><i>Air Quality</i></p> <p>A CHP appraisal has been carried out and this demonstrated that the system does not provide any CO₂ reduction benefit to the Proposed Amendments particularly in light of the updated (SAP 10) carbon emission factors. An ASHP system will be used at the Site, which will be combustion free and there not have any impact on local air quality.</p>

Policy Targets	Proposed Amendments Response
<p>Air Quality Developers and contractors should follow the guidance set out in the emerging The Control of Dust and Emissions during Construction and Demolition SPG when constructing their development.</p> <p><i>Priority LP Policy Ref: 5.3, 7.14</i></p>	<p><i>Air Quality</i></p> <p>During the construction phase, emissions of dust and exhaust gases from construction activities will be effectively controlled through the use of suitable mitigation measures implemented through a Construction Environmental Management Plan and a dedicated Dust Management Plan, which would be agreed with LBTH and LBH prior to the start of construction.</p> <p>The main contractor shall register under the Considerate Constructors Scheme and achieve compliance beyond best practice.</p>
<p>Noise Areas identified as having positive sound features or as being tranquil should be protected from noise.</p> <p><i>Priority LP Policy Ref: 3.2, 7.15</i></p>	<p><i>Noise</i></p> <p>A baseline noise and vibration survey reviewing the potential impacts of the amended scheme with respect to noise and vibration has been carried out for the Site by a suitably qualified specialist. This has considered both construction and operational noise including off-site traffic noise.</p>
<p>Noise Noise should be reduced at source, and then designed out of a scheme to reduce the need for mitigation measures.</p> <p><i>Priority LP Policy Ref: 3.2, 5.3, 7.6, 7.15</i></p>	<p><i>Noise</i></p> <p>The Site will seek to reduce noise at source and then design noise out of the scheme to reduce the need for mitigation measures.</p> <p>A Code of Construction Practice (CoCP) will be implemented by the contractor during construction which will act as the means for delivering the required mitigation measures during the construction phase including:</p> <ul style="list-style-type: none"> • Unnecessary revving of engines should be avoided, and equipment switched off when not in use; • internal haul routes should be kept well maintained; • Drop heights of materials should be minimised; • Plant and vehicles should be sequentially started up rather than all together; • As far as reasonably practicable, sources of significant noise should be enclosed; • Plant should always be used in accordance with manufacturers' instructions; • Care should be taken to site equipment away from noise-sensitive areas; • Where possible, loading and unloading should also be carried out away from such areas; and • Regular and effective maintenance by trained personnel should be undertaken to keep plant and equipment working to manufacturers specifications.
<p>Light Pollution Developments and lighting schemes should be designed to minimise light pollution.</p> <p><i>Priority LP Policy Ref: 5.2, 5.3, 6.7</i></p>	<p><i>Light Pollution</i></p> <p>All external lighting provided as part of the Site will be designed in compliance with Table 2 (and its accompanying notes) of the ILP Guidance notes for the reduction of obtrusive light, 2011, and will be automatically switched off between 23:00 and 07:00.</p>

Policy Targets	Proposed Amendments Response
<p>Surface Water Runoff In their aim to achieve a greenfield runoff rate developers should incorporate sustainable urban drainage systems (SuDS) into their schemes which also provide benefits for water quality.</p> <p><i>Priority LP Policy Ref: 5.3, 5.13, 5.14</i></p>	<p><i>Surface Water Runoff</i></p> <p>The London Plan calls for a reduction of surface water runoff to either the greenfield run-off rate or 50% betterment of the existing surface water run-off rate where possible.</p> <p>Despite the fact that there will be an increase in the area of hard-standing in the Site, the surface water runoff from the development will be restricted to greenfield run-off rate during peak flows. As a minimum, in accordance with the London Plan, the site will achieve attenuation volumes required to reduce run-off rates to 90% of the current development and sufficient underground storage volumes will be provided to accommodate this restriction of 5 l/s/ha for all events up to 1% AEP event plus climate change.</p> <p>It is proposed that surface water run-off attenuation for the development is delivered by a combination of green/ blue roofs and rainwater harvesting. These solutions will be further considered at site detailed drainage design stage.</p>
<p>Surface Water Runoff Encourage good environmental practice to help reduce the risk from business activities on the London water environment.</p> <p><i>Best Practice Policy Ref: 5.3, 5.13, 5.14</i></p>	<p><i>Surface Water Runoff</i></p> <p>Contractor responsibilities for developing a Building User Guide prior to handover to include advice for tenants of good environmental practice to reduce risk on the London water environment will be added to the fit-out contractor preliminaries in compliance with BREEAM Man 04 Handover requirements.</p>
<p>Surface Water Runoff Encourage those working on demolition and construction-Sites to prevent pollution by incorporating prevention measures and following best practice.</p> <p><i>Best Practice Policy Ref: 5.3, 5.14</i></p>	<p><i>Surface Water Runoff</i></p> <p>The main contractor will be required to operate an EMS and demonstrate best practice construction waste generation and pollution prevention management / control procedures via a Construction Management Plan.</p>
<p>Wastewater Treatment Commercial developments discharging trade effluent should connect to the public foul sewer or combined sewer network where it is reasonable to do so subject to a trade effluent consent from the relevant sewerage undertaker.</p> <p><i>Priority Policy Ref: 5.3, 5.14</i></p>	<p><i>Wastewater Treatment</i></p> <p>The Proposed Amendments will be provided with suitable connections to the public foul sewer or combined sewer network, as appropriate.</p>
<p>Wastewater Treatment Developments should be properly connected and post construction checks should be made by developers to ensure that misconnections do not occur.</p> <p><i>Priority Practice Policy Ref: 5.3, 5.14</i></p>	

5.3 APPENDIX 3: OUTLINE BREEAM STRATEGY

As a means of recognising the low environmental impact of the buildings within the proposed amendments and to ensure best environmental practice is incorporated throughout the planning, design, construction and operation of the buildings and the public realm, the buildings will be evaluated using the BREEAM certification scheme.

Through its application, BREEAM recognises and reflects the value in higher performing assets and aims to inspire and empower change by rewarding and motivating sustainability across the life cycle of both the masterplan and the individual buildings.

Certification will provide a way of recognising the breadth of sustainable measures incorporated throughout the scheme within both the masterplan / public realm and the individual buildings.

The non-domestic elements of the scheme will be assessed against the BREEAM criteria under the relevant use class and will target the following BREEAM ratings:

- BREEAM Refurbishment and Fit-out "Very Good" rating for Plot 7 (refurbishment of the listed arches);
- BREEAM New Construction "Excellent" rating for the hotel and all office areas.

BREEAM assessments for each plot will utilise the current BREEAM scheme at the time of reserved matters planning applications, to encourage continuous performance improvement and innovation by setting and assessing against a stricter range of scientifically rigorous requirements that go beyond current regulations and practice.

5.4 APPENDIX 4: APPLICATION OF THE SUSTAINABILITY STRATEGY TO PLOT 2

Plot 2 will integrate key measures from the site-wide sustainability strategy with particular focus on elements applicable to office use and the specific location of the building.

5.4.1 Social Aspect Key Theme “Placemaking”

An open, accessible and well-connected place that delivers social value to local communities.

- Plot 2 will satisfy the requirements of all five principles of inclusive design to ensure it creates a place everyone can use and pre-emptively design out any potential barriers that create undue effort to enter and navigate inside the building. This will include straightforward measures such as:
 - wheelchair and pushchair access
 - highly visible doors
 - non-slip mats and automatic doors

but will also build in flexibility in use so that the created spaces can adapt to changing uses and demands.

- Locally distinctive and durable street furniture will be installed within and around Plot 2 to encourage social interaction and general connectedness with the wider development.
- The site plan for public space management intended to keep spaces safe and lively will cover Plot 2 and address specific requirements associated with the interaction between office and retail space.
- The applicant commits to hold annual sustainability engagement forums with commercial tenants to discuss sustainability ambitions for the building and gather feedback in order to continuously improve its approach.

5.4.2 Human Aspect - Key Theme: “People-Centred Design”

Distinctive spaces that enhance health and wellbeing.

- Plot 2 will achieve all ten of the principles for active design formulated by Public Health England and Sport England. Particular focus will be placed on creating an active building through the provision of opportunities for activity inside and around it. The internal layout will promote the use of stairs by making them prominent and easy to access. In addition, tenants will be encouraged to create flexible and distinctive workplaces that discourage sedentary behaviour through, for example, the introduction of standing desks.
- Plot 2 will incorporate 100% high efficiency external lighting with limited upward light transmission to help create a safe and secure environment without generating light pollution.
- The building will create an indoor thermal environment that provides comfortable thermal conditions to support the occupant health, wellbeing and productivity.
- The building will incorporate key recommendations provided by the Metropolitan Police Designing Out Crime Officer (DOCO) in order to offer a safe and secure environment. These will include a set of security controls around the 24-hour access envisaged for the site and specific recommendations relating to the existing rail assets.

5.4.3 Natural Aspect - Key Theme: “Enhancing the Environment”

Seamless integration of built and natural environment which promotes resource efficiency.

- The existing condition of Plot 2 is considered to be of low ecological value. Through a comprehensive ecology and landscaping strategy, the building is expected to make a positive contribution to biodiversity. Plot 2 will incorporate large terraces with planting on Levels 15 and 16. Preference will be given to plant species which require manual irrigation only to reduce water demand.
- General and recyclable waste will be strictly segregated. In line with the BREEAM requirements for Wst 03 Operational waste credit, the building will have a designated recycling area at B1 level covering approximately 80m² which is expected to include 35 bins of 1100l capacity.
- Some of the existing unlisted arches on the site will have to be removed as part of the construction works. A pre-demolition audit will be carried out to maximise the recovery of material for subsequent high grade or value applications on Plot 2 or elsewhere on the wider site.
- The Goodsyrd site lies in Zone 1 – the zone of lowest fluvial and tidal flood risk. The surface water runoff from Plot 2 will be restricted to greenfield run-off rate during peak flows. Due to space restrictions blue roof systems are not considered to be appropriate for Plot 2. Therefore, as per the drainage consultant’s recommendation, surface water attenuation will be achieved through storage including geo-cellular systems located at podium level.

5.4.4 Physical Capital - Key Theme: “Mobility and Form”

A low-carbon place which preserves the site’s heritage while also embracing innovative solutions.

- In line with planning policy and the sustainability ambitions of applicant, Plot 2 will be a low-carbon building. This will be achieved through passive design measures and air source heat pumps.
- Off-site assembly will be considered at detailed design stage to explore opportunities for improving construction efficiency and reducing health and safety risks on site.
- A travel plan has been carried out for the wider scheme which covers Plot 2. Plot 2 will provide dedicated cyclist access separate from pedestrian access. 900 cycle long-stay storage spaces will be provided for the building which will all be located in a safe and secure location inside the building on the ground floor. These will be complemented by hire bikes available around the wider site. In alignment with the rest of the development and as per local planning policy, the proposed building will be car-free with on-site parking limited to delivery vehicle loading bays as justified through the Transport Assessment.
- Plot 2 will seek to achieve Wired certification for digital infrastructure to create a truly connected and digitally enabled building capable of meeting the requirements of future tenants.

5.4.5 Economic Aspect - Key Theme: “Local Prosperity”

Inclusive growth which creates opportunities for local communities and improves quality of life.

- The proposed building will deliver a significant number of full-time equivalent jobs during construction as well as employment opportunities throughout the operational phase associated with the office and retail space.
- All main contractor staff working on Plot 2 will be paid at or above the Living Wage for London as defined by the Living Wage Foundation.
- Plot 2 will prioritise the sourcing of products and services from suppliers local to the site where feasible.
- Building on the findings from the Socio-Economic environmental impact assessment (EIA), the joint venture will work with Hackney and Tower Hamlets Councils to identify the most significant socio-economic issues / ambitions for the area and develop a strategy including an Employment Skill Plan to deliver adequate training and create opportunities for the local community.

5.5 APPENDIX 5: BREEAM PRE-ASSESSMENT FOR PLOT 2

A BREEAM 2018 New Construction assessment of the proposed Goodsyard Plot 2 situated on the boundary of Shoreditch, London has been conducted.

The building is currently assessed using a 'shell and core' assessment type due to its speculative nature. In line with local policy requirements, the assessment will be targeting a BREEAM 'Excellent' rating as a minimum.

The current anticipated score is **74.4%** which is equivalent to an 'Excellent' rating, with a margin of **4.4%** above the 70% threshold.

Figure 5 summarises the current anticipated score relative to the minimum required score for the BREEAM rating threshold.

Figure 6 details a breakdown of the targeted credits. Please refer to the full BREEAM pre-assessment report for further details of the targeted credits and detailed requirements.

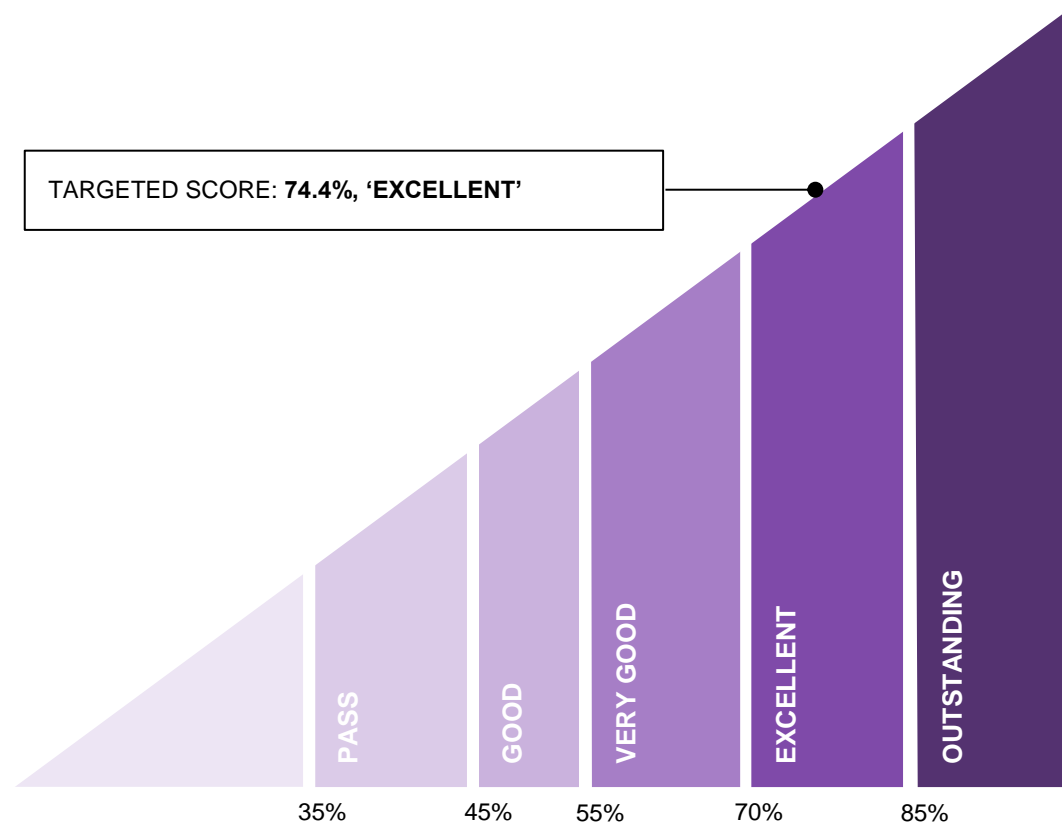


Figure 5: Targeted BREEAM scores and associated rating for Plot 2.

