



RIDGE

**VELVET CUTTERS, MANCHESTER
ENVIRONMENTAL STANDARDS
STATEMENT**

21/07/2025

VELVET CUTTERS, MANCHESTER

JULY 2025

Prepared for

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1. INTRODUCTION

This Environmental Standards Statement has been prepared by Ridge & Partners LLP on behalf of Torsion Homes in support of a full planning application for a residential development on land on Little Peter Street, Manchester. The Statement demonstrates how the development of the proposed sustainability strategy takes into consideration and responds to the requirements of local planning policy.

The primary objective of this report is to contribute to the development of a low carbon and sustainable strategy for the site which will be carried through to detailed design, construction, and operation.

2. DEVELOPMENT PROPOSALS

2.1. Site Overview and Development proposals

Located within the historic Knott Mill area at the edge of Manchester city centre, the proposed site is situated adjacent to Castlefield at the end of the Deansgate corridor. The existing site is currently used as a private car park.

The land use to the north and east comprises residential developments, with a commercial/ office building to the west. South of the site lies a private car park. Access to the site is provided by Little Peter Street and Constance Street.

The proposed development will allow for the construction of a residential development comprising 9 units, and associated landscaping, highway works, and other associated infrastructure. The proposals include apartments over five floors with no parking.

3. POLICY CONTEXT

3.1. National Planning Policy Framework

The Government's planning policies for England are set out in the National Planning Policy Framework (NPPF). Section 2 of the NPPF highlights sustainability as a critical issue which underpins all planning policies, stating that "the purpose of the planning system is to contribute to the achievement of sustainable development".

Aligning with the U.N. definition, the NPPF defines sustainable development as "meeting the needs of the present without compromising the ability of future generations to meet their own needs", and outlines the three pillars of sustainability which must be pursued in tandem to ensure developments are truly sustainable:

- An **economic objective**, to help build a strong, responsive, and competitive economy, by ensuring that sufficient land of the right types is available in the right places, and at the right time to support growth, innovation, and improved productivity; and by identifying and coordinating the provision of infrastructure.
- A **social objective**, to support strong, vibrant, and healthy communities by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations, and

by fostering a well-designed and safe built environment, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural wellbeing.

- An **environmental objective**, to contribute to protecting and enhancing our natural, built, and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.

3.2. Places For Everyone Joint Development Plan

The Places for Everyone (PfE) Joint Development Plan (2024) of Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Tameside, Trafford, and Wigan Councils sits at the foundations of proposals to improve employment opportunities for local communities, build the right homes in the right places, rejuvenate green spaces and reshape town centres. As a long-term plan for jobs, new homes, and sustainable growth, it will enable the region to tackle the inequalities experienced by many communities.

This section of the report summarises the policies within the Plan relevant to climate change and environmental sustainability, and to the proposed development site.

Policy JP-Strat9: Southern Areas

The economic competitiveness, distinctive local neighbourhood character and environmental attractiveness of the southern areas will be protected and enhanced. There will be a strong emphasis on making as much use as possible of suitable previously developed (brownfield) land and promoting the roles of the areas' town centres and its other key assets, including education and training facilities enabling people to gain access to employment opportunities. There will be an emphasis on improving transport connections and accessibility by public transport, cycling and walking, ensuring access to key employment opportunities in this area.

Policy JP-S1: Sustainable Development

Development should aim to maximise economic, social and environmental benefits simultaneously, minimise its adverse impacts, utilise sustainable construction techniques and actively seek opportunities to secure net gains across each of the different objectives. In preparing plans, authorities should make as much use as possible of suitable previously developed (brownfield) land and vacant buildings to meet development needs. In bringing forward previously developed sites for development, particular attention will be paid to tackling land contamination and stability issues, ensuring that appropriate mitigation and remediation is implemented to enable sites to be brought back into use effectively.

Policy JP-S2: Carbon and Energy

The aim of Policy JP-S2 is to deliver a carbon neutral Greater Manchester no later than 2038, with a dramatic reduction in greenhouse gas emissions. This will be supported through a range of measures, including:

- Promoting retrofitting of existing buildings with measures to improve energy efficiency and generating renewable and low carbon energy, heating and cooling.
- Promoting the use of life cycle cost and carbon assessment tools to ensure the long-term impacts from development can be captured.
- Taking a positive approach to renewable and low carbon energy schemes, particularly schemes that are led by, or meet, the needs of local communities.
- Increasing the range of nature-based solutions including carbon sequestration through the restoration of peat-based habitats, woodland management, tree-planting and natural flood management techniques.

- An expectation that new development will, unless it can be demonstrated that it is not practicable or financially viable:
 - Be net zero carbon which applies:
 - From adoption: to regulated operational carbon emissions
 - From 2028: to all emissions 'in construction'.

Starting from 2025, it will also be expected that carbon emissions from unregulated energy sources will be quantified and minimised. Reported through a energy statement, development proposals will be required to set out how this has been achieved in accordance with the energy hierarchy, which, in order of importance, seeks to:

- i. Minimise energy demand
- ii. Maximise energy efficiency
- iii. Use renewable energy
- iv. Use low carbon energy
- v. Utilise other energy sources

Furthermore, from 2025, any residual carbon emissions that cannot be fully mitigated on-site should be offset, in agreement with the relevant local planning authority through a financial contribution to a carbon offset fund. As an interim measure, development should be consistent with the 2022 Part L Building Regulations, unless superseded by changes to building regulations and/or national or local planning policies.

