SECTION 73

ENVIRONMENTAL STANDARDS STATEMENT

DECEMBER 2022

This statement comprises two addendum's, dated December 2022 relating to Phase 3 of the development and September 2021, relating to Phase 2 of the development. The original Environmental Standards Statement (ESS), dated December 2017, is appended and remains valid except where it is not superseded by the Addendum's. In cases where the statements conflict, the Addendum's will take precedence.

St Michaels.
Phase 2 Environmental Standards Statement Addendum. (September 2021)

Introduction

This addendum has been included as part of the Section 73 submission for St Michaels, Manchester. This addendum follows the Environmental Standards Statement (ESS), produced by Watergrove Ltd.

The St Michaels scheme includes a mixture of office, residential, hotel and retail development. Phase 2, to which this addendum relates, includes the office and retail areas.

As part of the recent design evolution, the approach to energy and sustainability has taken an approach towards low energy / carbon design and more emphasis on occupant wellbeing.

The office development is seeking to achieve a minimum NABERS UK rating of 5 stars. NABERS UK focusses on operational energy in use and requires that the building continues to operate efficiently, otherwise the star rating is compromised.

Alongside the NABERS UK goal, the office development is seeking to achieve an environment that provides best practice health and wellbeing. A BREEAM rating of 'Outstanding' is targeted (an improvement over the existing 'excellent' target) along with a WELL Platinum (Core) accreditation.

To further help reduce the environmental impact, the St Michaels development is seeking to use materials which have low embodied carbon. Initial workshops and studies have been undertaken to help reduce embodied emissions and will be revisited during the design stages.

This approach aligns with emerging standard in Manchester; considering operational energy, embodied carbon and health & wellbeing of occupants.

Combining all of these aspects address key questions relating to sustainability; climate change, biodiversity and wellbeing.

Appended to this statement is the original Environmental Standards Statement prepared by Watergrove Ltd., which still applies. This addendum supersedes the Watergrove document where the two documents contradict each other. The two documents should therefore be read together.

1. Sustainable Headlines

1.1 Environmental Design

The office development is now seeking to achieve a BREEAM 'Outstanding' rating.

1.2 Energy

Alongside the requirement to demonstrate an improvement in regulated emissions beyond Part L 2010 (and 2013), the office development is seeking to achieve a minimum of 5 NABERS UK stars. This assessment and performance method focusses on real world operational energy. Star ratings are only awarded once the building is operational and has at least 12 months' worth of energy data.

Alongside the focus on operational energy, the development will utilise electrical energy – benefiting from an ever-decarbonising national grid. Heat pumps will provide thermal energy to the building, helping to reduce energy consumption further. This means that the development has no on-site combustion, helping to limit the impact on air quality in the city.

1.3 Water
Still applicable.

1.4 Waste & Materials
Still applicable and beyond this, embodied carbon calculations are being undertaken to help reduce the embodied carbon impact of the building.

1.5 Biodiversity
Still applicable. The new development will include new landscaping and landscaped roofs / terraces, helping to improve biodiversity.

2. Sustainability Credentials of Development Proposals

2.1 Environmental Design
In recent years, focus has shifted away from metrics such as regulated carbon emissions (Part L) to be more focussed on real world outcomes and operational energy.

Whilst the development demonstrates that the local policies are met i.e. carbon reduction targets over Part L 2010, the design has evolved to focus on operational energy, embodied carbon and health & wellbeing.

Going forward, the development will be focussed on achieving a NABERS UK star rating, a reduction in embodied carbon emissions and environmental assessment ratings; BREEAM 'Outstanding' and WELL Platinum (CORE).

2.2 Energy
The energy hierarchy is still applicable and still part of the evolved strategy. The building will seek to use materials and efficiencies that improve energy consumption and reduce carbon emissions.

Because of the drastic change in carbon emission factors, the development will not utilise gas fired boilers and or Combined Heat and Power (CHP). The low zero carbon measures will be achieved through the use of heat pumps providing heating and cooling for the building.

2.3 Water
Still applicable.

2.4 Waste & Materials
Still applicable and beyond this, embodied carbon calculations are being undertaken to help reduce the embodied carbon impact of the building.

This approach aligns with the evolving drivers and targets for development in Manchester.

2.5 Biodiversity
Still applicable. The new development will include new landscaping and landscaped roofs / terraces, helping to improve biodiversity.

Beyond an increase in biodiversity, this has health & wellbeing benefits which will be realised in the environmental assessments; BREEAM and WELL.

Additionally an increase in landscaping and use of urban greening helps to reduce the urban heat island effect – which in turn helps to improve the energy efficiency of the building.

3. Appendix A: National and Local Policy

3.1 National Planning Policy Framework (NPPF)

3.2 The NPPF was replaced in July 2021 but the general principles remain largely unchanged. The three objectives of sustainable development are now described as:

a) an economic objective – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure;

b) a social objective – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering well-designed, beautiful and safe places, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and

c) an environmental objective – to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.

3.3 The relevant 13 elements are now:

- Building a strong, competitive economy
- Ensuring the vitality of town centres
- Promoting sustainable transport
- Delivering a sufficient supply of homes
- Achieving well-deigned places
- Promoting healthy and safe communities
- Meeting the challenge of climate change, flooding and coastal change
- Conserving and enhancing the natural environment

3.4 National Housing Standards Review & Zero Carbon

This has since been updated and changed. More recently the Future Homes Standard was announced which sets a trajectory to low energy, zero carbon homes.

Whilst the residential element is not considered as part of Phase 2, when this phase comes forward the design will be approached in a similar manner to office development i.e. focus on operational energy, embodied carbon and health & wellbeing.

3.5 Manchester Climate Change Strategy 2017-2050

Manchester's approach to zero carbon has been updated recently and emerging targets are forthcoming. These targets focus on operational energy and embodied carbon – largely following the UKGBC framework for zero carbon development.

The draft report and targets can be found here;
https://www.manchesterclimate.com/sites/default/files/Roadmap%20to%20Net%20Zero%20Carbon%20-%20Report.pdf

3.6 Manchester Residential Quality Guidance

Still applicable.