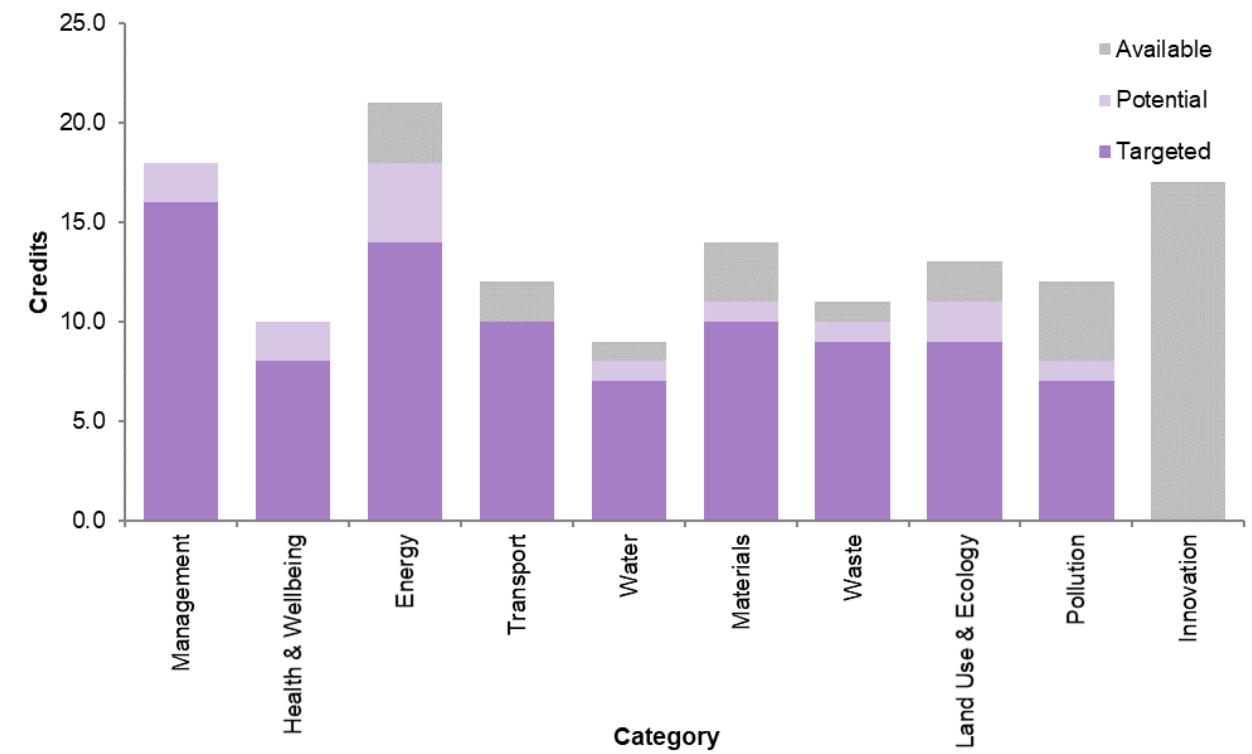
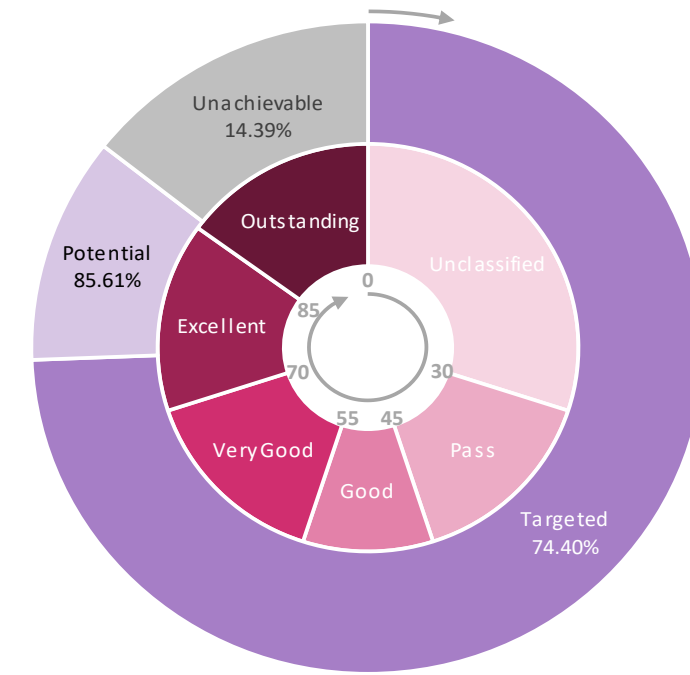


Figure 6: Performance summary and targeted credits.

The summary table below highlights the list of targeted credits within the current BREEAM 2014 pre-assessment. Mandatory credits to achieve a 'Very Good' rating and above are highlighted by (M_v). Mandatory credits to achieve an 'Excellent' rating and above are highlighted by (M_e) and (M_o).

Table 3: BREEAM 2018 credit summary.

Category	Issue	Credits	
		Available	Targeted
Management	Man 01: Project brief and design	4	4
	Man 02: Lifecycle cost and service life planning	4	3
	Man 03: Responsible construction practices (M _e), (M _o)	6	6
	Man 04: Commissioning and handover (M _e), (M _o)	4	3
	Man 05: Aftercare (M _e), (M _o)	-	-
Health & Wellbeing	Hea 01: Visual comfort	4	2
	Hea 02: Indoor air quality	1	1
	Hea 04: Thermal comfort	2	2
	Hea 05: Acoustic performance	1	1
	Hea 06: Security	1	1
	Hea 07 Safe and healthy surroundings	1	1
	Energy	Ene 01: Reduction of energy use and carbon emissions (M _e) (M _o)	13
Ene 02: Energy monitoring (M) (M _e) (M _o)		2	2
Ene 03: External lighting		1	1
Ene 04: Low carbon design		3	1
Ene 05: Energy efficient cold storage		-	-
Ene 06: Energy efficient transportation systems		2	2
Ene 07 Energy efficient laboratory systems		-	-
Ene 08: Energy efficient equipment		-	-
Transport	Tra 01: Transport assessment and travel plan	2	2
	Tra 02: Sustainable transport measures	10	8
Water	Wat 01: Water consumption (M _v) (M _e) (M _o)	5	3
	Wat 02: Water monitoring (M _v) (M _e) (M _o)	1	1
	Wat 03: Water leak detection	2	2
	Wat 04: Water efficient equipment	1	1
Materials	Mat 01: Environmental impacts from construction products - Building life cycle assessment	7	5
	Mat 02: Environmental impacts from construction products	1	1
	Mat 03: Responsible sourcing of construction products (M _v) (M _e) (M _o)	4	2
	Mat 05: Designing for durability and resilience	1	1
	Mat 06: Material efficiency	1	1
	Waste	Wst 01: Construction waste management (M _o)	5
Wst 02: Use of recycled and sustainably sourced aggregates		1	0
Wst 03: Operational waste (M _e), (M _o)		1	1
Wst 04 Speculative finishes		1	1
Wst 05: Adaptation to climate change		1	1
Wst 06: Design for disassembly and adaptability		2	2

Category	Issue	Credits	
		Available	Targeted
Land Use and Ecology	LE 01: Site Selection	2	1
	LE 02: Identifying and understanding the risks and opportunities for the project	2	2
	LE 03: Managing negative impacts on ecology	3	2
	LE 04: Change and enhancement of ecological value	4	2
	LE 05: Long term ecology management and maintenance	2	2
Pollution	Pol 01: Impact of refrigerants	3	1
	Pol 02: Local air quality	2	0
	Pol 03: Flood and surface water management	5	4
	Pol 04: Reduction of night time light pollution	1	1
	Pol 05: Reduction of noise pollution	1	1
Innovation	Inn 01: Approved innovation and exemplary level credits	10	0
	Targeted weighted score rating:	74.4%, 'Excellent'	

5.6 APPENDIX 6: APPLICATION OF THE SUSTAINABILITY STRATEGY TO PLOT 7

Plot 7 will integrate key measures from the site-wide sustainability strategy with particular focus on elements applicable to retail use and the specific location and characteristics of the plot.

5.6.1 Social Aspect - Key Theme “Placemaking”

An open, accessible and well-connected place that delivers social value to local communities.

- Plot 7 occupies a central place within the Goodsyrd masterplan. It incorporates:
 - the Grade II listed Braithwaite Viaduct and adjoining unlisted arches, and
 - London Road, which sits east-west on the site between Brick Lane and straddles Braithwaite (formerly Wheler) Street Grade several listed and unlisted arches
- The cultural heritage and unique character of Plot 7 will be preserved and protected to attract local residents and visitors to explore the site. The historic arches together with the community spaces created around them will serve to promote a sense of neighbourliness and social cohesion acting as a social glue between the residential element and the office segment of the wider site.
- The Hydraulic Accumulator which represents the largest and most significant piece of existing engineering remaining on site within Plot 7 will be restored and opened to the public as a visitor attraction with education and visitor offering to the public thereby enhancing the accessibility and inclusivity of the overall development.

5.6.2 Human Aspect - Key Theme: “People-Centred Design”

Distinctive spaces that enhance health and wellbeing.

- To the extent possible, Plot 7 will adhere to the key overarching principles informing the design of the overall development including active design, noise levels optimisation, circadian lighting, incorporation of nature, and health and safety considerations.
- Plot 7 will follow the applicable ‘Secured by design’ principles to create a safe and secure environment inviting residents and the wider community alike to take advantage of the abundant opportunities for entertainment generated by the various types of retail provided on site including shops, restaurants and cafés.

5.6.3 Natural Aspect - Key Theme: “Enhancing the Environment”

Seamless integration of built and natural environment which promotes resource efficiency.

Plot 7 will adhere to the site-wide strategy for water efficiency and waste minimisation both during construction and operation.

Low-impact and renewable materials will be prioritised to help towards the site-wide goal of maximising resource efficiency. A strict sustainable sourcing strategy aligned with industry best practice such as the ISO 20400 Sustainable procurement guidance will be implemented.

5.6.4 Physical Capital - Key Theme: “Mobility and Form”

A low-carbon place which preserves the site’s heritage while also embracing innovative solutions.

- Heritage lies at the heart of the Plot 7 design. The site comprises various listed assets and elements with distinctive character. Preserving these assets and enhancing their tangible value by opening them to the public is crucial to help shape a sense of identity and continuity in a fast-changing world for future generations.
- In line with planning policy and the sustainability ambitions of the developer, Plot 7 will be low-carbon and combustion free. This will be achieved through on-site and certified off-site sources. Plot 7 will be served by air sourced heat pumps (ASHP).
- The site will contribute to the effective management of supply chain carbon intensity seeking to reduce carbon emissions from materials and manufacturing through strict procurement policies and use of carbon neutral certified products when feasible.

5.6.5 Economic Aspect - Key Theme: “Local Prosperity”

Inclusive growth which creates opportunities for local communities and improves quality of life.

- Plot 7 will seek to boost the socio-economic value of the wider site by creating the necessary point of interaction between the several building use types part of the masterplan. Attractive and publicly assessable spaces will act as a focal point for people to visit, interact and enjoy spending time in. It will help bring the local community together and develop a sense of place thus enhancing the relationships between the physical, natural and social environments.
- The nature of Plot 7 makes it a natural social and economic generator. It will attract additional flows of social and economic benefits to the local area which will improve the quality of life of the people who live, work and socialise there. It will also support/create employment opportunities both during construction and operation associated with the site’s primary retail offering.
- In alignment with the wider site, Plot 7 will promote local procurement and collaboration with small and medium sized businesses. Likewise, all main contractor staff working on Plot 2 will be paid at or above the Living Wage for London as defined by the Living Wage Foundation.
- Building on the findings from the Socio-Economic environmental impact assessment (EIA), the joint venture will work with Hackney and Tower Hamlets Councils to identify the most significant socio-economic issues / ambitions for the area and develop a strategy including an Employment Skill Plan to deliver adequate training and create additional opportunities for the local community.

5.7 APPENDIX 7: BREEAM PRE-ASSESSMENT FOR PLOT 7

A BREEAM 2014 Refurbishment and Fit out (RFO) pre-assessment for the proposed refurbishment of the Goodsyard Plot 7 has been conducted.

The assessment is targeting a BREEAM 'Very Good' rating as a minimum.

The scope of works includes changes to the fabric and structure, and core services. Therefore, a BREEAM RFO Parts 1 & 2 assessment has been conducted.

The current anticipated score is 59.8% which is equivalent to a 'Very Good' rating, with a margin of 4.8% above the 55% threshold.

Figure 7 summarises the current anticipated score relative to the minimum required score for the BREEAM rating threshold.

Figure 8 details a breakdown of the targeted credits. Please refer to the full BREEAM pre-assessment report for further details of the targeted credits and detailed requirements.

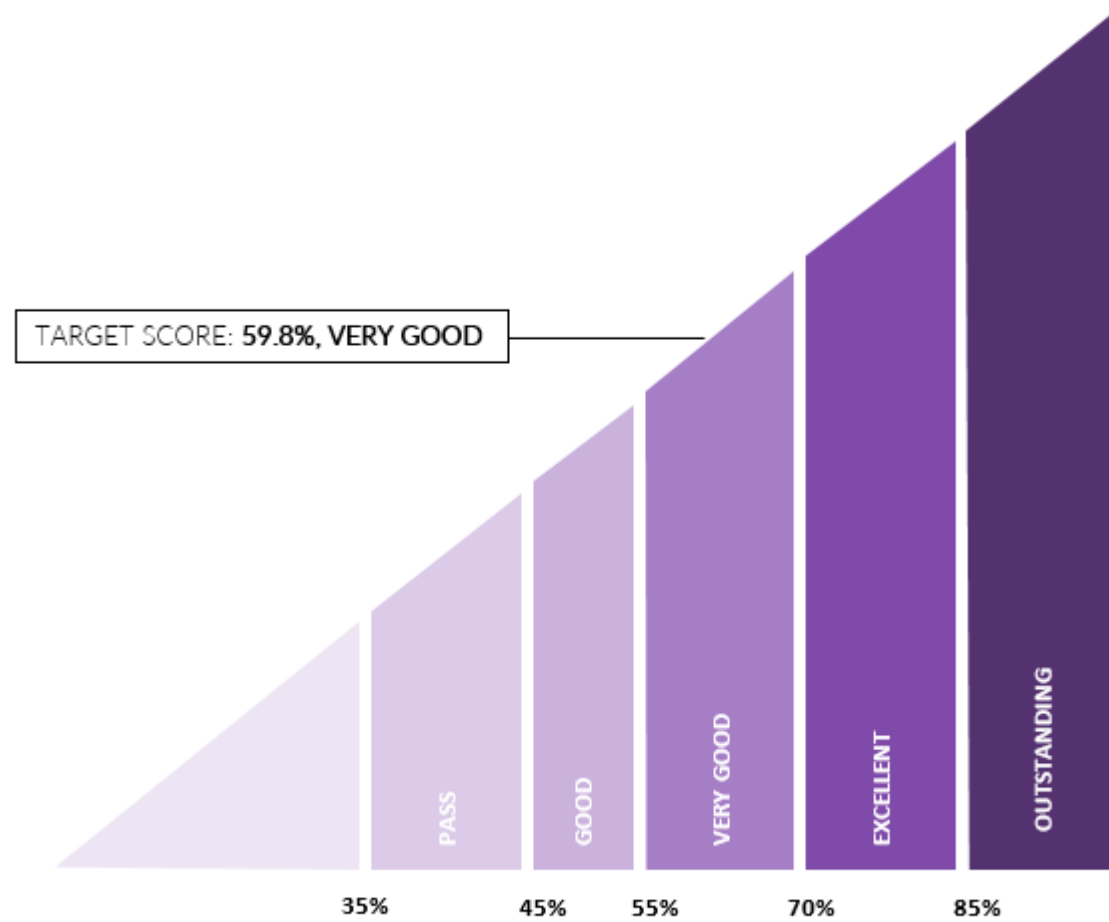


Figure 7: Targeted BREEAM score and associated rating for Plot 7.