- Incorporate adequate electric vehicle charging points in line with Part S of the Building Regulations, unless superseded by relevant Local Plan policies, to future proof for the likely long-term demand, taking account of the potential maximum energy demand for the site.
- Where practicable, prioritise connection to a renewable energy/heating/cooling network or a low carbon energy/heating/cooling network that is adaptable to non-fossil fuels at a later date.
- In residential developments, achieve energy demand reductions in terms of space heat demand; hot water energy demand and the delivery of on-site renewable energy generation, in accordance with Table 5.1 of the Plan. In summary, this requires houses to meet the following best practice thresholds from 2025:
 - Space heating demand of 30kWh/m² (houses) or 25kWh/m² (flats)
 - At least 20% energy demand reduction in the total heat required for hot water heating
 - Photovoltaic installation to equal at least 40% of ground floorspace

With regards to renewable energy generation, priority should be given to photovoltaic (PV) installation, where technically feasible. Alternative technologies will also be considered appropriate where the equivalent generation is evidenced.

- For non-residential developments, achieve at least BREEAM Excellent standard (or equivalent) for issue Energy 01 "Reduction of energy use and carbon emissions", rising to 'BREEAM Outstanding equivalent from 2028 (for issue Energy 01).
- Include a detailed energy statement to demonstrate via site relevant evidence how the development has sought to maximize reductions in carbon emissions in line with relevant policy targets, including the minimisation of overheating risks and appropriate measures for post occupancy evaluation. Whole life cycle emissions should be considered where possible. Districts may set out specific carbon emission reduction and energy demand targets within Local Plans.

Please note that the June 2022 release revision of “Approved Building Regulations Part L 2021” will be referred to as “Part L 2022” throughout this report, in accordance with the naming convention used in Policy JP-S-2.

Policy JP-S3: Heat and Energy Networks

The provision of decentralised energy infrastructure is critical to the delivery of the objectives for low carbon growth, carbon reductions, and an increase in local energy generation. The following measures will assist in achieving this:

1. Delivery of renewable and low carbon energy schemes will be supported, with particular emphasis on the use of decentralised energy networks in areas identified as “Heat and Energy Network Opportunity Areas”. These have been identified where:
 - a. Existing heat/energy networks are operational or have been commissioned;
 - b. Proposals for new heat networks/energy networks are being progressed, or future opportunities have been identified in city-region master planning;
 - c. Sufficient density of existing heat demand occurs; and
 - d. Significant future development is proposed at the strategic development locations.
2. Within the identified “Heat and Energy Network Opportunity Areas”, unless it can be demonstrated that there are more effective alternatives for minimising carbon emissions or such connection is not practicable or financially viable, it is expected that:
 - a. New residential developments that are '10 dwellings or more' or other developments over 1,000m² floorspace shall:
 - i. Connect to an existing or planned heat/energy network or be designed to enable future connection (where within 500m of such a network); and/or
 - ii. Install a site-wide or communal heat/energy network solution.
 - b. An expectation that new industrial development will demonstrate that opportunities for using waste heat locally have been fully examined, and included in proposals;
 - c. An expectation that where publicly owned buildings and assets adjoin new major development sites, opportunities for these buildings and assets to connect to site-wide proposals will be considered; and
 - d. An expectation that any site-wide networks will be designed so as to enable future expansion to adjoining buildings or assets as appropriate.

Policy JP-S4: Flood Risk and the Water Environment

An integrated catchment-based approach will be taken to protect the quantity and quality of water bodies with reference to the North West River Basin Management Plan and managing flood risk, by:

1. Returning rivers to a more natural state, where practicable;
2. Working with natural processes and adopting a natural flood management approach to slow the speed of water drainage and intercept water pollutants;
3. Locating and designing development so as to minimise the impacts of current and future flood risk, including retrofitting or relocating existing developments, infrastructure and places to increase resilience to flooding;
4. Expecting developments to manage surface water run-off through sustainable drainage systems and as close to source as possible. Development should achieve greenfield run-off rates unless it is demonstrated to be impracticable. District local plans should consider setting more detailed surface water drainage policies to reflect local circumstances, including alternative surface water discharge rates, such as in areas with critical drainage issues;
5. Ensuring that sustainable drainage systems:
 - a. Are designed to provide multifunctional benefits wherever possible, including for water quality, nature conservation and recreation;

- b. Avoid adverse impacts on water quality and any possibility of discharging hazardous substances to ground;
 - c. Are delivered in a holistic and integrated manner, including on larger sites split into different phases; and
 - d. Are managed and maintained appropriately to ensure their proper functioning over the lifetime of the development.
6. Securing the remediation of contaminated land and the careful design of developments to minimise the potential for urban diffuse pollution to affect the water environment; and
7. As a minimum, residential development should meet the mandatory water efficiency standard of 125 litres/person/day as set out in Building Regulations. District local plans may and should consider setting a tighter water efficiency standard of 110 litres/person/day where there is a clear local need with reference to national guidance on housing optional technical standards.