3.7 Manchester City Core Strategy

Policy DM1; Code for Sustainable homes no longer exists therefore alternate performance targets should be sought e.g. Home Quality Mark (HQM)

Policy EN1, EN2 & EN3; no change.

Policy EN4, EN5, EN6, EN7 & EN8; refer to energy strategy note.

Policy EN9, EN14, EN15, EN16, EN17, EN18 & EN19; no change.

3.8 Manchester City Councils' Guide to Development in Manchester Supplementary Planning Document

Energy Efficiency Policy **4.5**
Met through passive and low energy design and use of heat pumps for heating and cooling.

Renewable energy Policy 4.6
Renewable energy achieved through use of high efficiency heat pumps. Note that because of national grid decarbonisation, technology such as PV offers little carbon benefit – however does help to reduce energy consumption.

Environmental Design Policy 4.7 & 4.8
Development seeking to achieve BREEAM 'Outstanding' and WELL Platinum (CORE).

Water Management & Weather Resilience Policy 4.9
No change.

Waste Management Policy 4.10
No change.

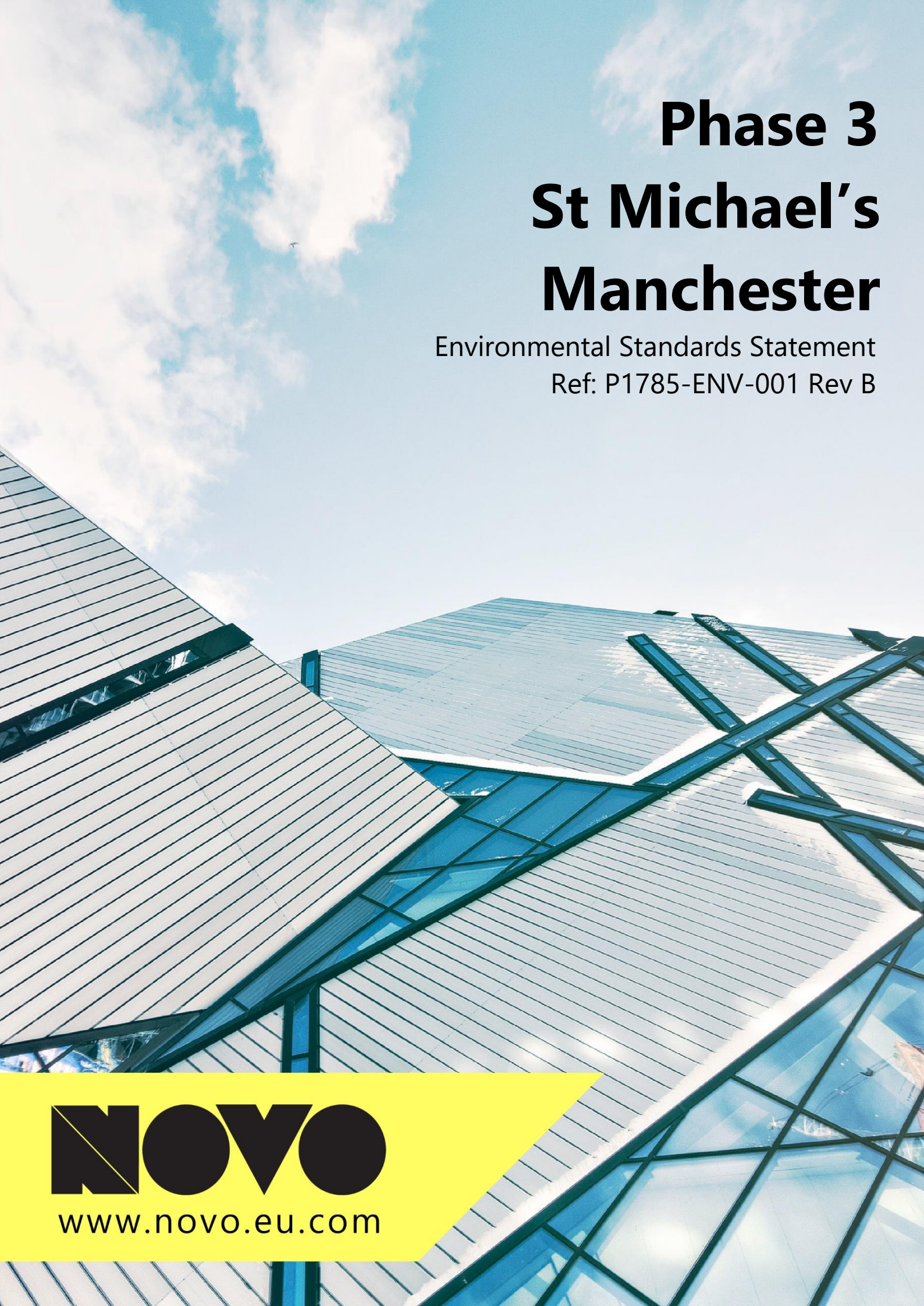
Construction Management Policy 4.13 * 4.14
No change.

Biodiversity Policy 4.15
No change.

Waterways Policy 4.16
No change.

Phase 3
St Michael's
Manchester

Environmental Standards Statement
Ref: P1785-ENV-001 Rev B



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AMENDMENT HISTORY

REVISION	DESCRIPTION	DATE	AUTHOR	CHECKED
A	Initial Issue	Nov 2022	C. Pearson	B. Duckworth
B	Zerum Comments incorporated	Dec 2022	C. Pearson	B. Duckworth

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1 EXECUTIVE SUMMARY

The proposed development St Michael's is located within Manchester city centre. As such the policies detailed in the Manchester Core Strategy must be adhered to. To support the application this Environmental Standards Statement has been produced in accordance with the Core Strategy policy.

Please refer to the Energy Strategy Report (P1785-ES-001 Rev B) for all data, analysis and results relevant to this Environmental Standards Statement.

2 ENVIRONMENTAL STANDARDS STATEMENT

This Environmental Standards Statement is designed compliment the Energy Strategy report and will be referred to throughout.

Some elements described within this statement fall outside the remit of NOVO Integration Ltd and as such will be incorporated within other parties' appointments. This statement will however summarise and reference other third-party reports where applicable to aid with addressing all applicable elements of the Environmental Standards.