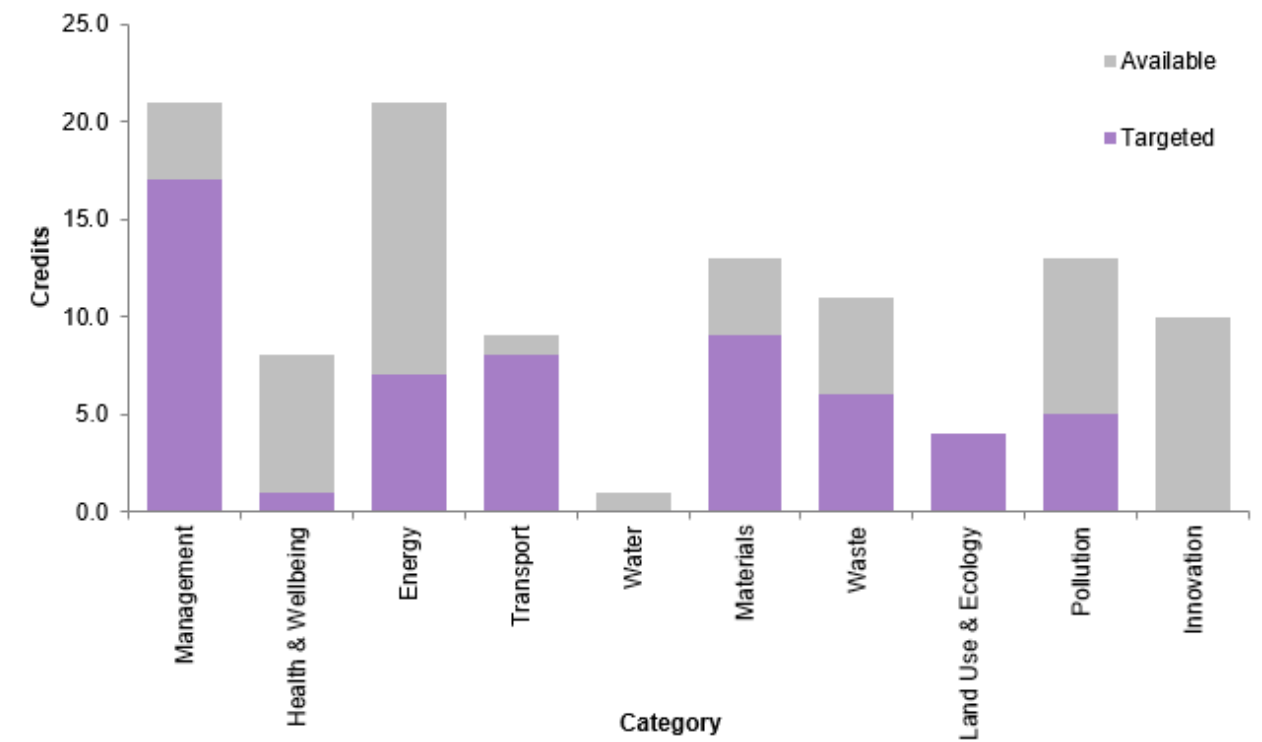
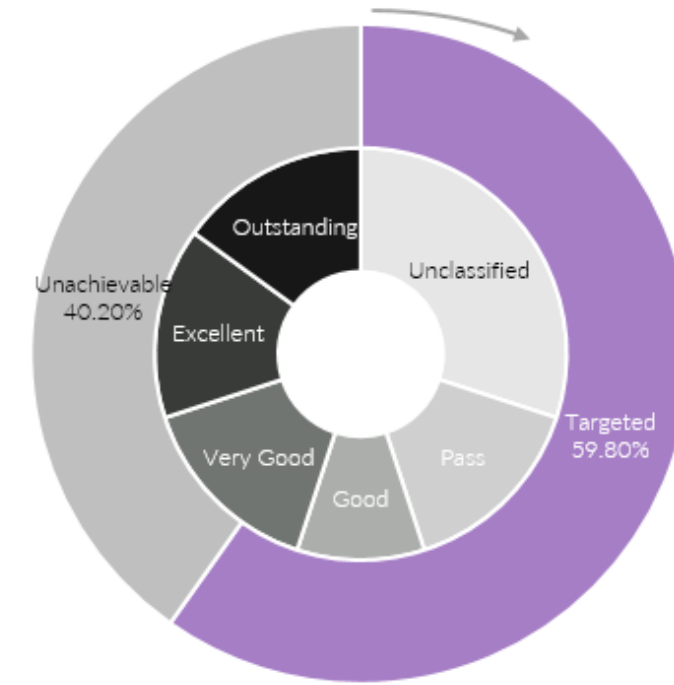


Figure 8: Performance summary and targeted credits.

The summary table below highlights the list of targeted credits within the current BREEAM 2014 pre-assessment. Mandatory credits to achieve a 'Very Good' rating and above are highlighted by **(Mv)**. Mandatory credits to achieve an 'Excellent' rating and above are highlighted by **(Me)** and **(Mo)**.

Table 4: BREEAM 2014 RFO credit summary.

Category	Issue	Credits	
		Available	Targeted
Management	Man 01: Project Brief and design	4	4
	Man 02: Lifecycle Cost and Service Life Planning	4	1
	Man 03: Responsible Construction Practices (Me)	6	6
	Man 04: Commissioning and Handover (Me)	4	3
	Man 05: Aftercare (Me)	3	3
Health & Wellbeing	Hea 01: Visual Comfort	5	0
	Hea 05: Acoustic Performance	2	0
	Hea 06: Safety and Security	1	1
Energy	Ene 01: Reduction of CO ₂ Emissions (Mv) (Me)	15	4
	Ene 02: Energy Monitoring (Me)	2	2
	Ene 03: External lighting	1	1
	Ene 04: Low carbon design	3	0
Transport	Tra 01: Public Transport Accessibility	5	5
	Tra 02: Proximity to Amenities	1	1
	Tra 03: Cyclist Facilities	2	1
	Tra 05: Travel Plan	1	1
Water	Wat 03: Water Leak Detection and Prevention	1	0
Materials	Mat 01: Life Cycle Impacts	6	4
	Mat 03: Responsible Sourcing of Materials (Mv) (Me)	4	2
	Mat 04: Insulation	1	1
	Mat 05: Designing for Durability and Resilience	1	1
	Mat 06: Material Efficiency	1	1
Waste	Wst 01: Project Waste Management	7	4
	Wst 03: Operational Waste (Me)	1	1
	Wst 05: Adaptation to Climate Change	1	0
	Wst 06: Functional Adaptability	1	1
Land Use and Ecology	LE 02: Protection of Ecological Value	1	1
	LE 04: Ecological Enhancement	1	1
	LE 05: Long Term Impact on Biodiversity	2	2
Pollution	Pol 01: Impact of Refrigerants	3	0
	Pol 02: NO _x Emissions	3	0
	Pol 03: Surface Water Run-off	5	3
	Pol 04: Reduction of Night Time Light Pollution	1	1
	Pol 05: Reduction of Noise Pollution	1	1
Innovation	Approved Innovation and Exemplary Level Credits	10	0
	Targeted weighted score rating:	59.8%, 'Very Good'	

5.8 APPENDIX 8: POLICY CONTEXT

5.8.1 Current Policy Framework

The policies considered when preparing this strategy are contained in the London Plan (GLA, 2015) and the London Borough of Tower Hamlets (LBTH) and London Borough of Hackney local policies.

The Proposed Development constitutes a 'major development' (>10 dwellings and/or >1,000m² of non-residential floor space) and is therefore subject to the policies of the GLA, contained within the London Plan.

National Policy

Approved Document Part L

Part L of the Building Regulations is the mechanism by which government is driving reductions in the regulated CO₂ emissions from new buildings.

5.8.2 Current Requirements: Part L 2013

Part L has five key criteria which must be satisfied as follows:

- a. Criterion 1 - Achieving the Target Emission Rate (TER)
- b. Criterion 2 - Limits on design flexibility
- c. Criterion 3 - Limiting the effects of solar gains in summer
- d. Criterion 4 - Building performance consistent with the Building Emission Rate (BER)
- e. Criterion 5 - Provision for energy efficient operation of the building

Criterion one requires that the building as designed is not predicted to generate CO₂ emissions in excess of that set by the Target Emission Rate (TER) calculated in accordance with the approved Standard Assessment Procedure (SAP) 2012. Part L (2013) requires the following reductions:

- a. A 6% aggregate reduction in CO₂ emissions beyond the requirements of Part L 2010 for dwellings; and
- b. A 9% aggregate reduction in CO₂ emissions beyond the requirements of Part L 2010 for non-domestic buildings.

Criterion two places upper limits on the efficiency of controlled fittings and services for example, an upper limit to an external wall U-value of 0.35W/m².K (non-domestic buildings).

A Fabric Energy Efficiency Standard (FEES) has been introduced for new buildings although no definitive targets have been set in this regard. Part L 2013 requires the following Fabric Energy Efficiency performance targets to be met:

- Target Fabric Energy Efficiency (TFEE). The TFEE is calculated for the building, based upon an elemental recipe of efficiency parameters, applied to the geometry of the building in question. This would generate a notional value which would then be relaxed by 15% to generate the TFEE

Criterion three requires that zones in non-residential buildings are not subject to excessive solar gains. This is demonstrated using the Simplified Building Energy Model (SBEM) or Dynamic Simulation Method (DSM) for non-residential buildings.

5.8.3 London Policy

London Plan (2016)

Final versions of the 'Minor Alterations to the London Plan (MALPs) were published and adopted in March 2016 and are current for any Stage 1 submissions to the GLA. The MALPs address parking and housing standards.

Recent alterations also include amendments to the 'Housing Supplementary Planning Guidance' (SPG) and 'Energy Planning' guidance, clarifying the CO₂ emissions reduction targets that currently apply and the changes that will be introduced from 1st October 2016 which are summarised in the table below.

Use Type	CO ₂ Reduction Target (beyond Part L 2013)	
	2013 – 2016	2016 – 2019 (1 st October 2016)
Residential Buildings	35%	'Zero Carbon'
Non-Domestic Buildings	35%	35%

The target reduction in CO₂ emissions for 'Residential Buildings' was historically 35% until 1st October 2016, at which point it was uplifted to 'Zero Carbon' for Stage 1 applications. In this context, this is assumed to be a 100% reduction in regulated CO₂ emissions. The policy requires that at least 35% should be achieved on site, with the remainder achieved by a combination of off-site measures and a cash in lieu payment (currently set at £1,800 per tonne of CO₂ of remaining emissions to achieve a total reduction of 100%).

The target reduction in CO₂ emissions for 'Non Domestic Buildings' remains at 35% and will not be uplifted in the near future, despite the consultation document indicating that this would be set at 50%. The GLA comment that the 35% target will provide a smooth trajectory towards the upcoming requirement for 'Nearly Zero Energy Buildings' by 2020. It should be noted that the UK Government has yet to ratify the EU requirement for 'Nearly Zero Energy Buildings' and this may not occur in light of the UK vote to leave the EU.

The 'Energy Planning' guidance document (March 2016) also includes an update to the guidance on compliance with overheating policy that design teams should be aware of when undertaking risk analysis and thermal comfort modelling.

It is the GLA's expectation that dynamic thermal modelling should be undertaken to determine overheating risk and demonstrate compliance with London Plan Policy 5.9. This should be in addition to the Building Regulations 'Criterion 3' assessment of heat gains in summer months.

The GLA has set out that dynamic modelling should be carried out in accordance with the guidance and data sets in CIBSE TM49 'Design Summer Years' for London (2014) using the three design weather years as follows:

- 1976: a year with a prolonged period of sustained warmth.
- 1989: a moderately warm summer (current design year for London).
- 2003: a year with a very intense single warm spell.

For developments in high density urban areas (e.g. Canary Wharf) and the 'Central Activity Zone' the 'London Weather Centre' data set should be used. In lower density urban and suburban areas the 'London Heathrow' dataset should be used. These data sets have been adjusted to account for future climate effects.

The modelling should also consider the additional guidance contained in CIBSE TM52 'The Limits of Thermal Comfort: Avoiding Overheating in European Buildings'.

5.8.4 London Plan Policy

Development on the border between the London Borough of Tower Hamlets and London Borough of Hackney aligned to the policy requirements of the London Plan 2016. The following policies of the London Plan (2016) have informed this strategy.

Policy 5.2: Minimising CO₂ Emissions

As of October 1st 2016, Policy 5.2 requires new-build domestic homes to be 'zero carbon' (equivalent to reducing regulated CO₂ emissions by 100%). Non-domestic development are to reduce CO₂ emissions by 35% beyond the Building Regulations Part L (2013) Target Emission Rate (TER). A minimum of a 35% reduction of CO₂ emissions is expected to apply for planning for domestic developments, with the remainder provided through a carbon offset payment to the relevant borough.

Policy 5.6: Decentralised Energy in Development Proposals

Policy 5.6 requires development proposals to evaluate the feasibility of Combined Heat & Power (CHP) systems and where a new CHP system is appropriate, examine opportunities to extend the system beyond the Site boundary. Developments should select energy systems on the following hierarchy:

- c. Connection to existing heating or cooling networks
- d. Site wide CHP network
- e. Communal heating and cooling

Where future network opportunities are identified, proposals should be designed to connect to these networks.

Policy 5.7: Renewable Energy

Policy 5.7 requires that developments should provide a reduction in expected CO₂ emissions through the use of on-site renewable energy generation, where feasible.

Policy 5.9: Overheating and Cooling

Policy 5.9 requires that development proposals reduce potential overheating & reliance on air conditioning systems, demonstrated in consideration of the following cooling hierarchy:

- f. Minimisation of internal heat generation through efficient design
- g. Reduction of external heat gains through consideration of orientation, shading, albedo, fenestration, insulation, and green roofs & walls
- h. Management of internal heat gains through exposed thermal mass
- i. Passive ventilation
- j. Mechanical ventilation
- k. Active cooling

Development proposals should demonstrate how the design, materials, construction and operation of the development would minimise overheating and also meet its cooling needs.

Policy 5.13: Sustainable Drainage

A Development should utilise sustainable urban drainage systems (SUDS) unless there are practical reasons for not doing so, and should aim to achieve greenfield run-off rates and ensure that surface water run-off is managed as close to its source as possible in line with the following drainage hierarchy:

1. Store rainwater for later use
2. Use infiltration techniques, such as porous surfaces in non-clay areas
3. Attenuate rainwater in ponds or open water features for gradual release
4. Attenuate rainwater by storing in tanks or sealed water features for gradual release

5. Discharge rainwater direct to a watercourse
6. Discharge rainwater to a surface water sewer/drain
7. Discharge rainwater to the combined sewer.

Drainage should be designed and implemented in ways that deliver other policy objectives of this Plan, including water use efficiency and quality, biodiversity, amenity and recreation.

Policy 5.15: Water Use and Supplies

Development should minimise the use of mains water by:

- a. Incorporating water saving measures and equipment
- b. Designing residential development so that mains water consumption would meet a target of 105 litres or less per head per day

Policy 7.1: Lifetime Neighbourhoods

Development should be designed so that the layout, tenure and mix of uses interface with surrounding land and improve people's access to social and community infrastructure (including green spaces), the Blue Ribbon Network, local shops, employment and training opportunities, commercial services and public transport.

Development should enable people to live healthy, active lives; should maximize the opportunity for community diversity, inclusion and cohesion; and should contribute to people's sense of place, safety and security. Places of work and leisure, streets, neighbourhoods, parks and open spaces should be designed to meet the needs of the community at all stages of people's lives, and should meet the principles of lifetime neighbourhoods.

The design of new buildings and the spaces they create should help reinforce or enhance the character, legibility, permeability, and accessibility of the neighbourhood.

Policy 7.2: An Inclusive Environment

Design and access statements submitted with development proposals should explain how, following engagement with relevant user groups, the principles of inclusive design, including the specific needs of older and disabled people, have been integrated into the Proposed Development, whether relevant best practice standards such as British Standard BS 8300:2009 + A1:2010 have been complied with, and how inclusion will be maintained and managed.

Policy 7.3: Designing Out Crime

Development should reduce the opportunities for criminal behaviour and contribute to a sense of security without being overbearing or intimidating. In particular:

- c. Routes and spaces should be legible and well maintained, providing for convenient movement without compromising security
- d. There should be a clear indication of whether a space is private, semi-public or public, with natural surveillance of publicly accessible spaces from buildings at their lower floors
- e. Design should encourage a level of human activity that is appropriate to the location, incorporating a mix of uses where appropriate, to maximize activity throughout the day and night, creating a reduced risk of crime and a sense of safety at all times
- f. Places should be designed to promote an appropriate sense of ownership over communal spaces
- g. Places, buildings and structures should incorporate appropriately designed security features
- h. Schemes should be designed to minimise on-going management and future maintenance costs of the particular safety and security measures proposed

The above measures should be incorporated at the design stage to ensure that overall design quality is not compromised.

Policy GG2 Making the Best Use of Land

- Creating high density development in order to "make the best use of land", whilst protecting London's open spaces.
- Promote urban greening.
- Encourage development that can encourage sustainable transport connections.

Policy GG3 Creating a healthy city

- Improve overall health and reduce health inequality.
- Promote a more active and healthy lifestyle, encouraging healthy choice (empowering healthy choice).
- Healthy streets approach, prioritise health in planning.
- Consider health and wellbeing on communities in planning applications - both health and health inequality (use Health Impact Assessments)
- Include access to green spaces and provision of green infrastructure.
- Ensure high quality, well insulated ventilated to avoid issues associated with damp, heat and cold.
- Create healthy food environments. Restrict unhealthy options.

Policy GG5 Growing a Good Economy

- Promote strength and potential of the wider city region
- Encourage diversified economy, with the benefits being shared more equitably across London.
- Plan for sufficient employment and industrial space in the right locations - supporting development/regeneration.
- Provide high quality housing and infrastructure to support growth
- Continue to provide innovation. Be an incubator and centre for learning
- Develop/enhance future transport network.

Policy GG6 Increasing Efficiency and resilience

- Improve energy efficiency, movement toward low carbon, circular economy. Target of zero carbon city by 2050.
- Buildings/infrastructure resilient against a changing climate, efficient use of water, reduction of impact from natural hazards such as flooding and heatwaves
- Avoid contribution to the heat island effect.
- Safe and secure environments, resilient against impacts such as fire/terrorism etc.
- Stakeholder contributions taken from all relevant public, private, community sectors.