Policy JP-S5: Clean Air

A comprehensive range of measures will be taken to support improvements in air quality, focusing particularly on locations where people live, where children learn and play, where there are impacts on the green infrastructure network and where air quality targets are not being met, including:

- Locating and designing development, and focusing transport investment, so as to reduce reliance on forms of transport that generate air pollution;
- Determining planning applications having regard to the most recent development and planning control guidance published jointly by the Institute of Air Quality Management (IAQM) and Environmental Protection UK (EPUK), and the most recent IAQM Guidance on the Assessment of Dust from Demolition and Construction, or relevant successor guidance, including the requirement for developers to submit construction management plans as appropriate;
- Requiring applications for developments that could have an adverse impact on air quality to submit relevant air pollution data so that adverse impacts on air quality can be fully assessed and development only permitted where they are acceptable and/or suitable mitigation can be provided;
- Restricting developments that would generate significant point source pollution such as some types of industrial activity and energy generation;
- Significantly expanding the existing commercial network of electric vehicle charging points, both for public and private use, including as part of new developments;
- Implementing the Clean Air Plan and associated measures;
- Facilitating the more sustainable distribution of goods within the urban area, including through accommodating urban consolidation centres and urban distribution centres that use ultra-low-emission vehicles, and local delivery facilities to reduce repeat delivery attempts;
- Designing streets to avoid trapping air pollution at ground level, including through the appropriate location and scale of buildings and trees;
- Controlling traffic and parking within and around schools, early years sites and other locations that are particularly sensitive to air quality;
- Promoting actions that help remove pollutants from the air, such as enhancing the green infrastructure network and using innovative building materials that capture air pollutants; and
- Development should be located in areas that maximise the use of sustainable travel modes and be designed to minimise exposure to high levels of air pollution, particularly for vulnerable users.

Policy JP-S6: Resource Efficiency

The achievement of a circular economy and a zero-waste economy will play a key role in meeting Greater Manchester's ambition of becoming a leading green city region by 2038. Application of the following measures will help achieve this:

- Development and implementation of the Zero Waste Strategy for Greater Manchester which promotes overall reduction in the levels of waste produced and supports resource efficiency within the Plan area in order to gain the maximum value from the things we produce;
- Recognition of the role of existing infrastructure in managing our waste and protecting such facilities to ensure adequate waste management capacity is maintained; and
- Using sustainable design and construction techniques to reduce carbon emissions, adapt and future proof to the impact of climate change, reduce and recycle waste and minimise water use.

Policy JP-G6: Urban Green Space

To ensure there is an appropriate scale, type, quality and distribution of accessible urban green space that can support a high quality of life and other important green infrastructure functions:

- Existing urban green space will be protected and enhanced in balance with other considerations;
- We will work with developers and other stakeholders to deliver new high quality urban green spaces.

Development should be designed to support the positive use of nearby green spaces, such as by offering a high-quality setting, providing natural surveillance, and facilitating easy access by walking and cycling.

Policy JP-G8: A Net Enhancement of Biodiversity and Geodiversity

Through local planning and associated activities, a net enhancement of biodiversity resources will be sought, including, where relevant, by:

1. Increasing the quality, quantity, extent and diversity of habitats, particularly priority habitats identified in national or local biodiversity action plans and those that support priority species;
2. Improving connections between habitats, to protect and enhance the provision of corridors, ecological networks (including Nature Recovery Networks) and steppingstones that enable the movement of species, especially as the climate changes;
3. Enhancing the management of existing habitats, including through habitat restoration, avoiding habitat fragmentation and combating invasive species;
4. Protecting sites designated for their nature conservation and/or geological importance, with the highest level of protection given to international and then national designations;
5. Facilitating greater access to nature, particularly within urban areas;
6. Supporting the development and implementation of the Great Manchester Wetlands Nature Recovery Network; and
7. Safeguarding, restoring and sustainably managing our most valuable soil resources, tackling soil degradation/erosion and recovering soil fertility, particularly to ensure protection of peat-based soils and safeguard 'best and most versatile' agricultural land.

Development will be expected to:

- a. Follow the mitigation hierarchy of:
 - i. Avoiding significant harm to biodiversity, particularly where it is irreplaceable, through consideration of alternative sites with less harmful impacts, then
 - ii. Adequately mitigating any harm to biodiversity, then
 - iii. Adequately compensating for any remaining harm to biodiversity
- b. Avoid fragmenting or severing connectivity between habitats;
- c. Achieve a measurable net gain in biodiversity of no less than 10%
- d. Make appropriate provision for long-term management of habitats and geological features connected to the development;
- e. Where appropriate, development should: mitigate air pollution impacts on Manchester Mosses SAC; mitigate urban edge, functionally linked land and recreation disturbance impacts

- on the South Pennine Moors SAC/SPAs; and assess and potentially mitigate boat movement, water pollution, and light spillage and shading impacts on the Rochdale Canal SAC; and
- f. Development proposals should be informed by the findings and recommendations of the appropriate biodiversity/ecological assessment(s) in the PfE evidence base and/or any updated or appropriate biodiversity/ecological assessments submitted as part of the planning application process.