The various topics covered here are as follows:

- Energy Efficiency
- Renewable Energy
- Environmental Design
- Water Management and Weather Resilience
- Waste Management
- Construction Management
- Waterways

Each element will be summarised how the development will achieve this, and any relevant third-party reports referenced accordingly.

Please note that where assumptions have been made of specific reports being carried out, confirmation of these reports from the developer will be required. Reference only is made within this report.

Any reports referenced within this section does not confirm that these reports are either required or have been or will be carried out and are assumptions of such only.

2.1 ENERGY EFFICIENCY

The Manchester Core Strategy states that in summary, all new developments should endeavour to reduce their CO_2 emission by particular targets as detailed in the Energy Strategy Report.

However, the principals highlighted within the section are carried through into the design.

Section 4 Energy Strategy of the Energy Strategy report details specifically how the proposed design of the development including the fabric, mechanical and electrical services will use passive, energy efficient and low carbon technologies throughout with emphasis on a fabric first approach to minimise the CO_2 emissions and meet the targets set in the Manchester Core Strategy.

The Energy Strategy describes how the development follows the Energy Hierarchy approach which many local authorities advocate the use of.

2.2 RENEWABLE ENERGY

The Manchester Core Strategy encourages the use of Low Zero Carbon technologies, this again follows the Hierarchical approach.

This is to encourage opportunities to reduce the energy demand via the use of onsite renewable technologies to improve energy security for occupants of the site and export of surplus energy back to the grid.

Various opportunities and different technologies should be investigated to determine the most viable and appropriate technology for the site in question.

Again Section 4 of the Energy Strategy report deals with the Energy Hierarchical approach to Energy and the use of renewable technology. Many different technology opportunities have been investigated and discounted where applicable and included where appropriate.

Following these in-depth reviews of varying renewable technologies, low carbon air source heat pumps have been deemed viable and appropriate for the development.

2.3 ENVIRONMENTAL DESIGN

This element encourages developers to use the Building Research Establishment Assessment Method (BREEAM) to assess environmental performance, for which the BREEAM Excellent rating is targeted for ethe offices. The offices in addition shall have a NABERS star rating, WIRED SCORE AND SMART SCORE ratings for energy efficiency. The process of the BREEAM, NABERS etc will also ensure embodied carbon is reduced.

2.4 WATER MANAGEMENT AND WEATHER RESILIENCE

Thoughtful design to reduce the levels of pollution within the city's watercourses, as well as mitigating the effects of flooding should significant storms present themselves in the future should be considered.

As such a Flood Risk Assessment and Drainage Strategy Report has been produced to demonstrate the methodology as to how the development will manage excessive water in times of storms etc to minimise the risk of flooding to the development and surrounding areas.

As the development is within Flood Risk Zone 1 there is a low risk of flooding. It is anticipated that any excessive rainwater will be dealt with through the use of attenuation other methodologies falling line with SUDs techniques to improve flows and quality of the surface water run-off.

Water Usage for the development will utilise low flow / volume sanitaryware to reduce the amount of water consumed and comply with the Building Regulations Part G, United Utilities water consumption limitations and also aspires to achieve the target metrics described in the RIBA 2030 Climate Challenge.

2.5 WASTE MANAGEMENT

It is understood that the Construction Waste Management Plan will be prepared to ensure that all aspects of waste production, deliveries, noise, dust pollution etc are all accounted for and reasonably mitigated.

There is potential for the Waste Management Strategy to be reviewed by Building Management during the lifetime of the building for opportunities to improve the procedures and will also review areas where reductions in waste, or an increase in recycling waste can be made. This will form part of a Construction Management Plan which will likely be required by a condition attached to any planning permission.

The design of designated areas for waste and recyclable waste once construction has been completed for the use of the occupants has and will be carefully considered, not only in terms of capacity but allowances made for access for collections.

These areas will have designated areas for recyclable waste which will encourage further responsibility to be taken by the occupiers to separate their own waste accordingly.

2.6 CONSTRUCTION MANAGEMENT

Best practices encourage environmentally friendly construction methods and materials which in effect reduces energy consumption.

This standard also encourages best practices during construction to prevent or limit damage to the environment and to make sure these measures are not being abused during the full construction phase.

It is assumed that the contractor will be responsible for providing a comprehensive construction management plan containing all procedures on site and methodologies for a safe, environmentally conscious, and efficient construction period.

St Michael's, Jackson's Row, Manchester

Environmental Standards Statement

Revision: 5
02 November 2017

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0	Draft for comment	28.10.16
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2	Second issue	04.11.16
3	Final issue	07.12.16
4	Final issue following comments	20.12.16
5	Revised application	02.11.17

Important notice
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Introduction

This Environmental Standards Statement (ESS) is submitted on behalf of Jackson's Row Development Limited (the "Applicant"), in support of an application for Planning Permission for the redevelopment of the Jackson's Row Site, known as St Michael's (the "Proposed Development" / "Proposals"). The application was originally registered in January 2017 however, following consultation the applicant took the decision to revise the scheme in order to address comments received. The Applicant now seeks consent for the partial demolition of the existing buildings and development up to 171.6m AOD comprising residential (Use Class C3), offices (Use Class B1), hotel (Use Class C1), place of worship (Use Class D1) and leisure/ food and drink uses (Classes A1, A3, A4, A5 and D2). Creation of public spaces and new public realm, provision of basement car parking, highway alterations, landscaping and associated works".

The Proposals include:

- A new public space at street level
- A new roof top level public garden space
- Up to 189 residential apartments
- 16,310 sq m of Grade A office space
- Up to 216 bed Five-Star Hotel
- 30 bed Boutique Hotel
- A synagogue
- 3,228 sq m of restaurants, cafes and bars

The ESS details the features incorporated into the Proposed Development to ensure that relevant standards outlined in Manchester City Council's (MCC) Core Strategy and Guide to Development Supplementary Planning Document (SPD) are met.

The ESS demonstrates that sustainability objectives form an integral part of the Applicant's aspirations for St Michael's.

Overview

Site Context

The Application Site is located within Manchester City Centre on Jackson's Row and covers an area of 0.56 hectares. The Site is bound by Southmill Street to the east, Jackson's Row to the north and Bootle Street to the South which provides both vehicular and pedestrian access.