Policy D1 London's form and characteristics

- Developments should optimise density and connectivity, be inclusive and use street spaces that have well defined public and private realm, provide outlook, privacy and amenity, be safe and secure, provide spaces for social interaction, play relaxation and physical activity.
- Provide and facilitate active travel with convenient and inclusive pedestrian and cycling routes.
- Mitigate or prevent the impacts of noise and poor air quality.
- Development design should respond to local context by delivering developments of appropriate scale, appearance and shape that responds successfully to the character of the local area.
- Be of high quality architecture that includes flexibility and appropriate building lifespan, delivering attractive robust materials that will mature well.

- Respect/enhance the heritage assets
- Maximise opportunities for urban greening to create attractive resilient places that effectively manage surface water.
- Achieve comfortable indoor and outdoor environments.

Policy D2 Delivering good design

- Boroughs should determine Development Plans and Strategies that include a wide range of physical and socio economic factors.
- Development should inform the type and scale of development projects taking account of:
 - A. Design analysis and visualisation
 - B. Design quality and development certainty
 - C. Design scrutiny
 - D. Managing design quality

Policy D3 Inclusive design

Deliver an inclusive environment and meet the needs of all Londoners: Proposals to be accessible and inclusive to allow development that can be entered and used safely (and with dignity by all), are convenient and welcoming with no disabling barriers. That can provide independent access without undue effort separation or special treatment including safe and dignified emergency evacuation to all users.

Policy D7 Public realm

- Development plans should ensure they are of good design, including being safe attractive spaces, landscaping, planting etc. The spaces should maximise the contributions public realm can make to active travel, discouraging travel by car and excessive on street parking, traffic noise etc.
- Public realm should develop sense of place and enhance relationships between the realm and its surrounding buildings.
- Incorporate Green Infrastructure to support rainwater/surface water management, exposure to air pollution, urban heat island and nature corridors
- Create spaces that are attractive and encouraging for community events.

Policy D8 Tall buildings

Tall building locations should be considered as part of development plans, identifying where tall buildings would be appropriate and their potential heights. Visual, Functional and Environmental Impact should be fully considered and include Wind, daylight, sunlight penetration and temperature conditions. The buildings must not compromise comfort or enjoyment of open spaces including around the building, air movement around the building and the building itself should not reduce the quality of surrounding spaces in terms of noise and air pollution.

Cumulative impacts from consented buildings should be fully included.

Policy D12 Agent of Change

Particularly in reference to the noise environment, the Agent of Change aims to encourage mitigation of existing impacts through the design of the Proposed Development (particularly in the case of residential development).

Policy D13 Noise

- Reduce manage and mitigate noise levels. The policy aims to encourage the use of the Agent of Change principle to ensure measures do not unduly impact on existing noise levels. Where levels unduly impact on the development, mitigation of the existing noise levels is considered.
- Noise levels of the development itself are limited. Quiet areas and spaces of Tranquillity are protected, and if possible improved and enhanced. Separation of new noise sensitive development from major noise sources, through the use of distance, screening or internal layout in preference to using sound insulation is encouraged. If standards are not achieved, acoustic design principles and insulation are then encouraged.

Policy D1 London's form and characteristics

- Developments should optimise density and connectivity, be inclusive and use street spaces that have well defined public and private realm, provide outlook, privacy and amenity, be safe and secure, provide spaces for social interaction, play relaxation and physical activity.
- Provide and facilitate active travel with convenient and inclusive pedestrian and cycling routes.
- Mitigate or prevent the impacts of noise and poor air quality.
- Development design should respond to local context by delivering developments of appropriate scale, appearance and shape that responds successfully to the character of the local area.
- Be of high quality architecture that includes flexibility and appropriate building lifespan, delivering attractive robust materials that will mature well.
- Respect/enhance the heritage assets
- Maximise opportunities for urban greening to create attractive resilient places that effectively manage surface water.
- Achieve comfortable indoor and outdoor environments.

Policy E1 Offices

- New office developments of varying sizes in new, refurbished and mixed use development types to be supported. This should be based on the anticipated demand for office floorspace to 2041 (100% increase by 2041).
- Spatial development areas should be supported by development works for offices.

Policy G1 Green infrastructure

- Green network of infrastructure to be protected and managed as integrated features across the city. Boroughs to prepare green infrastructure strategies that integrate open space provision, biodiversity, flood management, health and wellbeing and sports and recreation.

Policy G5 Urban greening

- Major development should contribute to greening as a fundamental part of the design. Boroughs to develop urban greening factor to identify appropriate level for new development proposals.

Policy G6 Biodiversity and access to nature

- Site of importance should be fully protected, including identifying all relevant areas within the proximity of any development proposals. Any locations or linkages that may be impacted upon by development proposals should be assessed and mitigated.
- Proposals should seek to create or enhance habitats of relevance in an urban context.
- Where harm is identified to be unavoidable, a hierarchy approach should be taken to limit the proposed damage as much as possible.

Policy G7 Trees and woodlands

- Trees should be protected wherever possible with new trees provided wherever possible to increase the urban forest proportion.
- Boroughs to identify locations for strategic tree planting.

Policy SI2 Minimising Greenhouse Gas Emissions

A. Major development should be net zero-carbon. This means reducing carbon dioxide emissions from construction and operation, and minimising both annual and peak energy demand in accordance with the following energy hierarchy:

1. Be lean: use less energy and manage demand during construction and operation.
2. Be clean: exploit local energy resources (such as secondary heat) and supply energy efficiently and cleanly. Development in Heat Network Priority Areas should follow the heating hierarchy in Policy SI3 Energy infrastructure.
3. Be green: generate, store and use renewable energy on-site.

As a minimum, energy strategies should contain the following information:

- a. A calculation of the energy demand and carbon dioxide emissions covered by Building Regulations and, separately, the energy demand and carbon dioxide emissions from any other part of the development, including plant or equipment, that are not covered by the Building Regulations (i.e. the unregulated emissions), at each stage of the energy hierarchy.
- b. Proposals to reduce carbon dioxide emissions beyond Building Regulations through the energy efficient design of the site, buildings and services, whether it is categorised as a new build, a major refurbishment or a consequential improvement.
- c. Proposals to further reduce carbon dioxide emissions through the use of zero or low-emission decentralised energy where feasible, prioritising connection to district heating and cooling networks and utilising local secondary heat sources. (Development in Heat Network Priority Areas should follow the heating hierarchy in Policy SI3 Energy infrastructure).
- d. Proposals to further reduce carbon dioxide emissions through the generation and use of on-site renewable energy, utilising storage technologies where appropriate.
- e. Proposals to address air quality risks (see Policy SI1 Improving air quality). Where an air quality assessment has been undertaken, this could be referenced instead.
- f. The results of dynamic overheating modelling which should be undertaken in line with relevant Chartered Institution of Building Services Engineers (CIBSE) guidance, along with any mitigating actions (see Policy SI4 Managing heat risk).
- g. Proposals for demand-side response, specifically through installation of smart meters, minimising peak energy demand and promoting short-term energy storage, as well as consideration of smart grids and local micro grids where feasible.
- h. Proposals for how energy demand and carbon dioxide emissions post-construction will be monitored annually (for at least five years).
- i. Proposals explaining how the site has been future-proofed to achieve zero-carbon on-site emissions by 2050.
- j. Confirmation of offsetting arrangements, if required.
- k. Proposals to minimise the embodied carbon in construction.
- l. Analysis of the expected cost to occupants associated with the proposed energy strategy.

B. Major development should include a detailed energy strategy to demonstrate how the zero-carbon target will be met within the framework of the energy hierarchy and will be expected to monitor and report on energy performance.

C. In meeting the zero-carbon target a minimum on-site reduction of at least 35 per cent beyond Building Regulations is expected. Residential development should aim to achieve 10 per cent, and non-residential development should aim to achieve 15 per cent through energy efficiency measures. Where it is clearly demonstrated that the zero-carbon target cannot be fully achieved on-site, any shortfall should be provided:

1. Through a cash in lieu contribution to the relevant borough's carbon offset fund, and/or
2. Off-site provided that an alternative proposal is identified and delivery is certain.

D. Boroughs must establish and administer a carbon offset fund. Offset fund payments must be ring-fenced to implement projects that deliver greenhouse gas reductions. The operation of offset funds should be monitored and reported on annually.

Policy SI3 Energy Infrastructure

A. Boroughs and developers should engage at an early stage with relevant energy companies and bodies to establish the future energy requirements and infrastructure arising from large-scale development proposals such as Opportunity Areas, Town Centres, other growth areas or clusters of significant new development.

B. Energy masterplans should be developed for large-scale development locations which establish the most effective energy supply options. Energy masterplans should identify:

1. major heat loads (including anchor heat loads, with particular reference to sites such as universities, hospitals and social housing)
2. heat loads from existing buildings that can be connected to future phases of a heat network
3. major heat supply plant
4. possible opportunities to utilise energy from waste
5. secondary heat sources
6. opportunities for low temperature heat networks
7. possible land for energy centres and/or energy storage
8. possible heating and cooling network routes
9. opportunities for futureproofing utility infrastructure networks to minimise the impact from road works
10. Infrastructure and land requirements for electricity and gas supplies
11. Implementation options for delivering feasible projects, considering issues of procurement, funding and risk, and the role of the public sector.

C. Development Plans should:

12. Identify the need for, and suitable sites for, any necessary energy infrastructure requirements including upgrades to existing infrastructure
13. Identify existing heating and cooling networks and opportunities for expanding existing networks and establishing new networks.

D. Major development proposals within Heat Network Priority Areas should have a communal heating system

14. The heat source for the communal heating system should be selected in accordance with the following heating hierarchy:
 - a. connect to local existing or planned heat networks

- b. use available local secondary heat sources (in conjunction with heat pump, if required, and a lower temperature heating system)

- c. generate clean heat and/or power from zero-emission sources

- d. use fuel cells (if using natural gas in areas where legal air quality limits are exceeded all development proposals must provide evidence to show that any emissions related to energy generation will be equivalent or lower than those of an ultra-low NOx gas boiler)

- e. use low emission combined heat and power (CHP) (in areas where legal air quality limits are exceeded all development proposals must provide evidence to show that any emissions related to energy generation will be equivalent or lower than those of an ultra-low NOx gas boiler)

- f. use ultra-low NOx gas boilers.

15. CHP and ultra-low NOx gas boiler communal or district heating systems should be designed to ensure

- that there is no significant impact on local air quality.

16. Where a heat network is planned but not yet in existence the development should be designed for connection at a later date.

Policy SI4 Managing heat risk

A. Development proposals should minimise internal heat gain and the impacts of the urban heat island through design, layout, orientation and materials.

B. Major development 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 following cooling hierarchy:

1. minimise internal heat generation through energy efficient design
2. reduce the amount of heat entering a building through orientation, shading, albedo, fenestration, insulation and the provision of green roofs and walls
3. manage the heat within the building through exposed internal thermal mass and high ceilings
4. provide passive ventilation
5. provide mechanical ventilation
6. provide active cooling systems.

Policy SI5 Water infrastructure

- Development plans to be produced to identify areas of specific water stress. Development proposals should minimise the use of water in residential developments in line with Building Regulations. Commercial developments should achieve at least the BREEAM Excellent standard.

- Smart metering encouraged including in retrofit situations.

- Development proposals to take account of local wastewater infrastructure, reduce instances of shared sewerage connections.

Policy SI6 Digital connectivity infrastructure

Provide sufficient digital infrastructure to allow for current and future connections of digital infrastructure. Use public realm features, such as street furniture to camouflage mobile digital infrastructure

Policy SI7 Reducing waste and supporting the circular economy

Waste reduction, improved recycling rates and improved reuse rates are targeted by:

- Promotion of a circular economy, improving resource efficiency and innovation, encourages waste minimisation waste avoidance through reuse of materials and through using fewer resources in the production and distribution of products.

- Target of zero biodegradable or recyclable waste to landfill by 2026.
- Recycling targets for London in line with the below:
- Municipal waste: 65% by 2030.
- Construction, demolition and excavation waste: 95% by 2020
- Applications where relevant to include a circular economy statement identifying how above aims will be achieved.

5.8.6 Local Planning Policy

The following local policy documents have informed this sustainability strategy:

- London Borough of Tower Hamlets Local Policy including:
 - Core Strategy (2010); and
 - Managing Development Document (2013)
- Tower Hamlets Draft Local Plan 2031 (not yet adopted)

On 28 February 2017, the new Tower Hamlets Local Plan was submitted to the Secretary of State to undergo an examination in public. This followed a six-week period of consultation on the draft plan which ran from 2 October to 13 November 2017. The plan has undergone independent examination which is the final stage of the process. In early 2019 LBTH will be consulting on the proposed changes (known as main modifications) which the Inspector considers are necessary to make the plan sound and legally compliant.

- London Borough of Hackney (LBH) Local Policy including:
 - Core Strategy (2010)
 - Development Management Local Plan (2015)
 - Hackney Local Plan 2033 (not yet adopted)

The new borough-wide Hackney Local Plan 2033, known as LP33, will be the key strategic planning document used to direct and guide development in the borough up to 2033. Once adopted LP33 will combine and replace Hackney's existing plans - the core strategy, development management local plan and site allocations local plan as well as the area action plans for Dalston, Hackney Central and Manor House.

The Hackney Local Plan 2033 was submitted to the Planning Inspectorate on 23 January 2019 for examination in public.

5.8.7 LBTH LOCAL POLICY

Core Strategy (2010)

The council has a strategic objective of achieving wider sustainability and adopts policies that will enable it to achieve this objective. The following policies have informed this strategy:

Policy SP03: Creating healthy and liveable neighbourhoods

Policy S03 requires that new developments should be designed, constructed and managed in ways that improve health and promote healthy lifestyles to help to reduce health inequalities. The elements that are applicable to sustainability within this policy seek to address the impact of noise and air pollution in the borough.

Policy SP04: Creating a blue and green grid

Requires that developments seek to contribute to the green spaces and corridors available in the capital and utilise and protect the waterfront areas. The requirements are to:

- ensure the development protects and enhances areas of biodiversity value in order to achieve a net gain in biodiversity

- aim to increase the amount of permeable surfaces, including SUDs, to improve drainage and reduce the surface water run-off

Policy SP05: Dealing with Waste

This policy sets out the requirements for dealing with waste during both construction/demolition phases and also when the building is operational. Developers should reduce and reuse waste from construction and demolition and plan and design for waste storage and recycling facilities.

SP08: Making Connected Places

This policy requires that developments deliver an accessible, efficient, high quality, sustainable and integrated transport network to reach destinations within and outside the borough.

Policy SP10: Creating Distinct and Durable Places

This policy requires that developments protect, celebrate and improve access to historical and heritage assets by placing these at the heart of reinventing the hamlets to enhance local distinctiveness, character and townscape views.

The focus is on promoting a borough of well designed, high quality, sustainable and robust buildings that enrich the local environment and contribute to quality of life.

Policy SP11: Working towards a zero-carbon borough

This policy requires the development to achieve target reductions in carbon emissions for both domestic and non-domestic dwellings.

- Achieve a reduction in carbon emissions in line with the targets of working towards zero carbon in 2016
- Provide 20% reduction of carbon dioxide emissions through on-site renewable energy generation, where feasible
- Ensure the development adapts to the effects of climate change

Policy SP12: Delivering Placemaking

This policy requires that developments deliver successful placemaking in Tower Hamlets to create locally distinctive, well designed, healthy and great places which interconnect with, respond and integrate into the wider London area.

5.8.8 Development Plan Document

The Managing Development Document DPD (2013 brings into practice the policies of the Core Strategy to enable the Council to meet its strategic objectives and contains the following policies that informed the strategy for this development.

DM9 Improving Air Quality

Major development will be required to submit an Air Quality Assessment demonstrating how it will prevent or reduce associated air pollution during construction or demolition.

The Council will expect development proposals to consider measures including, but not exclusively, reduction of vehicle traffic levels, how construction is carried out, measures to reduce emissions throughout the life time use of the building, reducing emissions from associated plant equipment, improving/greening the public realm, ensuring decentralised energy facilities do not contribute to poor air quality and encouraging sustainable movement patterns.

Given that emissions from combustion engine vehicles are a significant contributor to poor air quality, development should seek to reduce the number of associated combustion engine vehicle movements and would be encouraged to use alternative vehicles that do not emit, or emit fewer, harmful products, for example, electric vehicles.

DM10 Delivering Open Space

Development will be required to provide or contribute to the delivery of an improved network of open spaces in accordance with the Council's Green Grid Strategy and Open Space Strategy

DM11 Living Buildings and Biodiversity

Development will be required to provide elements of a living building

Existing elements of biodiversity value should be protected or replaced within the development and additional habitat provision made to increase biodiversity value

Major development will need to submit an Ecology Assessment demonstrating biodiversity enhancement in accordance with the Council's Local Biodiversity Action Plan.