Policy JP-P1 Sustainable Places

Greater Manchester aims to become one of the most liveable city regions in the world, consisting of a series of beautiful, healthy and varied places, each having the following key attributes that all development, wherever appropriate, should be consistent with:

1. Distinctive, with a clear identity that:
 - a. Conserves and enhances the natural environment, landscape features, historic environment and local history and culture;
 - b. Enables a clear understanding of how the place has developed; and
 - c. Respects and acknowledges the character and identity of the locality in terms of design, siting, size, scale and materials used
2. Visually stimulating, creating interesting and imaginative environments which raise the human spirit through the use of green space, public art and quality design
3. Socially inclusive:
 - a. Responding to the needs of all parts of society;
 - b. Enabling everyone to participate equally and independently;
 - c. Providing opportunities for social contact and support; and
 - d. Promoting a sense of community
4. Resilient, capable of dealing with major environmental events
5. Adaptable, able to respond easily to varied and changing needs and technologies
6. Durable, being built to last and using robust materials that reflect local character, weather well and are easily maintained
7. Resource-efficient with:
 - a. A low carbon footprint;
 - b. Efficient use of land;
 - c. Minimised use of new materials;
 - d. High levels of recycling
8. Safe, including by designing out crime and terrorism, reducing opportunities for anti-social behaviour and by ensuring that developments make appropriate provision for response and evacuation in the case of an emergency or disaster.
9. Supported by critical infrastructure, such as energy, water and drainage and green spaces
10. Functional and convenient, enabling people and uses to act efficiently with minimal effort, and responding to needs relating to servicing, recycling facilities, refuse collection and storage
11. Incorporating inclusive design within all spaces with support for tackling inequality and poverty to form part of creating sustainable places
12. Legible, being easy to understand and navigate, with the protection and enhancement of key views and new development well-integrated into the place
13. Easy to move around for those of all mobility levels, particularly by walking and cycling, with enjoyable routes free from obstacles and disorienting stimuli, and with places to rest
14. Well-connected to other places, particularly by public transport and digital infrastructure enabling everyone to take advantage of the employment, cultural and leisure opportunities across Greater Manchester and beyond
15. Comfortable and inviting, with indoor and outdoor environments:
 - a. Offering a high level of amenity that minimises exposure to pollution; and

- b. Addressing microclimate issues such as sunlight, indoor air quality, overheating, shade, wind and shelter
- 16. Incorporating high quality and well managed green infrastructure and quality public realm, with:
 - a. Opportunities for recreation and outdoor play for children, and interaction between the generations;
 - b. Public and private spaces clearly distinguished;
 - c. Development clearly defining, and promoting activity within, public spaces;
 - d. High quality landscaping with schemes
- 17. Well-served by local shops, services and amenities, including education and health facilities.

3.3. Manchester Core Strategy (2012 – 2027)

Adopted in 2012, the Manchester Core Strategy is a key document within the wider Manchester Local Plan. It sets out the long-term strategic policies for Manchester's future development forms the framework that planning applications are assessed against. A summary of key policies relevant to the development are provided within this section. An addendum to the Core Strategy was published following the adoption of the PfE Joint Development plan setting out which Core Strategy policies are partially replaced by the PfE policies. Therefore the section below only includes those parts of policies which still remain part of the Manchester Core Strategy.

CS Policy DM 1: Development Management

All development should have regard to a number of development principles for which more detailed guidance may be given within a supplementary planning document. It also states that, "subject to scheme viability, developers will be required to demonstrate that new non-domestic development to achieve a BREEAM Rating of 'Very Good' or for domestic development to achieve the Code for Sustainable Homes standard".

Policy EN4: Reducing CO2 Emissions by Enabling Low and Zero Carbon Development

The following is required:

- Wherever possible, new development and retrofit projects, including energy generation plant, must be located, and designed in a manner that allows advantage to be taken of opportunities for low and zero carbon energy supplies.
- Where possible, new development and retrofit projects will be used as a mechanism to help improve energy efficiency and provide low and zero carbon energy supplies to existing buildings.
- Where appropriate, new development and retrofit projects will be required to connect to and/or make contributions to low or zero carbon energy schemes and/or to incorporate provision to enable future connection to any existing / potential decentralised energy schemes.
- The use of building materials with low embodied carbon in new development and refurbishment schemes must be considered.

Policy EN5: Strategic Areas for Low and Zero Carbon Decentralised Energy Infrastructure

This policy sets a requirement for key developments to consider being part of or providing an anchor to a new local energy network.

Within specific strategic areas (including the Oxford Street corridor) new development, regeneration and retrofit projects, will be expected to take place in the context of more detailed proposals for decentralised low and zero carbon energy infrastructure in the form of energy proposals plans. The Council will work with all relevant stakeholders, which may include developers, landowners, residents, community groups, private sector partners, utilities companies, neighbouring authorities, and other public sector bodies, as appropriate, to bring forward such plans.

Where investment or development is being undertaken into or adjacent to a public building/asset or district heating network, full consideration shall be given to the potential role that these can have in providing an anchor load within a decentralised energy network or in creating opportunities for CO₂ reduction funded by contributions.