The Site is currently occupied by the old Greater Manchester Police Bootle Street station (which is no longer in use), the Sir Ralph Abercromby pub, the Manchester Reform Synagogue and car parking facilities.

The Site is located within an urban setting, and is surrounded entirely by buildings which are being used either as office space or bar / restaurants.

The Site is well connected within the city centre, with close proximity to the city centre's primary north-south pedestrian and vehicle routes, tram and bus stops, and major train stations.

Report Structure

The ESS demonstrates how the Proposals have been brought forward in the context of a strong commitment to sustainability. An overview of the relevant sustainability planning policy is provided in Appendix A; and the policies of the Core Strategy and Guide to Development in Manchester Supplementary Planning Document (SPD) are cross-referenced throughout the ESS.

The ESS is broadly structured around the headings of MCC's *Guide to Development SPD* and includes the following:

- Environmental Design
- Energy – incorporating Energy Efficiency and Renewable Energy
- Water – incorporating Water Management and Weather Resilience and Waterways (where applicable)
- Waste & Materials – incorporating Waste Management and Construction Management
- Biodiversity

Key Sources

The ESS is supported by the following documents:

- Planning & Tall Building Statement, prepared by Zerum
- Design and Access Statement, led by Hodder + Partners Architects
- Energy Strategy Statement, prepared by Zerum & appended to this ESS

Plus the following documents prepared by WSP:

- Transport Statement and Framework Travel Plan
- Flood Risk Assessment and Drainage Strategy
- Waste Management Strategy
- Biodiversity Assessment, Protected Species and Bat Surveys

Strategic Regeneration Framework

A Strategic Regeneration Framework (SRF) for the site at Jackson's Row was submitted to Manchester City Council and approved in December 2015. **The approved SRF will be a material consideration in determining any future planning applications for the development of the site.**

The Strategic Regeneration Framework for the Site states an aim to provide **'a connected and distinctive destination for all'**, with the following objectives:

- A new destination for Manchester
- Growth
- World-class architecture
- Heritage
- Integration
- Connectivity
- Vitality
- Sense of place
- Sustainability
- Accessibility

For the purpose of this ESS, the relevant objectives relating to environmental sustainability have been selected and are summarised here; demonstrating that environmental sustainability is an integral part of the regeneration plans of this area.

Sustainability & Management Objectives

Proposals should secure the highest possible standards of sustainability in new development by creating an inspiring and resilient urban environment in terms of energy performance and the resultant response to the impacts of climate change.

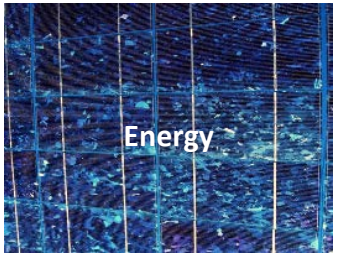
Proposals should integrate the principles of resource efficiency to both the development itself and the subsequent management of buildings, services and spaces.

Proposals should be focused upon new buildings which reduce energy use by incorporating high levels of insulation energy efficiency, utilising recovery of waste where possible. A high standard of sustainable building design should be sought.

New public realm will need to be covered by an appropriately rigorous ongoing management regime to ensure upkeep and safety across the site.

Sustainability Headlines

The headline sustainability features of the proposals for the St Michael's development are summarised in the following table.

THEME	SUSTAINABILITY HEADLINE
	Demonstrating a strong commitment to sustainable development by applying the sustainability principles of the Jackson's Row Strategic Regeneration Framework. BREEAM Excellent for offices is targeted and a bold approach to energy and low carbon design across the Development. The Development will be on 100% of previously developed land, thereby avoiding the use of virgin land. The Site is in an excellent location, in close proximity to the City Centre, to benefit from non-car travel. The Contractor will follow the Considerate Constructors Scheme to ensure that the site will be managed in an environmentally and socially considerate manner.
	An Energy Strategy has been devised in line with the Core Strategy approach to good energy design, setting out a route to exceeding the sustainable standards set out in Part L of the Building Regulations 2010 and ensuring compliance with current Building Regulations, Part L 2013. A CO_2 reduction of 15% or greater against Part L of the Building Regulations 2010 will be sought through a combination of: improved fabric performance, energy efficient mechanical and electrical servicing; and Low and Zero Carbon (LZC) technologies including water and air source heat recovery comfort cooling systems, and combined heat and power.
	Surface water run-off rates will be reduced, beyond good practice, to flows of 50% of pre-demolition discharge rates. The introduction of landscaped areas and roof gardens will increase short term water storage within the site and attenuate the rate and volume of surface water movements off site. This will be supplemented by an additional 149m^3 of attenuation storage built in to the site drainage. A water efficient strategy will be established to provide a 25% or greater improvement on typical water consumption (litre/person/day) in line with best practice BREEAM requirements.

THEME	SUSTAINABILITY HEADLINE
	Opportunities to reduce waste at source, promote resource efficiency, and re-use or recycle materials will be identified in order to meet a target of 90% of waste diverted from landfill during the construction phase of the development. The provision of dedicated recyclable storage will promote occupant participation in sustainable waste management during use.
	Ecology surveys have been undertaken to ensure no adverse impact on biodiversity will be caused. Proposed enhancements to site ecology include the design of the tower and roof garden to incorporate favourable habitat, such as achievable ledges and foraging opportunity in the planting, for locally highlighted black redstart, as well as other bird species, insects and bats.

Sustainability Credentials of Development Proposals

Environmental Design

Development proposal credentials for the following sustainability policies are summarised in this section:

Guide to Development in Manchester, Policy 4.7 & 4.8, Environmental Design

MCC Core Strategy, Policy DM1, Development Management

MCC Core Strategy, Policy EN16, Air Quality

In line with Council aspirations, in considering environmental sustainability within the Development, attention has been focused on achieving a high standard of design and a wide ranging package of environmental benefits, rather than focussing on narrow targets and specific standards, except where the markets demand such classification. The headline sustainability credentials for the Proposed Development, coupled with the development vision of the Strategic Regeneration Framework (SRF) for the Jackson's Row Site, are described further in the following pages of this ESS.

BREEAM Excellent is targeted for the proposed new build office areas in line with market expectations for Grade A office space.