DM12 Water Spaces

Development within or adjacent to the Blue Ribbon Network will be required to demonstrate that there is no adverse impact on the Blue Ribbon Network, including navigability, habitat quality, hydrology and water quality.

Development within or adjacent to the Blue Ribbon Network will need to identify how it will improve the quality of the water space and provide increase opportunities for access, public use and interaction with the water space.

DM13 Sustainable Drainage

Development will be required to show how it reduces the amount of water usage, runoff and discharge from the Site, through the use of appropriate water reuse and Sustainable Urban Drainage (SUD) techniques.

All development should provide details of these provisions and how they will be incorporated. Specifically a Water and Drainage Strategy should be provided for major development.

DM14 Managing Waste

Development should demonstrate how it will provide appropriate storage facilities for residual waste and recycling as a component element to implement the waste management hierarchy of reduce, reuse and recycle.

Major development should provide a Waste Reduction Management Plan for the construction and operation stages.

These measures should be localised, providing information relevant to the development and the provisions in the surrounding area. Specifically this information should:

- a. Identify that waste is expected to be produced by occupants and how this will be managed, stored and collected appropriately
- b. Identify monitoring provisions to ensure compliance with the Waste Reduction Management Plan

DM20 Supporting a sustainable transport network

Transport Assessments will be required for all major developments and developments that have a significant impact on the transport network.

Where significant transport impacts have been identified in the Transport Assessment, development will be required to provide a Travel Plan.

The Council will require the delivery of transport infrastructure and/or improvements identified as necessary through the Transport Assessment

DM21 Sustainable transportation of freight

Development that generates a significant number of vehicle trips for goods or materials during its construction and operational phases will need to demonstrate how:

- a. the impacts on the transport network and on amenity will be avoided, remedied or mitigated through Transport Assessments, Construction Management and Logistics plans, Travel Plans and Delivery and Servicing plans
- b. movement by water and/or rail, the use of low emission vehicles, electric vehicles and bicycles has been prioritised
- c. goods vehicles are accommodated on site

DM22 Parking

Development will be required to comply with the parking standards set out in the Managing Development Document

Development will be required to prioritise sustainable approaches to any off-street parking by:

- a. requiring space for on-site car clubs and pool car schemes
- b. securing the provision of electric charging points and parking bays for electric vehicles as part of any car parking provision
- c. ensuring an appropriate allocation of parking spaces for affordable family homes

In order to ensure suitable provision for cyclists, development will be required to:

- a. meet, and preferably exceed, the minimum standards for cycle parking set out in the Managing Development Document
- b. provide, where suitable, land for and/or contributions towards new publicly accessible shared cycle hire scheme docking station(s)

DM24 Place Sensitive Design

Development will be required to be designed to the highest quality standards, incorporating principles of good design, including:

- a. ensuring the use of high quality building materials and finishes
- b. ensuring the internal design and layout of development maximises comfort and usability for occupants and maximises sustainability of the development
- c. ensuring development is designed to be easily adaptable to different uses and the changing needs of users
- d. protecting features of positive value within the Site
- e. taking into account impacts on microclimate

Development should also ensure the use of climate change mitigation and adaptation design elements, such as the use of passive solar design where appropriate.

DM25 Amenity

Development should seek to protect, and where possible improve, the amenity of surrounding existing and future residents and building occupants, as well as the amenity of the surrounding public realm by:

- a ensuring adequate levels of daylight and sunlight for new residential developments
- b not resulting in an unacceptable material deterioration of the sunlighting and daylighting conditions of surrounding development including habitable rooms of residential dwellings, schools, community uses and offices and not result in an unacceptable level of overshadowing to surrounding open space.
- c not creating unacceptable levels of noise, vibration, artificial light, odour, fume or dust pollution during the construction and life of the development.

DM29 Achieving a zero carbon borough and addressing climate change

Development will be required to be accompanied by an Energy Assessment to demonstrate its compliance with the target to achieve a 45% CO₂ emissions reduction on 2013 Building Regulations for residential development

Development will be required to connect to or demonstrate a potential connection to a decentralised energy system unless it can be demonstrated that this is not feasible or viable.

Sustainable design assessment tools will be used to ensure climate change mitigation measures are maximised within development. For residential developments this will be the Code for Sustainable Homes Level 4 and a BREEAM 'Excellent' rating for non-residential development.

London Borough of Tower Hamlets Core Strategy Spatial Policy 11 requires all development to provide a reduction of CO₂ emissions through on-site renewable energy generation. Therefore the integration of renewable energy technologies should be maximised on-site to provide the highest achievable CO₂ savings where feasible.

5.8.9 Planning Obligations SPD (2012)

The Supplementary Planning Documents (SPDs) provide guidance for Proposed Development to ensure compliance with local policies.

Proposed Development are encouraged to refer to the strategies of the SPDs which set out the contributions required for the council's priorities for any qualifying development.

Some important points in the document are:

- a. Where officers consider all opportunities to meet the relevant London Plan carbon dioxide reduction targets on-site have been exhausted, contributions to a carbon offset fund will be sought to meet the shortfall.
- b. In identified decentralised energy areas, financial contributions will be sought towards the extension of the distribution network and connections to it.
- c. Where a development is not able to connect to the decentralised energy network the development must demonstrate full compliance with the current policies.

5.8.10 Tower Hamlets Draft Local Plan 2031 – Chapter 9: Protecting and managing our environment

5.8.10.1 Policy S.ES1: Protecting and enhancing our environment

The Policy requires that Proposed Development minimise the use of natural resources and work proactively to protect and enhance the quality of the natural environment, through:

- a. reducing the areas of sub-standard air quality in the borough and contributing towards delivering the objectives of the latest Tower Hamlets Air Quality Action Plan;
- b. protecting and enhancing biodiversity, with the aim of meeting the objectives of the latest Tower Hamlets Local Biodiversity Action Plan and Thames River Basin Management Plan and improving opportunities to experience nature, in particular in deficient areas;
- c. using the sequential and exceptions tests to direct development away from high flood risk areas and reduce flood risk in the borough;
- d. reducing clean and waste water use;
- e. following the energy hierarchy: be lean, be clean and be green;
- f. maximising climate change adaptation measures; and
- g. improving water and land quality and mitigating the adverse effects of contaminated land on human health.

5.8.10.2 Policy D.ES2: Air quality

The Policy requires that Proposed Development meet or exceed the 'air quality neutral' standard, including promoting the use of low or zero emission transport and reducing the reliance on private motor vehicles.

An air quality impact assessment, based on current best practice, is required as part of the planning application for:

- a major developments;
- b developments which will require substantial earthworks or demolition;
- c developments which include education and health facilities or open space (including child play space); and
- d new build developments in areas of sub-standard air quality (as shown on the Policies Map).

Where an air quality assessment indicates that a development will cause harm to air quality or where end users could be exposed to poor air quality, development will be resisted unless mitigation measures are adopted to reduce the impact to acceptable levels.

New build developments which propose to provide any private, communal, publicly accessible open space or child play space in areas of sub-standard air quality are required to demonstrate that they have considered the positioning and design of the open space to reduce exposure of future users to air pollution.

5.8.10.3 Policy D.ES3: Urban greening and biodiversity

The Policy requires that Proposed Development protect and enhance biodiversity, through:

- a maximising the provision of 'living building' elements;
- b retaining existing habitats and features of biodiversity value or, if this is not possible, replacing them within the development, as well as incorporating additional measures to enhance biodiversity, proportionate to the development proposed; and
- c protecting and increasing the provision of trees

Major development is required to submit an ecology assessment demonstrating biodiversity enhancement that contributes to the objectives of the latest Tower Hamlets Local Biodiversity Action Plan and the Thames River Basin Management Plan.

Planting and landscaping around developments must not include 'potentially invasive non-native species'. Invasive non-native species listed in schedule 9 of the Wildlife and Countryside Act must be controlled, and eradicated where possible, as part of redevelopment.

Development must not negatively impact on any designated European site such as Special Protection Areas, Special Areas of Conservation or Ramsar sites. Developments which might have the potential to adversely impact a Special Protection Area or Special Area of Conservation outside the borough will be required to submit Habitat Regulations Assessments.

Developments which affect a Site of Importance for Nature Conservation, or significantly harm the population or conservation status of a protected or priority species, are required to be managed in accordance with the following hierarchy:

- a Adverse impacts to the biodiversity interest should be avoided.
- b Where avoidance is not possible, proposals must minimise and mitigate the impact to the biodiversity interest.
 - a As a last resort for exceptional cases where the benefits of the proposal clearly outweigh the biodiversity impacts, appropriate compensation will be sought.
 - b Where appropriate compensation is not possible, planning permission will be refused.

5.8.10.4 Policy D.ES4: Flood risk

1. **The Policy requires that Proposed Development be located in areas suitable for the vulnerability level of the proposed uses with:**
 - a highly vulnerable uses not allowed within flood zone 3a;
 - b essential infrastructure and more vulnerable uses within flood zone 3a required to pass the exception test; and
 - c highly vulnerable uses within flood zone 2 required to pass the exception test.
2. **Development is required to provide a flood risk assessment if it meets any of the following criteria.**
 - a The development site is over 1 hectare in size within flood zone 1.
 - b The site is within flood zones 2 or 3a.
 - c The development may be subject to other sources of flooding, as defined in the Tower Hamlets Strategic Flood Risk Assessment.
3. **The flood risk assessment should include:**
 - a a sequential test if the development is in flood zone 2 or 3;
 - b the risks of both on and off-site flooding to and from the development for all sources of flooding including fluvial, tidal, surface run-off, groundwater, ordinary watercourse, sewer and reservoir;
 - c an assessment of tidal risk in the event of a breach in the River Thames defences;
 - d the impact of climate change using the latest government guidance;
 - e demonstration of safe access and egress; and
 - f mitigation measures, taking account of the advice and recommendations set out in the Tower Hamlets Strategic Flood Risk Assessment.
4. Site design of development which meets criteria outlined in part 2 above is required to:
 - a undertake a sequential approach to development layout to direct highest vulnerability uses to areas of the site with lowest flood risk; and
 - b incorporate flood resilience and/or resistance measures.

5. Development is required to protect and where possible increase the capacity of existing water spaces and flood storage areas to retain water.
6. Development is required to enable effective flood risk management through:
 - a requiring development along the River Thames, River Lea and its tributaries to be set back by the following distances unless significant constraints are evidenced:
 - i. a minimum of a 16-metre buffer strip along a tidal rive; and
 - ii. a minimum of a 8-metre buffer strip along a fluvial river.
 - b optimising opportunities to realign or set back defences and improve the riverside frontage to provide amenity space and environmental enhancement.

5.8.10.5 Policy D.ES5: Sustainable drainage

1. The Policy requires that Proposed Development reduce the risk of surface water flooding, through demonstrating how it reduces the amount of water run-off and discharge from the site through the use of appropriate water reuse and sustainable drainage systems techniques.
2. Major development is required to submit a drainage strategy which should demonstrate that surface water will be controlled as near to its source as possible in line with the sustainable drainage systems hierarchy.
3. Development is required to achieve the following run-off rates:
 - a New development in critical drainage areas is required to achieve a greenfield run-off rate and volume leaving the site.
 - 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.

5.8.10.6 Policy D.ES6: Sustainable water management

1. The Policy requires that Proposed Development reduce water consumption: new residential developments must achieve a maximum water use of 105 litres per person per day and refurbishments and other non-domestic development should meet BREEAM water efficiency credits.
2. New development is required to minimise the pressure on the combined sewer network.
3. Major development is required to demonstrate that the local water supply and public sewerage networks have adequate capacity both on and off-site to serve the development, taking into consideration the cumulative impact of current and Proposed Development.

5.8.10.7 Policy D.ES7: A zero carbon borough

1. The Policy requires that developments meet the carbon dioxide emission reduction standards as set out below.

Residential development	
Year	Improvement on the 2013 building regulations
2016-2031	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 off-set through a cash in lieu contribution).

Non-residential development	
Year	Improvement on the 2013 building regulations
2016-2019	45% regulated carbon dioxide emissions reduction
2019 – 2031	Zero carbon (to be achieved through a minimum 45% reduction in regulated carbon dioxide emissions and the remaining regulated carbon dioxide emissions to 100% - to be off-set through a cash in lieu contribution).

2. Development is required to maximise energy efficiency based on the following standards:
 - a All new non-residential development and non-self-contained residential accommodation over 500 square metres floorspace (gross) must meet or exceed BREEAM 'excellent' rating.
 - b All major non-residential refurbishment of existing buildings and conversions over 500 square metres floorspace (gross) must meet at least BREEAM non-domestic refurbishment 'excellent' rating.
 - c As a minimum, all self-contained residential proposals will be strongly encouraged to meet the Home Quality Mark.
3. Major residential and major non-residential development will require an energy assessment. Minor non-residential development will be strongly encouraged to prepare an assessment.
4. The energy assessment should demonstrate how the development has been designed in accordance with the energy hierarchy, especially how it will:
 - a maximise energy efficiency as per the requirements set out in part 2;
 - b seek to provide up to 20% reduction of carbon dioxide emissions through on-site renewable energy generation; and
 - c outline the feasibility of low nitrogen dioxide decentralised energy.
5. The sustainable retrofitting of existing development with provisions for the reduction of carbon emissions will be supported.

5.8.10.8 Policy D.ES8: Contaminated land and storage of hazardous substances

1. Where development is proposed on contaminated land or potentially contaminated land, The Policy requires that a desk study and site investigation in line with current guidance be carried out and remediation proposals agreed to deal with the contamination before planning permission is granted.
2. Development will not be supported which involves the storage or use of hazardous substances or which is located in close proximity to hazardous installations where it would cause a significant threat to health and the environment.
3. Certain contaminating developments, processes or land uses proposed within or in close proximity to sensitive locations, including source protection zones, may not be acceptable.

5.8.10.9 Policy D.ES9: Noise and vibration

1. The Policy requires that Proposed Development:
 - a use the most appropriate, layout, orientation, design and use of buildings to minimise noise and vibration impacts;
 - b identify/outline mitigating measures to manage noise and vibration from new development, including during the construction phase;
 - c separate noise-sensitive development from existing operational noise; and
 - d provide a noise assessment where noise-generating development or noise-sensitive development is proposed.
2. Where new noise-sensitive land uses are proposed in proximity to existing noise-generating uses, such as cultural and entertainment venues, development is required to robustly demonstrate how conflict with existing uses will be avoided, through mitigation measures.
3. Development is required to demonstrate that the level of noise emitted from any new heating or ventilation plant will be below the background level by at least 10dBA.

5.8.10.10 Policy D.ES10: Overheating

The Policy requires that Proposed Development ensure that buildings (both internally and externally) and the spaces around them are designed to avoid overheating and excessive heat generation, while minimising the need for internal air conditioning systems.

5.8.11 LBH LOCAL POLICY

Core Strategy (2010)

The London Borough of Tower Hamlets Core Strategy is one of the key tools to realise the vision of the Community Plan. It provides a 15-year-plan which will shape what the borough looks like in the future.

The Core Strategy is the principal document of the Local Development Framework. It sets out the borough's long-term spatial strategy to help to deliver the aspirations of the Community Plan until 2025. It defines where, how and when development should be delivered across the borough through Strategic Objectives and Spatial Policies.

5.8.11.1 Core Strategy Policy 6: Transport and Land Use

The Council will encourage patterns and forms of development that reduce the need to travel, particularly by car, and will ensure that development results in the highest standard of design quality, environment and facilities for pedestrians and cyclists. The Council will aim to improve the quality of an area and the way it functions in transport terms by:

- Meeting access standards, and in turn the mobility requirements of all users, including people with sensory or mobility difficulties,
- Maximising accessibility for pedestrians, cyclists and public transport users,
- Mitigating any potentially negative impacts of the development on the transport network,
- Promoting public transport improvements, including rail,
- Safeguarding sites for Crossrail 2 alignment and construction access,
- Managing travel demand by car,
- Seeking reductions of through traffic,

Reduced or preferably no on-site parking in areas of good accessibility, Reallocating road space to sustainable modes of travel where appropriate.