Policy EN 6: Target Framework for CO₂ Reductions from Low or Zero Carbon Energy Supplies

Residential developments of 10 or more units will be expected to achieve a minimum performance target, unless this can be shown not to be viable. This should be demonstrated through an energy statement, submitted as part of the Design and Access Statement. Such a statement will be expected to set out the projected regulated energy demand and associated CO₂ emissions for all phases of the development’.

Policy EN 8 Adaptation to Climate Change

All new development will be expected to be adaptable to climate change in terms of the design, layout, siting and function of both buildings and associated external spaces. In achieving developments which are adaptable to climate change developers should have regard to the following, although this is not an exhaustive list:

- Reduction in urban heat island effect through the use of Green Infrastructure such as green roofs, green walls, increased tree cover and waterways.
- The need to control overheating of buildings through passive design.

Developers will be permitted to use green infrastructure elements such as green roofs, green walls, street trees and waterways to contribute to compliance with CO₂ mitigation under Policy EN6, subject to sufficient evidence to quantify their contribution to compliance.

Policy EN 14 Flood Risk

The following requirements are stated within Policy EN 14:

- In line with the risk-based sequential approach contained within PPS25, development should be directed away from sites at the greatest risk of flooding, and towards sites with little or no risk of flooding; this should take account of all sources of flooding identified in the Manchester-Salford-Trafford Strategic Flood Risk Assessment (SFRA).
- In addition to the requirements for site-specific Flood Risk Assessments (FRAs) set out in PPS25, an appropriate FRA will also be required for all development proposals, including changes of use, on sites greater than 0.5ha within Critical Drainage Areas (CDAs) and Canal Hazard Zones identified in the SFRA.
- In CDAs, evidence to justify the surface water run-off approach / rates will be required.
- Developers should have regard to the surface water run-off rates in the SFRA User Guide. In CDAs, evidence to justify the surface water run-off approach / rates will be required.
- The City of Manchester contains many sections of rivers which are culverted or 'hidden'; where these are indicated in the SFRA beneath the proposed development site, further investigation will be required and the development proposal should take this into account; where feasible and appropriate development should seek to open up culverted/hidden rivers to reduce the associated flood risk and danger of collapse, taking advantage of opportunities to enhance biodiversity and Green Infrastructure.

Policy EN 15 Biodiversity and Geological Conservation

The Council will seek to maintain or enhance sites of biodiversity and geological value throughout the City. Particular consideration will be given to:

- sites with international or national designations for their biodiversity value. Manchester contains one Site of Special Scientific Interest (SSSI) (Cotteril Clough); there is a Special Area of Conservation (SAC) and an SSSI just over the border in Oldham (both on the Rochdale Canal within Oldham).

- other sites of biodiversity value, including Sites of Biological Importance (SBIs) and Local Nature Reserves (LNRs); Manchester currently has 35 SBIs (including the Rochdale and Ashton Canals) and 7 LNRs; priority habitats found within Manchester, as listed in the Manchester Biodiversity Strategy, and included in the Greater Manchester Biodiversity Action Plan (GM BAP).
- protected and priority species, as listed in the Manchester Biodiversity Strategy and included in the Greater Manchester Biodiversity Action Plan (GM BAP).
- sites that are recognised for their geological importance;
- the Council's objective to protect and conserve the City's existing trees and woodlands and the aim for a net increase in trees across the City.

Developers will be expected to identify and implement reasonable opportunities to enhance, restore or create new biodiversity, contributing to linkages between valuable or potentially valuable habitat areas where appropriate, with reference to:

- the Manchester Biodiversity Strategy, which provides further details of priority habitats within Manchester and opportunities for biodiversity enhancement including corridors such as the Mersey, Medlock and Irk River valleys, the canals and disused railway lines and areas of managed greenspace particularly in parks.
- the Green Infrastructure Framework for Greater Manchester, which encompasses an ecological framework that seeks to guide and inform habitat creation and repair, including identifying large 'biodiversity opportunity areas' including the Moston Brook Corridor and Nutsford Vale;
- the Open Space, Sport & Recreation Study, which identifies areas where there is a deficit of natural and semi-natural greenspace, opportunities for green corridors and other linkages.
- Manchester's Climate Change Action Plan.
- the Strategic Flood Risk Assessment (SFRA) for Manchester.
- the Habitats Regulations Assessment (HRA) for Manchester, which gives detailed consideration to Special Areas of Conservation (SACs), including the Rochdale Canal SAC just outside the district boundary.
- the River Basin Management Plan for the Northwest.
- the Manchester Tree Strategy.

Any adverse impacts on biodiversity will need to be justified against the wider benefits of the proposal, assessed against other LDF policies. Where adverse impacts are unavoidable, developers will be required to provide appropriate mitigation and/or compensation.

Policy EN 16 Air Quality

The Council will seek to improve the air quality within Manchester. Developers will be expected to take measures to minimise and mitigate the local impact of emissions from traffic generated by the development, as well as emissions created by the use of the development itself, including from Combined Heat and Power and biomass plant.

When assessing the appropriateness of locations for new development the Council will consider the impacts on air quality, alongside other plan objectives. This includes cumulative impacts, particularly in Air Quality Management Areas.