The Proposals have been developed to allow compliance with energy standards set in Building Regulations Part L 2013; and aim to achieve an Energy Performance Certificate (EPC) rating of 'A'.

Enhanced fabric performance, energy efficient mechanical and electrical servicing, water and air source heat recovery comfort cooling systems, and combined heat and power (CHP) are under consideration as measures to contribute to the energy reduction and sustainability features of the whole development.

The Development will be on 100% of previously developed land, thereby avoiding the use of virgin land.

The Site is in an excellent location to benefit from non-car travel being in close proximity to established public transport nodes including buses, Metrolink and train services which not only connect to local and regional services but also national destinations. Furthermore, the surrounding pedestrian and cycling infrastructure is extensive and covers a wide range of surrounding areas.

The Proposals include measures to promote sustainable travel patterns, including the introduction of new pedestrian routes. Pedestrian connectivity to the wider city centre is also excellent. Cyclist facilities will be incorporated in the Proposed Development to encourage building users to use more sustainable forms of transport, which will contribute to MCC's aspiration to improve air quality in the City. The provision will include 292 cycle storage spaces in the basement plus the option of folding bike storage for each residential apartment.

Energy

Development proposal credentials for the following sustainability policies are summarised in this section:

Guide to Development in Manchester, Policy 4.5, Energy Efficiency

Guide to Development in Manchester, Policy 4.6, Renewable Energy

MCC Core Strategy, Policy EN4, Reducing CO_2 emissions by enabling LZC development

MCC Core Strategy, Policy EN6, Target framework for CO2 reductions from LZC energy supplies

MCC Core Strategy, Policy EN7, Energy Infrastructure

MCC Core Strategy, Policy EN8, Adaptation to climate change

The Energy Strategy Statement prepared by Zerum (appended to this report) describes how the proposed design of the buildings and the mechanical and electrical services strategy will utilise passive, energy efficient and low zero carbon features throughout to minimise its carbon and environmental footprint and exceed the sustainable standards set out in Building Regulations.

More specifically, the energy strategy for the Site follows the **Energy Hierarchy** approach supported in the Core Strategy, which advocates prioritising building fabric and services performance improvements over the installation of on-site LZC technologies. The Proposals address the energy hierarchy as follows:

- **Building Passive Measures:** The energy used for heating the buildings will be reduced by improving the fabric energy efficiency of the building envelope beyond current building standards. The U-values for the thermal elements and air permeability will be improved beyond the standards required under Building Regulations Part L 2013.
- **Energy Efficient Systems:** Low energy LED lighting with local zones and controls will be incorporated. High-efficiency heating and cooling systems will serve office areas. Ventilation will be provided by inverter-driven fan systems with heat recovery to maximise energy saving. A Building Management System (BMS) will be provided along with comprehensive energy metering to allow efficient monitoring and control of major energy consuming systems.
- **Low or Zero Carbon (LZC) Measures:** VRF (variable refrigerant flow) water and air source heat recovery comfort cooling systems, and combined heat and power (CHP) are under consideration as measures to reduce CO_2 emissions.

Overall, the above combination of passive, energy efficient and LZC measures will provide the following CO_2 reductions in line with the requirements of the MCC Core Strategy:

- Offices: 15% improvement on Part L2A of the Building Regulations 2010.
- Hotel/Function Spaces: 15% improvement on Part L2A of the Building Regulations 2010.
- Residential: 19% improvement on Part L1A of the Building Regulations 2013 (which equates to a 25% improvement on 2010 regulations).

Water

Development proposal credentials for the following sustainability policies are summarised in this section:

Guide to Development in Manchester, Policy 4.9, Water Management & Weather Resilience

MCC Core Strategy, Policy EN8, Adaptation to climate change

MCC Core Strategy, Policy EN14, Flood Risk

MCC Core Strategy, Policy EN17, Water Quality

The Flood Risk Assessment prepared by WSP (accompanying this Application) confirms that the majority of the Site is considered to be at a low or negligible risk of flooding from all sources. The Site is located within Flood Risk Zone 1 which indicates there is less than a 0.1 per cent (1 in 1000) chance of flooding occurring each year. However, the Environment Agency Risk of Flooding from Surface Water Velocity Map indicates that during storm events with a low chance of occurring, there is surface water flow along Jackson's Row and Bootle Street.

The Flood Risk and Drainage Strategy identifies the following surface water management and drainage approaches:

- Site levels on the northern and southern boundary of the Site engineered to ensure that flow from Jackson's Row and Bootle Street would not be directed onto the Site and cause flooding.
- 149m^3 of attenuation storage (based on an impermeable area of 0.57 hectares and achieving a discharge rate of 39.8 l/s during the critical 1 in 100 year storm event, plus a 40% allowance for climate change).
- The introduction of landscaped areas and roof gardens to increase the short term water storage within the site itself and attenuate the rate and volume of surface water movements off site.

The above Sustainable Urban Drainage (SuDS) measures will seek to limit flows to 50% of pre-demolition discharge rates in line with the requirements set by MCC Planning Department in pre-application consultation; and to avoid flooding from surface water run-off from a 1 in 100 year storm (plus a 30% allowance for climate change in accordance with the NPPF and BREEAM).

A water efficient strategy will be established for the site in order to provide a 25% or greater improvement on typical water consumption (litre/person/day) in line with best practice BREEAM requirements. Water efficient devices and equipment will include:

- Low flow sanitary fittings
- A-rated, low water consuming appliances (where provided)
- Water meters to enable occupants to monitor water use
- Water leak prevention and leak detection systems
- External landscaped areas to be irrigated by natural rainfall

Although the Site is not located near any main surface watercourses; in line with BREEAM, the construction site will be managed in an environmentally considerate manner. The Code of Considerate Practice to be adopted by the contractor will involve adhering to best practice policies to prevent ground and surface water pollution.

Waste & Materials

Development proposal credentials for the following sustainability policies are summarised in this section:

Guide to Development in Manchester, Policy 4.10, Waste Management

Guide to Development in Manchester, Policy 4.13 & 4.14, Construction Management

MCC Core Strategy, Policy EN19, Waste

A key aspect of the revised scheme is the retention of the Portland Stone building of the former Police Station and the Sir Ralph Abercromby public house. The retention of these existing buildings will reduce the embodied energy of construction materials and the waste arisings typically associated with entirely new build construction.