5.8.11.2 Core Strategy Policy 8: Focusing Social Investment

The Council will work with key social infrastructure providers, such as The Learning Trust, City and Hackney Primary Care Trust, the Metropolitan Police, Hackney Homes, Job Centre Plus and other public and voluntary and community sector partners to align investment programmes, planning contributions and other funding sources to deliver new or enhanced social infrastructure in Hackney where the evidence demonstrates are most in need and growth areas including:

- Hackney Central
- Dalston
- Improved Railway Corridors (East London line and North London Line)
- South Shoreditch
- Woodberry Down/Manor House
- Hackney Wick
- Stamford Hill
- Estate Renewal Areas

5.8.11.3 Core Strategy Policy 12: Health and Environment

The Council will encourage development that contributes to an urban and natural environment that enables all Hackney residents regardless of age, family type and ability to lead a more healthy and active lifestyle in which regular physical activity plays a greater role and the physical environment contributes more to tackling childhood obesity.

The Council and other partners will work together to create a more healthy outdoor and indoor environment through:

- Encouraging appropriate refurbishment of its leisure centres, community halls and school halls to meet Hackney's need for an additional 4 sports halls and 5 commercial size fitness centres.
- Creating new publicly accessible open spaces where there are deficiencies, including Dalston, or investing in improving the quality of existing spaces, especially Hackney Marshes.
- Favourably facilitating appropriate investment into improving the quality of Hackney pedestrian and cycle network especially around Hackney Wick and the Olympic Park area.

5.8.11.4 Core Strategy Policy 19: Housing Growth

Hackney will seek to ensure that proposals for new residential development and residential conversions including changes of use, incorporate a mix of dwelling types and sizes that reflect and respond to Hackney's current and future housing needs, and taken together with residential extensions, positively contribute to the creation of mixed, sustainable communities and neighbourhoods. The Council's approach will be informed by up to date assessments of local housing need and demand.

Hackney will seek to resist the loss of family accommodation and promote the provision of new family accommodation (3 bed or larger) of all tenures as well as seeking to provide a mix of housing to meet the identified needs of different types of households within the borough and to create cohesive, tenure diverse communities.

Planning permission will not be granted for any development which results in a net loss of residential units, unless acceptable plans are in place for replacement development at an equivalent or higher density.

5.8.11.5 Core Strategy Policy 20: Affordable Housing

Affordable housing will be sought from residential-only developments and mixed use developments incorporating residential use. On site provision of affordable housing will always be sought in the first instance. Where there are exceptional reasons, the provision of alternative or 'surrogate' off site affordable units may be considered. Commuted sums that will enable the provision of a commensurate number and mix of affordable units in lieu of on-site or off-site provision will be only considered as a last resort. In the case of commuted sums the Council will direct the funding to a partnering Registered Social Landlord or a Developer which has qualified as an Investment Partner with the HCA.

Affordable housing will be sought on all developments comprising 10 residential units or more. New housing should seek to meet a borough-wide affordable housing target of 50% of all units subject to site characteristics, location and overall scheme viability. The Greater London Authority's Affordable Housing Toolkit Assessment or a similar scheme appraisal model should be used in presenting the viability of a scheme.

In line with identified need and as a borough wide guide the required tenure split of affordable housing will be 60% social rented and 40% Intermediate (by unit). On individual sites the exact tenure split will be guided by up to date assessments of specific local housing need and site and neighbourhood characteristics. On individual development sites, the exact tenure split will be guided by up to date assessments of local housing need and site or neighbourhood characteristics.

5.8.11.6 Core Strategy Policy 25: Historic Environment

All development should make a positive contribution to the character of Hackney's historic and built environment. This includes identifying, conserving and enhancing the historic significance of the borough's designated heritage assets, their setting and where appropriate the wider historic environment.

5.8.11.7 Core Strategy Policy 26: Open Space Network

All open and green spaces should be well-managed and enhanced to improve quality, capacity and public accessibility, to support a diverse and multi-functional network of open spaces. Where appropriate, new open spaces will be created which are publicly accessible and linked to other open spaces to enhance the borough's green infrastructure. Particular attention should be given to improved provision in the identified areas of deficiency.

There will be no loss of open space within Hackney's network of public and other designated open spaces as identified on the Proposals Map and Table 8.1 unless:

there is compensatory contiguous replacement of better or equivalent quantity and quality of public open space and setting including facilities to enhance or diversify people's experience of the open space, and

replacement is in a location with better or equivalent access by walking, cycling or public transport, and

the quality of the remaining and replacement open space is not eroded by the Proposed Development.

Development will only be permitted on Amenity Green Space, including shared spaces on residential estates but excluding spaces attached to single dwelling houses or flats where: replacement and/or enhancement of open space of better or equivalent quality is provided either on site or a location within the vicinity of the site, especially in the identified areas of deficiency or high density, and wherever possible any replacement connects to the network of open space infrastructure including the green links or green corridor, or it can be shown that the relationship between buildings and associated open space(s) can be improved in terms of use, security, setting and landscape quality.

5.8.11.8 Core Strategy Policy 27: Biodiversity

The Council will protect, conserve and enhance nature conservation areas, in particular in and around Dalston and Shoreditch for their biodiversity value, and develop a local habitat network contributing to the wider Green Grid.

Development will be encouraged to include measures that contribute to the borough's natural environment and biodiversity. Where appropriate, a biodiversity survey of the site must be carried out, with actions to enhance the biodiversity value, mitigate or compensate for any harm to habitats and / or species

5.8.11.9 Core Strategy Policy 28: Water and Waterways

The natural habitat and setting of the waterways and their riparian areas will be protected and enhanced. Where appropriate, public access, continuous green links, towpaths and heritage value along the waterfront should be maintained, improved and extended for the purposes of nature conservation, leisure, recreation, education and economic activity. Development alongside the waterways and their riparian areas may be permitted where:

- there is no conflict with nature conservation and biodiversity interest, that cannot be addressed through mitigation or compensatory measures, and
- the proposal reuses brownfield land, and
- the design makes a positive contribution to the character and appearance of the waterfront area and setting, including where appropriate the incorporation of an undeveloped buffer strip alongside the watercourse.

5.8.11.10 Core Strategy Policy 29: Resource Efficiency and Reducing Carbon Dioxide Emissions

Hackney will address climate change at a local level through the inclusion of mitigation and adaptation measures to reduce CO2 emissions from buildings. This will be achieved by:

- Ensuring that building design is to a high standard, adhering to the principles of sustainable design and construction;
- The inclusion of measures to reduce resource consumption in all residential development, in line with the Mayor of London's Energy Hierarchy;
- All proposals for new residential development being rated against the Code for Sustainable Homes*, and BREEAM standards for non-residential proposals;
- Encouraging the retrofitting of water efficient devices and energy saving equipment to existing residential, industrial or commercial premises.

5.8.11.11 Core Strategy Policy 30: Low Carbon Energy, Renewable Technologies and District Heating

As part of the shift to a low-carbon Hackney and to tackle climate change, opportunities to generate energy from non-fossil fuel and/or low carbon sources will be encouraged throughout the borough. District heating networks will be sought in the two main town centres of Hackney Central and Dalston, new communities such as Hackney Wick and as part of large estate renewal projects, such as Woodberry Down. Existing and proposed decentralised network routes will be safeguarded and protected to provide future connection opportunities from new and refurbished developments.

Applications for new or replacement street appliances (such as bus stops) to incorporate off-grid solar power, or to offset CO2 by other means will be encouraged.

5.8.11.12 Core Strategy Policy 31: Flood Risk

The suitability of land for development and the granting or refusal of any planning permission on all sites will be informed by the North London Strategic Flood Risk Assessment and the Sequential and Exception tests as laid out in PPS25.

All development proposals in Hackney must contribute to the long-term flood management targets of the Thames Catchment Flood Management Plan and demonstrate an overall reduction in flood risk, including the use of Sustainable Urban Drainage Systems (SUDs). Development that does not support the aims of PPS25 will be refused.

Proposals for new development should ensure that all forms of flood risk are fully assessed and measures taken to reduce flood risk. Flood Risk Assessments (FRAs) are required for all developments within Flood Zones 3, 2 and sites greater than one hectare in size in Flood Zone 1. Sustainable options should be identified to reduce flood risk to and from the development. New development shall be designed to include flood resilience and resistance measures where appropriate.

5.8.11.13 Core Strategy Policy 32: Waste

New development in Hackney must support the objectives of sustainable waste management. This includes:

- Minimising waste during design and construction of development; including production of site waste plans to arrange for efficient materials and waste handling;
- The incorporation of integrated and well designed recycling, composting and residual waste storage facilities in all new developments, and reuse storage where appropriate;
- Working with partners in the North London Waste Authority to produce the North London Waste Plan which will identify locations suitable for new waste management facilities;
- Seeking to maximise self-sufficiency in waste management capacity in line with the London Plan;
- Seeking to minimise waste creation and to exceed the London Plan recycling targets for Hackney;
- Safeguarding existing waste sites unless compensatory provision is made; facilitating the maximum use of existing waste sites;
- Monitoring changes in waste management facilities, waste arisings, and the amount of waste recovered for disposal;
- Promoting waste reduction and increasing recycling in the community in line with the emerging North London Waste and Recycling Strategy

5.8.11.14 Core Strategy Policy 33: Promoting Sustainable Transport

Hackney is committed to prioritising sustainable transport, walking and cycling over private car use, and providing safe and convenient access to rail and bus travel. The need to travel will be reduced through the efficient spatial arrangement of activities and land use throughout the borough. Significant trip generating development should be located in areas with high PTAL scores (5 or above), such as Town Centres or identified Growth Areas.

Travel plans will be required for all development over a certain size. To minimise noise and disturbance, operations that require heavy movement of goods should be located close to the higher level road network as defined by Transport for London.

Car parking will be controlled in line with regional policy and the local parking standards in the emerging Sustainable Transport SPD. Where appropriate car-free developments, car club bays and electric vehicle charging provision will be required.

5.8.12 Development Management Local Plan (2015)

5.8.12.1 Policy DM3 – Promoting Health and Well-Being

Development in the Borough should promote health and well-being. Measures to ensure this include as follows:

- i. Ensuring that development is designed to promote physical activity, through appropriate arrangement of buildings and uses, access, open space and landscaping, the provision of facilities to support walking and cycling, and schemes meet 'Secured by Design' principles;
- ii. Integrating development with the public realm and public transport, and in particular ensuring that local facilities and services are easily accessible by foot or bicycle;
- iii. Ensuring that supporting infrastructure is in place to support development, such as providing or contributing to open space, child play facilities, indoor and outdoor leisure provision, and healthcare facilities;

- iv. Development should not have an adverse impact on the environment, such as through air, noise and water pollution, and remediation of contaminated land prior to development must be undertaken. The Council will require the submission of Health Impact Assessments for major schemes of 100 housing units or more, or 10,000 sq.m or more for all other uses considered to have potential impacts on health and well-being, depending on the nature and scale of such development, to be considered at pre-application stage.

5.8.12.2 Policy DM21 – Affordable Housing Delivery

Proposals for residential development must comply with Core Strategy Policy 20, 'Affordable Housing' in relation to the provision of social/affordable rented and intermediate housing. In addition, requirements to provide onsite provision of affordable housing will apply to:

- i. All developments comprising of 10 or more residential units, including part conversion/part new-build schemes
- ii. Residential developments with a site area of more than 1000 sq.m or 0.1Ha;
- iii. Phased developments where a housing development is part of a larger development meeting or exceeding the above thresholds.

The Council may refuse proposals where it is considered that the site has the capacity to provide residential development to meet or exceed the above thresholds.

Where additional homes are proposed through amended planning applications (i.e. through re-submissions or variations of existing planning applications or submission of a new planning application for an extension resulting in an increase in existing homes) within four years of the commencement of the original planning permission and the total number of homes proposed increases to 10 or more, or the site threshold above, affordable housing for 50% of all residential units will be sought preferably on-site, or if not possible by way of in-lieu contributions.

5.8.12.3 Policy DM31 – Open Space and Living Roofs

Development proposals proposing 10 or more residential units and / or more than 1000 sq.m of commercial floorspace, will be expected to provide the following levels of communal amenity open space:

- 10 sq.m per person from residential development schemes,
- 4 sq.m per employee from commercial development schemes.

The layout and arrangement of open space must be of high quality and functionality and must be incorporated into the design of a scheme from the outset. Communal open space should be made publicly accessible where possible. Open space should maximise bio-diversity benefits and food growing opportunities, and should include the provision of living roofs which should be suitable for a range of activities where feasible.

5.8.12.4 Policy DM33 – Allotments and Food Growing

The Council supports the provision of new, improved and expanded allotments, and local food growing initiatives and operations, especially on existing open spaces and temporary derelict land where short or medium-term development is not planned. Proposals will need to ensure that adequate provision has been made to support these uses, such as the need to address storage of equipment, composting, equality of access and security, and that the provision of such facilities does not detrimentally impact on the character, appearance and amenity of the surrounding area.

5.8.12.5 Policy DM35 – Landscaping and Tree Management

Proposals for development will seek to retain trees considered to be of amenity value, especially veteran trees, hedgerows and natural features on development sites. Existing landscaping features considered to be of value should also be retained and protected where possible and appropriate, and should be incorporated within detailed landscaping schemes.

Landscaping plans should include environmentally appropriate planting for the specific location, demonstrate appropriate sustainable irrigation plans and should ensure that planting design does not impact negatively on the structure of nearby buildings or hinder accessibility.

The Council will refuse planning permission and/or consent for the removal of protected trees (trees under a TPO and those within conservation areas), and for proposals that would have a detrimental impact on the health and amenity of such trees, except in exceptional circumstances and/or where over-riding planning benefits are demonstrated. In such cases, compensatory measures will be required for suitable replacements and/or additional planting, or contributions to planting offsite.

The removal of non-protected trees as part of development schemes will not be supported unless adequate replacement planting is proposed, or the removal is in the interests of good arboricultural practice.

5.8.12.6 Policy DM37 – Sustainability Standards for Residential Development

All proposals for residential development must meet the requirements set out in the Building Regulations.

Householder extensions should comply with Building Regulations and will be strongly encouraged to include efficiency measures. The Council will encourage improvements in the efficiency standards of existing buildings through retro-fitting where this is possible.

All development will be required to minimise the use of water by incorporating savings measures in order to achieve set water use targets in the London Plan. Hackney will welcome and encourage new build proposals which achieve PassivHaus certification.

5.8.12.7 Policy DM38 – Sustainability Standards for Non-Residential Development

Major non-residential developments (with a site area of more than 1,000 sq.m) must achieve the BREEAM 'Excellent' rating (or an equivalent rating under any other system which may replace it) and where possible achieve the maximum number of water credits, and must be built to the following standards:

- i. 2013 – 2016: minimum of 40% reduction in carbon dioxide emissions
- ii. 2016 – 2019: Building Regulations standards
- iii. 2019 – 2031: zero carbon

5.8.12.8 Policy DM39 – Offsetting

Where it is demonstrated that it is not possible to reduce CO2 emissions on-site by the specified levels, carbon off-setting payments will be required. These will be secured via legal agreement.

5.8.12.9 Policy DM40 – Heating and Cooling

New build developments and all major development should take into account the need to adapt to higher temperatures, avoid and mitigate overheating and meet the need for cooling in terms of their layout, design, construction, materials and landscaping.

Major developments must demonstrate that the heating, cooling and power systems have been selected to minimise carbon dioxide emissions, in line with the London Plan targets. They should be designed to connect to existing or proposed decentralised heat and energy networks and where none exists commit to future proofing. Minor developments should, where technically possible, similarly be designed to connect to existing or planned decentralised energy networks

Opportunities to adapt existing buildings, spaces and places to manage higher temperatures should be maximised.

5.8.12.10 Policy DM42 – Pollution and Water and Air Quality

A. General

Detailed survey and assessment information will be required as appropriate in order for the Council to consider any possible pollution impact linked to development proposals. Necessary mitigation measures will be secured through negotiation on a scheme, or via the use of planning conditions or planning obligations where appropriate. Permission may be refused for proposals that cannot provide adequate mitigation.

B. Pollution

Development proposals should include measures to reduce adverse noise, vibration, and/or odour impacts and minimise unnecessary light pollution, particularly close to light and noise sensitive areas, the public realm and open space.

C. Air Quality

The Council will refuse the grant of planning permission in the most polluted areas of the Borough until the applicant has satisfactorily demonstrated how emissions from the construction process of the Proposed Development will be minimised and controlled, so that the Council's air quality objectives are not exceeded or further exceeded, and the ongoing use of the development will not contribute to a worsening of air quality and be minimised as far as practicably possible. All development should be designed to mitigate its impact on air quality both during the construction process and lifetime of the completed development. Individually or cumulatively, development proposals should not worsen air quality.

D. Water Quality

In consultation with the Council and where necessary the Environment Agency, the applicant must consider the risks arising from development (including design, construction and operation) to water quality, and where appropriate include measures to reduce the risk to the water environment and aim to protect and improve the water quality of surface water and groundwater. Planning permission may be refused if adequate mitigation measures are not provided.