Policy EN 19 Waste

The Council will:

- Require all developers, including those of new waste management facilities within the District, to demonstrate the proposal's consistency with the principles of the waste hierarchy (prevention, reduction, re-use, recycling/composting, energy recovery, final disposal)

- Require all developers to submit a waste management plan to demonstrate how both construction and demolition waste will be minimised and recycled on site wherever possible and how the sustainable waste management needs of the end user will be met.
- Promote the development of innovation and technological advancement within the sustainable waste management industry, aiming to achieve a closed-loop waste management system.
- Require waste management practices to have full regard to the environmental, social & economic impacts of such development and encourage long-term benefits in improving the environment, the regeneration of areas in need of investment and co-location with other employment uses where appropriate.
- Encourage communities to take responsibility for the waste created by provision of accessible facilities.

3.4. Guide to Development in Manchester Supplementary Planning Document

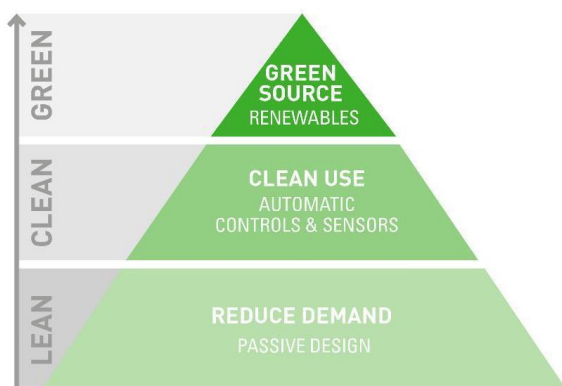
Adopted in 2017, the Guide to Development in Manchester Supplementary Planning Document (SPD) is a material planning consideration for applications. That said, it is not part of the Development Plan. Whilst it references policies from the old Local Plan (UDP), which have been superseded, it is still useful as a general guide to development. It includes a section on environmental standards, with sub sections on energy efficiency, renewable energy, environmental design, water management and weather resilience, waste management, construction management, biodiversity, and waterways.

4. SUSTAINABILITY FEATURES OF THE PROPOSED DEVELOPMENT

4.1. Energy & Carbon

The development will aim to minimise operational CO₂ emissions from the development and the associated impact upon climate change by adhering to the energy hierarchy below, demonstrating compliance with Policy EN 4 'Reducing CO₂ Emissions by Enabling Low & Zero Carbon Development' and the Places for Everyone Framework Policy JP-S2. Noting that full energy modelling will be undertaken at RIBA Stage 4, the design is currently progressing on the assumptions listed below.

The "Energy Hierarchy" methodology provides a design framework which was used to develop the proposed low carbon energy strategy. The approach described by this methodology provides a staged process: LEAN, CLEAN and GREEN (Illustrated below) to assess design measures.



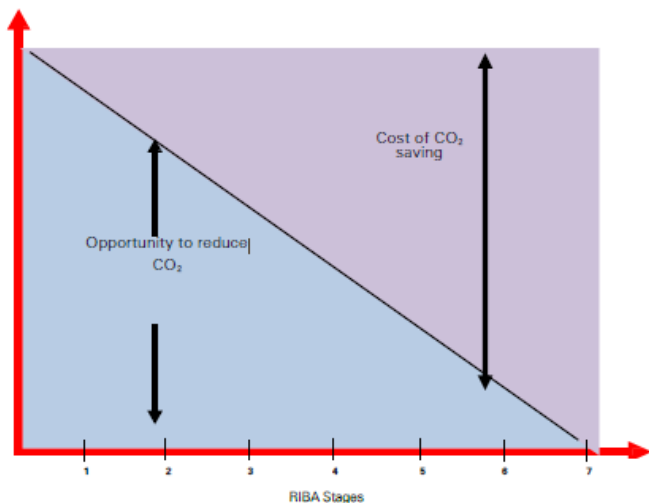
Lean - Main aim is to reduce the buildings energy demand through "passive measures".

Clean - Meet the reduced energy demand in the most efficient way possible using "active measures".

Green - Assess the technical feasibility of incorporating a low or zero carbon technology to further reduce the CO₂ emissions.

Note that the above measures are sequential and iterative i.e. only after the "Lean" measures have been exhausted should "Clean" measures be examined and so forth. This approach has been widely accepted across the industry as the methodology for reducing carbon emissions in design. The strategic approach outlined, follows a specific appraisal of technologies at each stage of design and to achieve the overall goal of

CO₂ reduction. As on the whole it becomes more expensive to implement carbon reduction measures the further along the design process as the opportunities to reduce demand diminish.



In this first instance it is therefore essential that the buildings **'passive measures'** are optimised and the design teamwork in close collaboration with the Client to consider the future fit out demands.

The next stage is to adopt **'efficient technologies'** such as heat recovery, variable speed drives and occupancy sensors etc. to meet the demand efficiently.

The final approach looks at applying **'renewable and low carbon'** technologies accordingly.