The Demolition section of the EIA (accompanying this Application) confirms an audit of the rear portion of the Greater Manchester Police Station (which is no longer in use) and the Manchester Reform Synagogue, has been undertaken to identify likely demolition material and opportunities for reuse. The demolition material is anticipated to be stone and brick which will be recycled off-site.

During the development of the detailed designs and specifications, the life cycle impact of major building materials will be appraised and the following considered:

- BRE Green Guide Rating of materials and/or Environmental Product Declarations (EPD), with preference given to materials with low environmental impact.
- Low volatile organic compound (VOC) finishes.
- Prioritising suppliers and manufacturers who operate Environmental Management Systems and responsible sourcing practices.
- Local sourcing of construction materials.

In line with best practice BREEAM requirements, a target of 90% of waste to be diverted away from landfill will be established for the construction phase of the development. A Site Waste Management Plan will be developed by the appointed contractor to identify opportunities to reduce waste at source, promote resource efficiency, and re-use or recycle materials. The Waste Management Strategy (accompanying this Application) confirms the demolition and excavation material will be used as temporary works on Site and then be recycled off Site; and the vast majority of construction waste will either be re-used on Site or recycled off-Site.

During construction the Site will be registered under the Considerate Constructors Scheme and the contractor will be encouraged to go significantly beyond best practice under the scheme.

The management of waste produced during the operational phase of the Proposed Development will be considered and addressed through the design process and the Waste Management Strategy, to ensure it is managed in a way to minimise environmental effects in accordance with legislation, guidance and local targets. Dedicated recyclable storage areas or containers will be provided to encourage occupant participation in the separation of recyclable materials at source.

Biodiversity

Development proposal credentials for the following sustainability policies are summarised in this section:

Guide to Development in Manchester, Policy 4.15, Biodiversity

MCC Core Strategy, Policy EN9, Green Infrastructure

MCC Core Strategy, Policy EN15, Biodiversity & Geological Conservation

The Applicant has appointed ecologists to assess the baseline ecological value of the site, identify any flora and fauna requiring protection and advise of measures to enhance local biodiversity.

The Biodiversity Assessment (accompanying this Application) describes the Site as dominated by man-made habitats such as buildings and hardstanding. There are limited areas of semi-natural habitat present including ornamental shrubs and scattered trees. All existing shrubs and trees are to be removed as part of the Proposed Scheme. Such habitats are considered to be common within the local context and unlikely to be of significant value for any protected or notable species.

The Protected Species and Bat Surveys (accompanying this Application) conclude that there is no evidence of bats roosting in the Site and there is very limited potential for foraging across the Site given the limited vegetation present on the Site. Therefore, the potential for disturbance or loss of bats during the construction phase is considered to be insignificant. Additionally, given the limited vegetation of Site the potential for disturbance or loss to breeding birds is also considered insignificant.

The Biodiversity Assessment concludes that it is considered unlikely that the Proposed Development will impact on protected/notable species or local conservation sites as identified in the study; and the Proposals provide opportunity to provide valuable wildlife habitats within the green spaces.

In line with recommendations the following are being considered during the early scheme design to minimise potentially adverse ecological effects and realise opportunities to enhance biodiversity:

- The Construction Environmental Management Plan will include measures to check for the presence of breeding birds on the Site, prior to mitigation.
- Soft landscaping considering local wildlife listed in the Greater Manchester Action Plan and efforts made to promote these species;
- Review feasibility of directional external lighting and sodium lamps to avoid disturbance to commuting, foraging or roosting bats.
- The design of the tower and roof gardens incorporates favourable habitat, such as achievable ledges and foraging opportunity in the planting, for locally highlighted black redstart, as well as other birds, insects and bats.

Appendix A: National & Local Planning Policy

National Planning Policy Framework (NPPF)

The National Planning Policy Framework (NPPF) was published on 27th March 2012 with the policies within it applicable from this date. It replaced all previous Planning Policy Statements and Guidance notes (PPSs and PPGs).

The NPPF States that the Planning System should play an active role in guiding development to sustainable solutions. The NPPF also sets out three dimensions to sustainable development as: economic, social and environmental. These dimensions give rise to the need to the planning system to play a number of roles.

An economic role: contributing to building a strong, responsive and competitive economy, by ensuring that sufficient land of the right type is available in the right places and at the right time to support growth and innovation; and by identifying and coordinating development requirements, including the provision of infrastructure.

A social role: supporting strong, vibrant and healthy communities, by providing the supply of housing required to meet the present and future generations; and by creating a high quality built environment, with accessible local services that reflect the community's needs and support its health, social and cultural well-being.

An environmental role: contributing to protecting and enhancing our natural, built and historic environment; and as part of this, helping to improve biodiversity, use natural resources prudently, minimise waste and pollution, and mitigate and adapt to climate change including moving to a low carbon economy.

Presumption in favour of sustainable development

At the heart of the NPPF is a **presumption in favour of sustainable development**, which should be seen as a golden thread running through both plan-making and decision-taking. The NPPF states that policies in Local Plans should follow the approach of the presumption in favour of sustainable development so that it is clear that **development which is sustainable can be approved without delay**.

The NPPF outlines 13 elements considered essential for **'Achieving Sustainable Development'**, of which the following are deemed relevant to this Proposed Development.

- Building a strong competitive economy
- Ensuring the vitality of town centres
- Promoting sustainable transport
- Delivering a wide choice of high quality homes
- Requiring good design
- Promoting healthy communities
- Meeting the challenge of climate change, flooding and coastal change
- Conserving and enhancing the natural environment

National Housing Standards Review & Zero Carbon

Government issued a **Ministerial Statement on 25 March 2015** setting out the conclusion of the **Housing Standards Review**. The statement set out a new policy on the application of technical housing standards that applied immediately to all local planning authorities and qualifying bodies. This had a direct effect on the application of existing Code policies, and the setting of new Code policies.

Following consultation in 2014 the Government elected to **remove the Code for Sustainable Homes** and incorporate new additional optional Building Regulations on water and access, and a new national space standard. The aim is to boost industry activity through reduced regulatory and financial burdens. The new national **Housing – Optional Technical Standards** came into force in October 2015.