5.8.12.11 Policy DM43 – Flooding and Flood Risk

A. General

Development may be required to provide or contribute to strategic or site-specific infrastructure in line with the Council's CIL and/or Planning Contributions SPD to address and mitigate the impacts of flood risk, particularly when they are located in areas considered at high risk of surface water and fluvial flooding.

B. Surface Water Flood Risk

Borough Wide

All development should utilise Sustainable Drainage Systems (SuDS), unless there are practical reasons for not doing so, and manage surface water run-off as close to source as possible. Where there will be a net increase in impermeable area, development must include at least one 'at source' SuDS measure (e.g. waterbutt, rainwater harvesting tank, bioretention planter box etc) resulting in a net improvement in water quantity or quality discharging to a sewer. All developments should reduce both the volume and rate of existing run-off from site by at least 50% where reasonably practicable through the appropriate incorporation of SuDS. Amenity and biodiversity benefits should be maximised on all schemes, for example by incorporating well-designed, safe SuDS features which make use of clean water at the surface to enhance landscape design and create a sense of place.

C. Critical Drainage Areas (which include Local Flood Risk Zones)

All development in Critical Drainage Areas is required to incorporate measures to reduce the overall level of surface water flood risk in the CDA through the layout and form of the development, including the appropriate application of SuDS. All major developments located in CDAs should reduce runoff to that of a predevelopment Greenfield runoff rate (calculated in accordance with IoH12419). It is recommended that a SuDS treatment train is utilised to assist in this reduction.

In Local Flood Risk Zones, development may be required (subject to the site location and degree of flood hazard) to submit a Flood Risk Assessment (FRA) to ensure that development will remain safe and will not increase the risk to others.

5.8.12.12 Policy DM44 – Movement Hierarchy

All development proposals should prioritise transport-related users in line with the hierarchy set out below:

- Pedestrians and those with mobility difficulties;
- Cyclists;
- Public transport;
- Coaches and taxis/private hire vehicles;
- Motorcycles;
- Rail freight;
- Commercial and business users including road haulage;
- Car borne shoppers and visitors; and
- Car borne commuters.

All new development must be successfully integrated into the existing transport networks and manage demand through traffic restraint and proven demand management tools. Proposals for development on large sites in particular will be required to promote walking and cycling permeability and ensure that linkages and publicly-accessible through routes are created to successfully integrate the development into the wider street network.

5.8.12.13 Policy DM46 – Walking and Cycling

All development proposals must:

- Comply with policy DM45;
- Take full account of the needs of pedestrians, cyclists and other users, including those with disabilities, meeting mobility requirements as appropriate;
- Provide for generous levels of secure cycle parking (as per London Plan Standards) and provide sufficient provision of changing and shower facilities for cyclists in employment sites;
- Contribute financially to publicly-accessible cycle parking located in the public realm within the vicinity of the site, e.g. outside local shops if they are for uses that are publicly accessible. This will be secured through s106 legal agreement or CIL as appropriate;
- Promote walking and cycling safety, through providing a high-quality street environment and well lit, signed and well maintained thoroughfares and safe facilities for crossing roads, junctions and at transport interchanges;
- Ensure new roads are designed for reduced traffic speeds;
- Ensure accessibility for pedestrians and cyclists is maintained at all times with presumption in favour of maximum permeability for cycling; and viii. Consider 'desire lines' to key local facilities including shops and schools, including safer routes to schools and public transport hubs.

5.8.12.14 Policy DM47 – Parking, Car Free and Car Capped Development

- A. Hackney will expect to see car free and car capped developments, in most locations throughout the Borough but particularly in those that:
- Have a high PTAL rating (Level 4, 5 or 6), or
 - Are near a wide range of amenities including shops and leisure activities, or
 - Are within an operational Controlled Parking Zone or area of known parking stress
 - Where the provision of off-street parking would be likely to cause conflict with pedestrians and other road users.

The Council will expect adequate dedicated disabled parking provision in accordance with the London Plan standards.

For development proposals outside of CPZs, developers will be required to submit a parking stress survey for assessment by the Council. Where a high level of parking stress is found, the Council will expect the proposed scheme to be car-free.

B. Car clubs

The Council will support the provision of car clubs, including the provision of wheelchair accessible car club parking bays, where appropriate. Major residential and mixed-use developments will be required to contribute towards the provision of car clubs in the vicinity of the development, through CIL and/or Section 106, as appropriate.

C. The Council will require a Transport Assessment/Statement to justify any proposed parking, subject to the thresholds referred to in paragraph 8.2.3 and 8.2.4. Where car parking is proposed the following will apply:

- All developments, including redevelopments and changes of use, should provide well-designed, high quality parking facilities in accordance with the London Plan (2015) maximum car parking and minimum cycle parking standards;
- Any permitted provision is designed to be safe and secure, to achieve placemaking objectives, to minimise land take and the urban heat island effect by providing adequate soft landscaping, permeable surfaces and other treatments to off-set adverse impacts of surface water run-off;
- Parking proposals will be required to preserve a buildings setting and the character of the surrounding area by avoiding over-dominance of parking and hard-standing surface areas to ensure that front gardens make a positive contribution to street appearance; and
- The provision of electric charge points in accordance with the standards set out in the London Plan.

5.8.13 Hackney Local Plan 2033 (not yet adopted)

PP1 Public Realm

Public realm improvements and spaces between buildings must be considered as part of all development schemes. Where appropriate, development should:

- Integrate new and existing public realm: improving the quality and function of existing routes; creating well-defined streets and open spaces; and taking advantage of existing topography and landscape features;
- Create wide, clear and level pavements and avoid unnecessary street clutter;
- Provide landscaping, planting, seating, drinking water fountains, shade and shelter, street lighting and signage - incorporating these into the frontage of a building where possible;
- Make it easy for people to find their way around, by marking focal points and accesses to buildings and open spaces;
- Encourage community interaction, safe building entrances and exits, and appropriately designed lighting and security features as an integral part of the development;
- Create multi-functional shared public space for users of all ages, allowing opportunity for informal play and recreation as well as for sitting and lingering.

5.8.14 LP2 Development and Amenity

- A. All new development must be appropriate to its location and should be designed to ensure there are no significant adverse impacts on the amenity of occupiers and neighbours. The individual and cumulative impacts of development proposals on amenity will be considered in assessing their acceptability.

Consideration of the merits of development proposals will be balanced against the impact on amenity. These considerations will also be applied to waterways and canals

- B. Amenity considerations include the impact of development on:

- Visual privacy and overlooking;
- Overshadowing and outlook;
- Sunlight and daylight, and artificial light, levels;
- Vibration, noise, fumes and odour, and other forms of pollution;
- Microclimate conditions;
- Safety of highway users

5.8.15 LP8 Social and Community Infrastructure

- A. The Council in partnership with service providers will plan for the following infrastructure up to 2033:

- Education
- Health and Social Care Facilities
- Sport and Leisure Facilities
- Libraries, Museums and Archives
- Youth Facilities
- Community Facilities
- Cultural Facilities

- B. Proposals for social and community infrastructure will be supported where they meet all of the following criteria:

- meet the current identified need; and
- are of a high quality and inclusive design providing access for all; and
- provide flexible, affordable and adaptable buildings and where possible provide mixed used development, co-located with other social infrastructure uses and maximise use of buildings in evenings and at weekends.

- C. Facilities should be located in places that are accessible by walking, cycling or public transport for its end users.

- D. Proposals involving the loss of existing social and community infrastructure will not be permitted unless one of the following criteria is met:

- a replacement facility of equivalent or better quality that meets the needs currently met by the existing facility is provided; or
- adequate alternative facilities are already within walking distance, which are capable of meeting the needs currently being met by the existing facility without leading to a shortfall in provision for the specific social infrastructure; or
- It has been demonstrated that the facility is no longer required in its current use and it has been demonstrated that it is not suitable and viable for any other forms of social infrastructure for which there is a defined need in the locality, or for which there is a current or future need identified in the Infrastructure Needs Assessment and Delivery Plan.

- E. The incorporation of community facilities into mixed use residential schemes where it meets an identified need will be supported.
- F. New development should have regard to existing social infrastructure capacity, and where Proposed Development is expected to place additional pressure on existing social infrastructure by increasing demand, these developments will be expected to contribute towards the provision of additional social infrastructure to meet needs, either through on-site provision or through contributions towards providing additional capacity off-site.

5.8.16 LP9 Health and Wellbeing

- A. New development that contributes to a high-quality environment that enables all Hackney residents to lead healthier and active lifestyles and reduce health inequalities will be supported, subject to all other plan policies.
- B. New development will only be permitted where all of the following criteria are met. The development must:
 - i. Be designed to promote mental and physical activity and wellbeing, and reduce environmental factors which can contribute to poor health through appropriate arrangement of buildings and uses, access, open space and landscaping, the provision of facilities to support walking and cycling, and schemes must meet 'Secured by Design' principles; and
 - ii. Integrate the public realm and public transport, and in particular ensure that local facilities and services are easily accessible by foot or bicycle.
- C. Major schemes of 50 housing units or more, non-residential developments of 10,000 sqm or more, and proposals for takeaways, betting shops and payday loan shops of any size will be required to submit a Health Impact Assessment (HIA).
- D. Large-scale commercial developments in major town centres and highly accessible locations should incorporate local social infrastructure such as free drinking fountains and free publicly accessible toilets as part of the development and provide for the long-term maintenance of facilities.

5.8.17 LP11 Utilities and Digital Connectivity Infrastructure

Utilities:

- A. As part of any major residential and commercial schemes it will be required to demonstrate, in conjunction with utility providers, that there will be adequate utility Proposed Submission Local Plan 2033 November 2018 74 infrastructure capacity to serve the development in place before the development is completed.
- B. Utility infrastructure and connections must be designed into and integrated with the development wherever possible.
- C. Utilities infrastructure provision must be completed prior to occupation. Where potential capacity problems are identified and no improvements are programmed by the utility company, the Council will require the developer to facilitate appropriate improvements.

Digital Connectivity:

- D. To ensure homes and businesses are well connected all new residential and commercial development schemes should:
 - Ensure that sufficient ducting space for future digital connectivity infrastructure is provided;
 - Maximise opportunities to provide affordable digital connectivity;
 - Support the effective use of the public realm to accommodate well-designed and located mobile digital infrastructure; and
 - Achieve greater digital connectivity speeds than set out in part R1 of the Building Regulations and where possible achieve connectivity speeds set out in the Council's most recent Infrastructure Delivery Plan.

Minor residential and commercial development schemes must meet the minimum requirements set out in Part R1 of the Building Regulations, and aim to exceed them unless it can be suitably demonstrated that this cannot be practically and feasibly achieved.

5.8.18 LP13 Affordable Housing

- A. New development must maximise opportunities to supply genuinely affordable housing on-site. The Council will seek the maximum reasonable amount of affordable housing, subject to viability and site context.
- B. Affordable housing requirements are not limited to Class C3 in the Use Classes Order and will be sought from alternative housing products and developments such as purpose-built shared housing (e.g. co-living), supported and specialist housing and student housing.
 - 1. Schemes of 10 units or more:
 - i. A minimum 50% of net housing delivered will be sought as on-site affordable housing, subject to the requirements set out in part A; and
 - ii. Conventional C3 housing schemes will need to deliver affordable housing in accordance with the following tenure split:

Affordable Housing Tenures	Type of affordable housing	Proportion required
Social Rent/London Affordable Rent	Social	60%
Hackney/London Living Rent or London Shared Ownership or other genuinely affordable products that the Council considers appropriate	Intermediate	40%

- iii. Other types of affordable housing tenures will be considered to form part of on-site affordable provision alongside or in-place of the listed tenures if its affordability relative to local ward level incomes can be demonstrated to be 'genuinely affordable housing'.
- iv. Off-site affordable housing or payments in-lieu will only be considered in truly exceptional circumstances where the Council is satisfied that off-site provision would secure a better outcome in meeting housing need. Off-site affordable housing and payments in lieu will be required to be equivalent to the 50% requirement, subject to viability.

5.8.19 LP26 New Employment Floorspace

- A. New employment floorspace (B class) in the borough will be supported in Locally Significant Industrial Areas, Priority Office Areas, Priority Industrial Areas, Central Activities Zone, and designated town centres.
- B. New development in the designated employment areas should maximise employment floorspace in line with policy LP27 Protecting and Promoting Office floorspace in the borough and policy LP28 Protecting and Promoting Industrial land and floorspace in the borough and should incorporate other priority uses such as conventional affordable housing and have active frontages at ground floor level, where appropriate.
- C. New employment space outside of the locations outlined in A will only be permitted if the following criteria are met:
 - i. it can be demonstrated that there is a reasonable prospect of it being occupied; and
 - ii. the employment use is small-scale and would contribute towards place making; or
 - iii. the employment space is being provided as part of a temporary use; and
 - iv. does not have an unacceptable impact on residential amenity.
- D. Within Priority Office Areas, office-led (B1a Use Class) development will be supported. These areas comprise of:
 - Dalston
 - Mare Street
 - Kingsland
 - Shoreditch
 - Wenlock
- E. New employment floorspace (all B use classes) should be fit-out to a standard that enables occupation by businesses, including basic mechanical and electrical services, fire detection and protection services and internal surface finishes

5.8.20 LP29 Affordable Workspace and Low-Cost Employment Floorspace

- A. New major employment and mixed used development in the borough's designated employment areas, Central Activities Zone and town centres should provide affordable or low cost workspace, equating to a minimum of 10% of gross new employment floorspace.

Re-provision of Low Cost Employment Floorspace

- B. Major employment and mixed use schemes involving the redevelopment of existing low cost employment floorspace must re-provide the maximum economically feasible amount of low cost employment floorspace in perpetuity, at equivalent rents and service charges, suitable for the existing or equivalent uses, subject to current lease arrangements and the desire of existing businesses to remain on-site.

Affordable Workspace

- C. If the low cost employment floorspace equates to less than 10% of gross new employment floorspace or there is no low cost workspace to be re-provided as part of a major development scheme, new affordable workspace should be provided as follows:
 - i. Development in the Shoreditch POA: at least 10% (offset by the amount of low cost employment floorspace provided) of the new employment floorspace (gross) should be affordable at no more than 40% of the locality's market rent in perpetuity, subject to viability.
 - ii. In remaining POAs, CAZ and town centres: at least 10% (offset by the amount of low cost employment floorspace provided) of the new employment floorspace (gross) should be affordable at no more than 60% of the locality's market rent in perpetuity, subject to viability.

- D. New affordable workspace should normally be provided on-site. Only in exceptional circumstances where it can be demonstrated robustly that this is not appropriate in terms of the policies in this Plan, it may be provided off-site. A cash in lieu contribution will only be accepted where this would have demonstrable benefits in furthering affordable workspace in the borough and other policies in this Plan.
- E. In circumstances where it is viable, both low cost employment floorspace and new affordable workspace should be provided.

5.8.21 LP31 Local Jobs, Skills and Training

- A. The Council will secure a successful and inclusive economy in Hackney by harnessing the benefits of economic growth for local residents and businesses, seeking to ensure that there are a broad range of employment opportunities across a variety of sectors available to local residents, including in both the construction and operation of new developments.
- B. All new major development will be required to:
 - i. Where appropriate, contribute towards employment skills and training programmes through S106 legal agreements to equip residents with the skills required to gain employment; and
 - ii. Demonstrate how the new development offers employment opportunities to residents.

5.8.22 LP41 Liveable Neighbourhoods

- A. New development and its associated transport systems should contribute towards transforming Hackney's places and streets into one of the most attractive and liveable neighbourhoods in London.
- B. All new development must:
 - i. Create an environment where people actively choose to walk and cycle as part of everyday life.
 - ii. Reduce the dominance of the private motor vehicles both in terms of traffic and congestion on our roads and managing excessive parking on our streets.
 - iii. Contribute to the Healthy Streets approach to improve air quality, reduce congestion and make Hackney's diverse communities become greener, healthier and more attractive places in which to live, play and do business.
 - iv. Contribute to a safe road environment where traffic accident casualties are steadily reduced supporting Vision Zero objectives.
 - v. Contribute towards greening our neighbourhoods: creating a cleaner, healthier environment that is able to cope with changes to the climate.
 - vi. Make improvements to the pedestrian environment including the provision of high quality public realm, safe road crossings, water fountains, seating, wayfinding and increased tree and vegetation coverage. Provide and where appropriate financially contribute towards creating well connected, high quality, convenient and safe cycle routes and infrastructure.
 - vii. Tackle poor air quality, seeking to reduce NOx emissions to achieve the National Air Quality objective and in particular reduce the exposure of children and vulnerable people to transport-related air pollution.
 - viii. Provide for and financially contributing towards measures to support Low Emission Neighbourhoods (LENs) including but not limited to the increased use of car sharing, low emission vehicles including taxis, freight consolidation and associated engagement with businesses, residents and other stakeholders to support these aims.
 - ix. Support permeability and the reallocation of road space to promote walking, cycling and use of public transport.