4.1.1. Passive Measures – Lean

These measures focus on passive design principles to reduce the overall energy demand for the building. Examples of the passive design that have been explored and applied where possible for the Proposed Development include:

- “Fabric First” approach – minimising heat losses by improving the performance of the fabric with uplifted U-values and improving air tightness, including triple glazed windows.
- Natural daylighting – reducing the artificial lighting demand.
- Natural ventilation – reducing the required energy load for mechanical ventilation and air conditioning.
- Passive solar control – using building orientation, layout, form, and thermal mass and limit solar gain.
- Low energy fit out – reducing energy demand through highly efficient goods and appliances.
- Sub-metering- allows energy consumption to be recorded and reviewed.

The team have maximised passive measures where possible to reduce the initial load of the building in terms of heating and anticipated lighting loads. The scheme will use U-values and air permeability rates that exceed minimum Building Regulation Standards 2021 Part L2 as demonstrated within the tables below;

Building Fabric Element	Limiting U-Value (w/m ² K)	Target U-Value (w/m ² K)
Walls	0.26	0.15
Floors	0.18	0.10
Roofs	0.18	0.15
Windows	1.6	0.8

Air Permeability	Limiting Air Permeability	Target Air Permeability	% Betterment
M3/(h.m ²) at 50 Pa	8	3	63%

4.1.2. Meeting Demand Efficiently – Clean

The following Energy efficiency measures have been established to meet the energy demand of the building; these will be further explored at the next stage of design for the Proposed Development:

- LED Lighting will be utilised to minimise energy consumption and CO₂ emissions associated with lighting in the Proposed Development.
- High efficiency/Low specific fan power (SFPs) ventilation fans will be used to reduce the energy consumption of the Proposed Development's air handling systems.
- Demand Operated Systems will be used where the ventilation, lighting, heating, and cooling is provided in spaces that may not always be in use in the form of occupancy sensors. To reduce energy consumption, these will shut down the systems serving these spaces when they are not required and turn them back on instantly when they are required.
- Variable Speed operation of mechanical plant: All pumps and fans will be provided with variable speed motors to allow the modulation of energy systems during periods of lower demand to conserve energy.
- Power Management: allocation of spare plant space will be made for future introduction of power factor correction into the Proposed Development to allow users to control the amount of electrical power consumed by devices, this will follow a survey undertaken after 6 months of operation.
- Building Management Systems (BMS) will be considered for installation for the Development to optimise the function of the ventilation, heating, and cooling systems within the amenity areas to minimise energy use.

4.1.3. Renewable & Low Carbon Technologies – Green

The final aspect of the design has been to establish what renewable and low carbon technologies can be adopted. A review of possible technologies has been completed. Air Source Heat Pumps (ASHP) will be used to generate hot water to the individual apartments.

By including the technology, this ensures the Proposed Development is in compliance with policies EN 4 'Reducing CO₂ Emissions by Enabling Low and Zero Carbon Development' and EN 6 'Target Framework for CO₂ reductions from low or zero carbon energy supplies'.



4.2. Transport

The Highways Technical Note, prepared by Axis (document reference 5239) dated July 2025) and submitted as part of this planning application, provide an overview of the existing transport conditions associated with the site, and outlines the sustainable transport measures associated with the new development.

4.2.1. Public Transport

The site is well served by existing public transport routes (buses, railway and the Metrolink), connecting the site to amenities and centres of employment in the City Centre, Trafford and Salford.

The nearest bus stops are located along Whitworth Street West (150m) and Bridgewater Viaduct (190m) and can be reached within a circa 150m and 190m walk distance respectively to the north and west of the

Site. The westbound and eastbound bus stops on Whitworth Street West both have a raised bus boarder for easy access, with a flag and pole and timetable information. The southbound bus stop on Bridgewater Viaduct has a raised bus border for easy access with a shelter, seating and timetable information. Details of the bus services stopping at the nearest bus stops are provided within the transport assessment report.

The closest railway station is Deansgate Railway Station, which can be easily accessed within a 2-minute walk (or 180m walking distance) of the site. The rail services connect the site to Bolton, Manchester Airport, Liverpool Lime Street, Preston, Horwich Parkway, Chorley, Lostock, and Manchester Oxford Road.

The closest Metrolink stop is Deansgate-Castlefield, which can also be easily accessed within a 3.5-minute walk (or 270m walking distance) of the site. The Metrolink tram services connect the site to other areas of the City Centre, Altrincham, Bury, Ashton, Eccles, Etihad Campus, Media City, East Didsbury, Rochdale, Shaw & Crompton, the Trafford Centre, Castlefield and Manchester Airport.

Accordingly, it is evident that the site is highly accessible by sustainable transport modes and is therefore compliant with national (NPPF) and local policies.

4.2.2. Amenities

The site is considered to be well connected to a number of amenities. It is situated on the edge on Manchester city centre and is therefore within easy access of all the shopping, leisure and cultural amenities that the city offers. A selection of local shops, convenience stores and amenities are located in closer proximity at locations such as Deansgate Square, and in the area on the east side of Medlock Street, just south of the railway tracks.

4.2.3. Access for Cyclists

The site benefits from good access to local cycle infrastructure, which residents can utilise for travel through Manchester. There are numerous traffic-free routes and on-road signed cycle paths. In addition, most streets have a speed limit of 20mph, allowing cyclists to ride safely on the carriageway when no designated cycle route is available. It should also be noted that the local highway network surrounding the Site is well-lit by street lighting and the topography of the area is generally flat, thereby providing conditions which are conducive for cycling.