Local planning authorities have the option to set additional technical requirements exceeding the minimum standards required by Building Regulations in respect of **access** and **water**, and an optional nationally described **space standard**. Local planning authorities will need to gather evidence to determine whether there is a need for additional standards in their area, and justify setting appropriate policies in their Local Plans.

Mandatory Building Regulations covering the **physical security** of new dwellings came into force on 1 October 2015 and planning authorities should no longer seek to impose any additional requirements for security of individual dwellings through plan policies, though designing for security of site layout remains a valid planning consideration.

The new **Housing – Optional Technical Standards** have come about because of clauses within the **Deregulation Act 2015**.

The Act also brings in a Clause which will amend the Planning and Energy Act 2008 to **prevent local authorities from requiring higher levels of energy efficiency than Building Regulations**. This second **Clause has yet to be commenced**, and the written ministerial statement stated that this is expected to happen alongside the introduction of zero carbon homes policy in late 2016.

However, the Government's productivity plan, **HM Treasury, Fixing the foundations, published on 10 July 2015**, confirmed the **removal of the standards for Zero Carbon Homes** from 2016 as follows:
'The government does not intend to proceed with the zero carbon Allowable Solutions carbon offsetting scheme, or the proposed 2016 increase in on-site energy efficiency standards, but will keep energy efficiency standards under review, recognising that existing measures to increase energy efficiency of new buildings should be allowed time to become established.'

<u>Therefore, from 26 March 2015 until the amendment of the Planning and Energy Act (for which there are no current timescales), the Government's policy is that where there is an existing plan policy which references the Code, authorities may continue to only apply the following in respect to energy performance for new build homes:</u>
*'Set a standard equivalent to the (outgoing) Code Level 4 requirements, which state a **19% improvement above Building Regulations Approved Document L1A 2013** England*.'

In respect of cases such as where developments are legally contracted to apply a Code policy or where a case has been granted permission subject to condition stipulating discharge of a Code level prior to 26 March 2015, legacy arrangements will apply.

It is therefore inferred that the wider Code Level requirements of the Manchester City Council Core Strategy are no longer a material consideration and cannot be stipulated as a planning condition.

Housing White Paper

Government issued the White Paper **"Fixing our broken housing market"** on 7 February 2017, which sets out a broad range of reforms that government plans to introduce to help reform the housing market and increase the supply of new homes.

The Government defines its proposals as four steps to achieving the objective of boosting new housing supply, to deliver 'between 225,000 and 275,000 homes every year'.

The steps are:

1. **Planning for the right homes in the right places** - principally by using local and neighbourhood plan policies.

2. **Building homes faster** - mainly by better linking infrastructure with housing development, more efficient development management and addressing the construction skills shortages.

3. **Diversifying the housing market** - focussing on increasing the numbers of small and medium-size builders, promoting more varied forms of tenure (e.g. rental) and encouraging 'modern methods of construction'.

4. **Helping people now** - by meeting all of the population's diverse housing needs.

Manchester Climate Change Strategy 2017-50

'Manchester will play its full part in limiting the impacts of climate change… and by 2025 will be on a path to being a zero carbon city by 2050'

This is the commitment in 'Our Manchester' the Manchester Strategy for 2016-25, published just one month after the international climate change negotiations in Paris in December 2015.

Following this commitment, the Manchester: A Certain Future Steering Group and Manchester Climate Change Agency have produced a **Manchester Climate Change Strategy (MCCS) 2017-50** and **Implementation Plan 2017-22**, which were launched on the 5th December 2016.

The MCCS sets out an approach to realising the commitment for Manchester to become a zero carbon, climate resilient City. The headline objectives of the strategy are as follow:

1. Sustainable economy and jobs
2. Healthy communities
3. Resilience to climate change
4. Zero carbon
5. Culture change

Key thematic actions are set out as follows:

6. **Buildings:** very low and zero carbon existing and new buildings
7. **Energy:** supplied by 100% clean energy by 2050
8. **Transport:** decarbonising local transport system by 2050 and managing Manchester Airport's CO_2 emissions as part of an international scheme
9. **Resources and waste:** zero waste by 2050
10. **Food:** sustainable food production and consumption
11. **Green spaces and waterways:** for climate resilience and carbon sequestration

The buildings section of the MCCS is particularly relevant to this ESS.

Buildings

The MCCS envisages that the standards that Developers build to will increase over time, driven by local demand and policy, reaching net zero carbon by the early 2020s. This shift aims to avoid creating assets with low long-term value which have high carbon and running costs and climate vulnerability 'locked in' to their design. By developing policies collaboratively with developers and other built environment professionals, this transition will be able to be managed so that supply chains and expertise can be built up over time, and that zero carbon buildings are commercially viable for the developers constructing them. Local businesses, colleges and universities will play a key role in helping to develop these skills as well as supporting the development of innovative new construction products and technologies.

Zero Carbon

The MCCS states that the definition of zero carbon applied to Manchester will be shaped by international, national and local policy to ensure consistency.

As mentioned on page 17 of this report, the Government has removed the standards for Zero Carbon Homes from 2016 at a national level. The next steps towards zero carbon are currently unclear. However, in March 2016, The Mayor of London published updated Housing Supplementary Guidance implementing a zero carbon standard for all new homes that are part of major developments within Greater London from October 2016. Whether Manchester adopts a similar top-down policy approach remains to be seen; the MCCS suggests a more collaborative, market-driven approach will be pursued.

Manchester Residential Quality Guidance

The 'Draft Manchester Residential Quality Guidance' was published for consultation in July 2016, and Manchester City Council's executive approved the guide for all new housing across the city on 22 December 2016.

The Guidance cross references but does not seek to replicate existing policy and regulations that will continue to apply to all new residential development.

In addition, it provides the baseline minimum requirements and mandatory standards that all new residential proposals will be required to satisfy or exceed in order to be considered sustainable development.

New development is expected to comply with the Guidance. Where a proposal does not, thorough justification will need to be provided. Typical justification for exception will be in order to produce exemplary and innovative design and/or projects that provide overriding public benefit.

The guidance aims to underpin the delivery of new housing which is fit for purpose in the long term, comfortable, safe, accessible, environmentally sustainable and spacious enough to accommodate the changing needs of occupants throughout their lifetimes.