5.8.23 LP42 Walking and Cycling

- A. All new development must promote sustainable transport by prioritising walking and cycling in the borough.

Walking

- B. New development will only be permitted where it:
- Improves the pedestrian environment and contributes towards achieving a world class public realm linking the site to transport infrastructure as well as facilities and amenities including the provision of high quality safe road crossings where needed, seating, signage and increased tree and vegetation coverage.
 - Is permeable - easy and safe to walk through - and adequately lit;
 - Provides high quality footpaths that are wide enough for the number of people expected to use them and designed to be suitable for vulnerable road users including older people and disabled people.
 - Contributes towards improved wayfinding including signposted links such as TFL's
 - Legible London to key infrastructure, transport nodes, green spaces and canal towpaths where appropriate.

Cycling

- C. In order to promote cycling in the borough and ensure a safe and accessible environment for cyclists, the Council will seek to ensure that development:
- Provides for and makes contributions towards connected, high quality, convenient and safe cycle routes for all, in line or exceeding London Cycle Design Standards.
 - Contributes to a world class public realm which reduces vehicle dominance and supports sustainable transport in particular walking and cycling
 - Provides cycle parking for building users and visitors to the development in accordance with Hackney's cycle parking standards (see below). Cycle parking shall be secure, accessible, convenient, and weatherproof and will include an adequate level of parking suitable for accessible bicycles, tricycles and cargo bikes.
 - Makes provision for high quality facilities that promote cycle usage including workplace showers, changing room and lockers. The provision should be proportionate to the scale of development and cycle parking provided.
 - Provides links to public transport nodes as well as facilities and amenities.
 - Contributes towards improved wayfinding.
 - Promotes and contributes towards the introduction and expansion of cycle hire facilities.

5.8.24 LP43 Transport and Development

- A. New development should be located where its transport needs can be met in a sustainable manner.
- B. Any significant negative impact on the operation of transport infrastructure, must be satisfactorily mitigated.
- C. Major development proposals are required to include the submission of either a Transport Assessment and Travel Plan, or a Transport Statement and Local Level Travel Plan, in accordance with the London Borough of Hackney thresholds.

5.8.25 LP44 Public Transport and Infrastructure

- A. All development must:
- Protect existing and proposed transport infrastructure, particularly routes for walking, cycling and public transport, from removal or severance which could compromise their use or operation. Proposals which are contrary to the safeguarding of strategic infrastructure improvement projects, including Crossrail 2 will be refused.

5.8.26 LP45 Parking and Car Free Development

- A. In order to reduce car usage and promote active travel, all new developments in the borough must be car-free; on-site parking limited to:
- Parking for disabled users, which is required to be provided in accordance with best practice standards, as set out in the London Plan.
 - Essential operational or servicing needs as justified through a Transport Assessment.
- B. Where sites are redeveloped existing parking provision must be significantly reduced to make the new development car free unless there is site specific justification to re-provide an element of the existing parking. In housing estate development schemes, parking provision may be retained or re-provided where it can be demonstrated that:
- existing occupiers with established parking spaces or permits are to return to the site once the development is completed and that the retained or re-provided parking is for those residents only; and
 - Where necessary, there is evidence of adequate capacity within the relevant controlled parking zone if the re-provided parking is to be on-street; and
 - the retained or re-provided parking is delivered as part of an overall package of measures improving legibility, including walking and cycling routes, and making improvements to the public realm.

If a development is to have entirely new occupiers it must be car free.

- C. Proposals for the redevelopment of existing car parks for alternative uses will be supported and the removal of boundary treatments and gardens to provide vehicle crossovers and on-site parking will be resisted.
- D. New development must incorporate designated spaces for deliveries within the boundaries of the development and provide Delivery and Servicing Plans which encourage provision for low-emission, consolidation and last mile delivery modes.
- E. A minimum of one fifth of all off-street parking places created need to be equipped with electric vehicle charging infrastructure in line with the London Plan. Facilities for charging electric Powered Two Wheel vehicles should also be considered. Contributions will also be required for on-street provision of electric vehicle and other low emission vehicle infrastructure.
- F. All major residential developments will be required to contribute towards the expansion of the local car club network including those using low-emission vehicles.
- G. Proposals for, or including, new public car parks (and other motor vehicle public parking, including for coaches) will be refused. Proposals for the redevelopment of existing car parks for a different use shall be subject to the car-free and Transport Assessment need requirements within this policy.

5.8.27 LP46 Protection and Enhancement of Green Infrastructure

- A. All new development should enhance the network of green infrastructure and watercourses across the borough and seek to improve access to open space, particularly in areas of deficiency.
- B. Development involving the loss of designated open space will not be permitted unless:
 - i. there is compensatory contiguous replacement of better or equivalent quantity and quality of public open space and setting including facilities to enhance or diversify people's experience of the open space; and
 - ii. replacement is in a location with better or equivalent access by walking, cycling or public transport; and
 - iii. the quality of the remaining and replacement open space is not eroded by the Proposed Development.
- C. Development on other open space will only be permitted where:
 - i. replacement and/or enhancement of open space of better or equivalent quality is provided either on site or a location within the vicinity of the site, especially in the identified areas of deficiency, and
 - ii. wherever possible any replacement connects to the network of green infrastructure including the green chains and green corridors, or
 - iii. it can be shown that the relationship between buildings and associated open space(s) can be improved in terms of use, security, setting and landscape quality.
- D. Small scale ancillary developments which enhance the park and open space offer, such as refreshment facilities, public conveniences, drinking fountains, public art installations or outdoor play and fitness equipment will be permitted provided that they are:
 - i. Of a high standard of design and quality, safe and accessible to all; and
 - ii. Do not have a detrimental impact on nature conservation and biodiversity, and should seek to improve such; and
 - iii. Do not result in the loss of functional open space where possible; and
 - iv. Do not detract from the overall function, character and appearance of the park or open space.
- E. Living roofs and Vertical Forests
 - i. Living roofs are required on major development schemes that include roof plates of over 100sqm.
 - ii. Living roofs and vertical forests are encouraged on all development proposals, including minor schemes, renovations, extensions and conversions.
- F. Allotments and Food Growing
 - iii. The Council will protect existing allotments and support the provision of new food growing spaces.

5.8.28 LP48 New Open Space

- A. All development proposals for 10 or more residential units must provide:
 - i. 14 sqm per person of communal open space; and
 - ii. An Urban Greening Factor score of at least 0.4
- B. All major mixed-use or commercial development proposals must provide:
 - iii. 4 sqm of communal open space per employee, and
 - iv. An Urban Greening Factor score of at least 0.3.
- C. In the identified areas of deficiency, shown on Map 12, the emphasis is on on-site provision of open space. Planning permission for major developments will only be approved if the applicant can demonstrate that they will achieve the requirements set out in A and B above.
- D. Outside of the areas of deficiency, shown on Map 12, where the targets set out in A and/or B cannot be achieved, developments must:

- v. Make physical improvements to the public realm to improve access to existing public open spaces, or
- vi. Make financial and/or physical contributions for the enhancement of existing public open space or other green infrastructure in the locality.

E. All new open space should meet the following criteria:

- i. Be provided on site, and
- ii. Be of high quality, and
- iii. Be incorporated into the design of the scheme from the outset, and
- iv. Maximise biodiversity benefits, and
- v. Be publicly accessible and useable where possible.

5.8.29 LP49 Green Chains and Green Corridors

- A. All new development adjacent to existing Green Chains and Green Corridors must be developed in a way that contributes towards the green infrastructure network. In the areas of potential new Green Chains, financial contributions may be sought to develop new Green Chains in the future.

5.8.30 LP50 Play Space

- A. The Council will protect existing play and recreation facilities and support the development of new formal and informal play facilities. New major residential developments and mixed-use schemes that are likely to generate a child yield of 10 or more are required to provide 10sqm of dedicated play space per child on-site.
- B. New play spaces should:
 - i. Be well located and easily accessible by pedestrian, cycling or bus routes, and
 - ii. Be inclusive to all, and
 - iii. Provide a range of different types of play facilities and experiences for children of different abilities, and
 - iv. Be sustainable and easy to maintain.

5.8.31 LP51 Tree Management and Landscaping

- A. All development proposals must retain existing landscape features and trees of amenity value, especially veteran trees, hedgerows and natural features, and must incorporate high quality landscaping.
- B. Proposals resulting in the removal of protected trees (trees under a TPO and those within conservation areas) or a detrimental impact on the health and amenity of such Proposed Submission Local Plan 2033 November 2018 trees will be refused except in exceptional circumstances and/or where over-riding planning benefits are demonstrated. In such cases, compensatory measures will be required for suitable replacements and/or additional planting, or contributions to planting offsite. The removal of non-protected trees as part of development schemes will not be supported unless adequate replacement planting is proposed, or the removal is in the interests of good arboricultural practice.

5.8.32 LP53 Water and Flooding

- A. All development must have regard to reducing flood risk, both to, and from the site, over its expected lifetime. Potentially vulnerable development must not be located in flood-prone areas as identified by the Council unless it can be suitably demonstrated that flood-risk will be sufficiently mitigated using flood resistance and/or resilience measures.
- B. All development should decrease vulnerability to flooding through appropriate siting, design, and on-, and off-site mitigation.

- C. The following types of development will be expected to submit the appropriate flood risk assessment
- i. Developments in fluvial flood zone 2 or 3 including minor development;
 - ii. All major developments or basement developments in areas at high-risk to flooding, or in an areas known to have a potentially elevated risk of groundwater flooding;
 - iii. Developments on sites of 0.5 hectares or more;
 - iv. Developments on sites of less than 0.5 hectares in flood zone 1, including change of use in development type to more vulnerable class (for example, from commercial to residential) in areas at risk of flooding from sources of flooding other than river.
- D. All major developments will be required to submit a Sustainable Drainage Strategy taking into account climate change allowances and supported by a site-specific management and maintenance plan of the drainage proposal. All other developments, particularly for sites located within critical drainage area should implement Sustainable Drainage Systems (SuDS) such as water butt, green/blue roof, permeable paving and other above ground green infrastructures.
- E. Development which includes the creation or extension of basements must demonstrate that they will not increase the potential for groundwater flooding to itself or to the surrounding area.
- F. All developments should achieve greenfield runoff rates by attenuating rainwater on site, utilising SuDS and in accordance to the drainage hierarchy. Where this is shown, through appropriate evidence, to be unfeasible, planning obligations will be expected to reduce the overall flood risk within the site and in the vicinity.
- G. All development should, in liaison with Thames Water, take account of the capacity of existing on and off-site water and sewerage infrastructure and the impact of development proposals on this infrastructure. All major developments will be required to demonstrate that capacity exists on and off-site in the sewerage network to serve the development or that it can be provided ahead of occupation to ensure there is sufficient capacity in the sewerage system to accommodate for the proposed flows.
- H. Where necessary, and as advised by Thames Water, the Council will seek improvements to water and/or sewerage infrastructure related and appropriate to the development so that improvements are completed prior to occupation of development.
- I. All developments should take account of the location, capacity and requirements of, and access to, existing, and need for improved, flood defences, and where needed supporting improvements.
- J. Development must be designed to be water efficient and reduce water consumption. Refurbishments and other non-domestic development will be expected to meet BREEAM water-efficiency credits. Residential development must not exceed a maximum water use of 105 litres per head per day (excluding the allowance of up to 5 litres for external water consumption).
- K. New developments are encouraged to incorporate additional water saving, water recycling and water efficiency measures such as smart-metering, rainwater harvesting, greywater recycling, including retrofitting, to help reduce water consumption.

5.8.33 LP54 Overheating

- A. All new development must regulate internal and external temperatures through orientation, design, materials and technologies which avoid overheating, mitigate the Urban Heat Island (UHI) effect and have regard to maximising the use of the cooling hierarchy. Measures which deliver biodiversity benefits will be strongly supported.

5.8.34 LP55 Mitigating Climate Change

- A. All new developments in Hackney must actively seek to mitigate the impact of climate change through design which minimises exposure to the effects, and technologies which maximise sustainability.
- B. All new residential development should meet a zero carbon emissions target emission rate in line with the London Plan energy hierarchy and Sustainable Design and Construction SPD.
- C. All non-residential developments must achieve the BREEAM 'Excellent' rating (or an equivalent rating under any other system which may replace it) and where possible achieve the maximum number of water credits, and must be built to be zero-carbon.

- D. In reducing carbon emissions, residential development should aim to achieve 10% and non-residential development should aim to achieve 15% through energy efficiency measures alone.
- E. Major commercial development should generate at least 10% of their energy needs from renewable sources onsite or in the local area.
- F. The design, construction and operation of new buildings should be informed by the London Plan energy hierarchy.
- G. Where it can be robustly demonstrated that it is not possible to reduce CO₂ emissions on-site by the specified levels, carbon off-setting payments will be required and secured via legal agreement.

5.8.35 LP56 Decentralised Energy Networks (DEN)

- A. All developments should maximise opportunities to incorporate decentralised energy to support reductions in energy use and emissions.
- B. New major development should connect to an existing network; unless it is clearly demonstrated that it is not technically feasible or economically viable.
- C. Only when it can be clearly demonstrated that all options to link into existing schemes have been explored should development provide on-site DEN. Developments should be designed to connect to other developments at a later date.

LP57 Waste

- A. Developments should seek to minimise waste during both construction and operation of the development, and should provide clear consideration in plans for the facilities needed for the storage and collection of waste and recycling.
- B. The council will support the objectives of the North London Waste Plan in assessing the need for and provision of new waste sites if needed.
- C. Existing waste sites will be safeguarded unless compensatory provision is made which maximises waste capacity.

5.8.36 LP58 Improving the Environment – Pollution

Air Pollution

- A. All new development must as a minimum not exceed air quality neutral standards or contribute to a worsening of air quality at the construction or operation stage, over the lifetime of the development.
- B. They should consider the existing air quality and not locate sensitive uses in areas that are exposed.
- C. New development, especially those catering for vulnerable people and users such as elderly and children should be sited and designed to minimise exposure to air pollution.
- D. An air quality assessment (AQA) will be required for the following types of development:
- All major developments, unless it can be demonstrated that transport and building emissions will be less than the existing use; or
 - New build developments in areas of sub-standard air quality; or
 - Developments in close proximity to sensitive uses; or
 - Development of sensitive uses; or
 - Developments which involve significant demolition and construction.
- E. Development proposals which are identified as likely to cause harm to air quality or could expose occupiers and users of the building to poor air quality will be resisted unless appropriate mitigation measures are proposed to reduce the impact to acceptable levels.
- F. Measures to improve air quality should be implemented on-site however where it can be demonstrated that on-site provision is impractical or inappropriate, off-site measures to improve local air quality may be acceptable, provided that equivalent air quality benefits can be demonstrated.

Water Pollution

- G. New developments should not pose an unacceptable risk to water quality and developments which have the potential to adversely impact on water quality, in the opinion of Hackney and the Environment Agency, will be required to provide appropriate mitigation to alleviate the risk.
- H. Source Protection Zones (SPZs) should be taken into account when considering the environmental impact of a development.

Contaminated Land

- I. For development proposed on contaminated or potentially contaminated land, a desk study and site investigation in line with the most up-to-date guidance will be required and remediation proposals agreed to deal with any identified contamination.
- J. New development should address risks to sensitive receptors (both on and off site) from land contamination through proportionate action(s) before and during construction and during operation where appropriate, planning conditions, over the lifetime of the development.
- K. Development which proposes potentially contaminating or polluting activities, or which is located in close proximity to hazardous installations, must incorporate mitigation for harmful effects to people and the environment and where considered necessary provide monitoring of any impact.

Noise and Vibration

- L. Noise-sensitive development should be located in areas where occupiers will not be exposed to significantly adverse noise levels. Where new noise-sensitive development is proposed in proximity to existing noise-generating uses, the applicant will be required to carry out a noise assessment and demonstrate how adverse effects will be effectively mitigated without harming the continued operation of existing uses.
- M. Development in any location will only be permitted where it can be demonstrated that the noise generated by the development is effectively mitigated to prevent adverse impacts on health and quality of life. The impact of noise generated by the demolition and constructions phases of development must also be minimized.
- N. All residential development proposals shall minimise the potential adverse noise impact on and between dwellings through housing layout, design and materials. New development will only be permitted where the locations of lift and circulation spaces is designed to limit the transmission of sound to noise sensitive areas. They should be adequately separated from major noise sources or designed to mitigate the impact.

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