The Proposed Development provides one secure cycle parking space per apartment, located on the basement level. Access to the basement cycle storage is facilitated via the platform lift near the Constance Street entrance, followed by the main lift located in the south-west corner of the building.

4.2.4. Car Parking

As shown on the proposed plans there will be no on-site car parking provision as part of the Proposed Development, and so it will therefore effectively be 'car free'. This will further encourage the use of sustainable alternatives compared to the private car.

4.3. Climate Change Adaptation

As the scheme develops, further consideration will be given to designing in mitigation features to protect the development against the effects of climate change, as directed by Manchester Core Policy EN8 "Adaptation

to Climate Change” JP-S4 Flood Risk and the Water Environment and JP-G8 A Net Enhancement of Biodiversity and Geodiversity.

Mitigation features will apply to the external envelope and building services, and future proofing will be considered, where appropriate.

The potential impacts of climate change considered include:

- Increased flood risk
- Increased frequency of extreme weather events
- Wetter winters, including increased moisture and driving rain
- Hotter summers, including increased solar radiation

Rising sea levels and increases in average winter precipitation, as well as a general increase in the frequency, duration and intensity of rainfall, may result in an increased risk of flooding. This is considered as part of the Flood Risk Assessment (FRA) report produced by Brennan Consult (document reference 3034-BCL-00-XX-RP-D-0001 dated February 2025), which accounts for climate change scenarios. The FRA summarises the risk of flooding from the following sources:

- Tidal: Low
- Fluvial: High (the site is in Flood Zone 3)
- Surface: Low
- Sewers: Low
- Groundwater: Low
- Artificial Sources: Very Low

With regards to fluvial flooding (flooding from rivers), there is a high risk across the site. The Environment Agency’s indicative floodplain map shows that the site is located entirely in Flood Zone 3 i.e. land assessed as having greater than a 1 in 100 (>1.0%) annual probability of fluvial flooding in any year. This is due to the surcharging of the River Medlock watercourse to the southeast and the overland flood flow waters heading towards and into the site boundary.

The assessment has determined that the finished floor level of the new building will be located a minimum of 0.60m above both the 1.0% AEP (1 in 100 year) event level plus a 35% increase in climate change and the 0.1% AEP (1 in 1000 year) event.

A detailed flood evacuation plan will be prepared for the redevelopment and provided to all future occupants of the buildings. This will be a fluid document that is regularly updated when new information and flood data / strategies become available.

As the development buildings will be raised above the external areas, flood resistant and flood resilient measures will not be required. Should an extreme flood event occur, safe egress for the occupiers is assured for higher order storm events up to and including the 1000-year event to the higher ground levels to the north of the site.

The general principal of the surface water drainage strategy is to collect the runoff from the new roof area via new downpipes and direct it to a below ground surface water drainage network located beneath the building that will ultimately outfall to the combined public sewer. As the impermeable area is only 150m², no flow control is required as the peak flow rate will not exceed 5l/s, considered the minimum orifice size to prevent blockage.

4.4. Materials and Waste

Low carbon and sustainable materials will be considered as the design develops, where the use of materials with Environment Product Declarations (EPDs) will help drive the specifications. EPDs communicate the environmental performance of products, allowing specifiers to make informed decisions regarding materials from both a performance and environmental perspective.

To encourage the recycling of operational waste, the development will be provided with appropriately sized and segregated recycling bins within a dedicated bin store in the basement.

4.5. Biodiversity

The site is an existing car park with no ecological features and therefore no adverse ecological impacts are anticipated. As such, a biodiversity net gain report and associated assessment will not be required. This supports compliance with Policies EN 15 and JP-G8.

4.6. Noise Pollution

Noise pollution can have detrimental impacts on the physical and mental wellbeing of residents and building users. To ensure the new development does not significantly contribute to noise pollution, a noise impact assessment has been undertaken by Environmental Noise Solutions Limited (report reference NIA-12149-25-12149-v1).

As confirmed in the report, existing noise levels at the site are controlled by the surrounding road network, with a lesser contribution from vehicles along Little Peter Street and Constance Street. No other significant noise sources were noted by the survey engineer.

5. CONCLUSION

When reviewing the energy and sustainability strategy for this Development, careful consideration has been given to the context of the site, local planning policy and the 2021 Building Regulations.

The proposed energy strategy will follow a sequential approach, using the Energy Hierarchy, assessing, in turn, the feasibility of reducing the energy demand of the building, using energy more cleanly and finally applying renewable technologies. Although various measures are to be implemented, the details of these will be finalised in later RIBA stages. It is intended that there will be optimisation of the thermal performance of the building envelope beyond the minimum U value, including triple glazed windows, and air infiltration standards set out in Building Regulations. Key proposed energy efficient building services systems include the use of LED lighting installations, PIR lighting controls in common areas and low energy mechanical ventilation systems. Air source heat pumps are to be installed for domestic hot water generation.

Sustainable features to address wider issues are also proposed for the scheme. These include provision of cycle storage, together with a strategy for addressing the key issues of materials and embodied carbon, surface water and waste.



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