Developers should refer to this guidance throughout the planning and development process to help identify and articulate the contribution of their development towards the neighbourhood, the block and the home.

Addressing these holistic principles during pre-application discussions, working alongside the local authority as part of an iterative and effective development process will be an essential pre-curser to the granting of Planning Permission.

The key principles of the guidance are:

Make it Manchester – developers must understand the city's unique character, heritage old and new, density and scale in various parts of the city and appreciate how new homes will fit in to what's already there.

Make it bring people together – new homes must encourage a sense of community and neighbourliness, offering a mix of tenures to promote a mix of people.

Make it animate streets and spaces – understand the relationship between new homes and its environment and create public space.

Make it easy to get around – make sure developments have good transport links, along with good walking and cycling provision.

Make it work with the landscape – development should improve the connection with the local environment with improved biodiversity, as well as greening and water schemes.

Make it practical – dealing with waste, car parking, bike storage and visitors should be made as easy as possible.

Make it future proof – design must anticipate the impacts of climate change and extreme weather with efficient design and adaptability.

Make it a home – sufficient space, natural light, privacy and storage are essential for people to settle down and flourish.

Make it happen – ensuring proposals are delivered, to a high quality, with high design standards and high sustainability.

Manchester City Council's Core Strategy

Manchester City Council's Core Strategy sets out the strategic approach to development for the city up 2027. The Core Strategy was adopted in July 2012 and is the key Development Plan Document in the Local Development Framework (LDF).

The following table summarises the policies relevant to sustainability within the Core Strategy.

ENVIRONMENTAL STANDARDS	DESCRIPTION
Core Strategy Policy DM1 Development Management	Subject to scheme viability, developers will be required to demonstrate that new development incorporates sustainable construction techniques as follows (In terms of energy targets this policy should be read alongside policy EN6 and the higher target will apply): For new residential development meet as a minimum the following Code for Sustainable Homes standards. This will apply until a higher national standard is required: 1. Year 2010 – Code Level 3; 2. Year 2013 - Code Level 4; 3. Year 2016 - Code Level 6; ***In light of the conclusion to the Housing Standards Review published on 25 March 2015, it is assumed that the Code Level requirements of the Core Strategy are no longer a material consideration.*** For new commercial developments to demonstrate best practice which will include the application of the BREEAM (Building Research Establishment Environmental Assessment Method) standards.
Core Strategy Policy EN1 Design Principles & Strategic Character Areas	All development will be expected to follow the seven principles of urban design, as identified in national planning guidance and have regard to the strategic character area in which the development is located.
Core Strategy Policy EN2 Tall Buildings	By their very size tall buildings can have a significant impact on the local environment and its micro-climate. It is therefore expected that this impact be modelled and that submissions for tall buildings also include appropriate measures to create an attractive, pedestrian friendly local environment.
Core Strategy Policy EN3 Heritage	The Council will encourage development that complements and takes advantage of the distinct historic and heritage features of its districts and neighbourhoods, including those of the City Centre.
Core Strategy Policy EN4 Reducing CO_2 Emissions by Enabling Low & Zero Carbon (LZC) Development	All development must follow the principle of the Energy Hierarchy, being designed: • to reduce the need for energy through design features that provide passive heating, natural lighting and cooling • to reduce the need for energy through energy efficient features such as improved insulation and glazing • to meet residual energy requirements through the use of low or zero carbon energy generating technologies

ENVIRONMENTAL STANDARDS	DESCRIPTION
	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 LZC energy supplies. Where possible new development and retrofit projects will be used as a mechanism to help improve energy efficiency and provide LZC energy supplies to existing buildings. Where appropriate new development and retrofit projects will be required to connect to and/or make contributions to LZC 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.
Core Strategy Policy EN5 Strategic Areas for LZC decentralised energy infrastructure	New development, regeneration and retrofit projects, within the following strategic areas 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. 1. The Regional Centre, which also includes the Oxford Road Corridor and Eastlands 2. District Centres and associated major development sites 3. Airport Strategic Site 4. Strategic housing location 5. Strategic employment locations
Core Strategy Policy EN6 Target Framework for CO_2 Reductions from Low & Zero Carbon Energy Supply	Applications for residential development of 10 or more units and all other development over 1,000 sq. m will be expected to comply with the ***target framework***. This should be demonstrated through an energy statement. Such a statement will be expected to set out the projected energy demand and gross CO_2 emissions (i.e. both regulated and unregulated) for all phases of the development.
Core Strategy Policy EN7 Energy Infrastructure	There will be a general presumption in favour of low and zero carbon decentralised energy schemes, subject to further conditions set out in the Core Strategy.
Core Strategy Policy EN8 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: 1. Minimisation of flood risk by appropriate siting, drainage, and treatment of surface areas to ensure rain water permeability 2. Reduction in urban heat island effect through the use of Green Infrastructure such as green roofs, green walls, increased tree cover and waterways 3. The need to control overheating of buildings through passive design 4. The opportunity to provide linked and diverse green space to enhance natural habitats which will assist species adaptation

Environmental Standards	Description
Core Strategy Policy EN9 Green Infrastructure	New development will be expected to maintain existing green infrastructure in terms of its quantity, quality and multiple function. The Council will encourage developers to enhance the quality and quantity of green infrastructure, improve the performance of its functions and create and improve linkages to and between areas of green infrastructure. Where the benefits of a proposed development are considered to outweigh the loss of an existing element of green infrastructure, the developer will be required to demonstrate how this loss will be mitigated in terms of quantity, quality, function and future management.
Core Strategy Policy EN14 Flood Risk	In line with the risk-based sequential approach contained within PPS25, development should be directed away from sites at the greatest risk of flooding. A site-specific Flood Risk Assessments (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. All new development should minimise surface water run-off, including through Sustainable Drainage Systems (SUDS) and the appropriate use of Green Infrastructure. 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.
Core Strategy Policy EN15 Biodiversity & Geological Conservation	Developers will be expected to identify and implement reasonable opportunities to enhance, restore or create new biodiversity, either on-site or adjacent to the site, contributing to linkages between valuable or potentially valuable habitat areas where appropriate. 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. Development should wherever possible seek to maintain, enhance or restore existing geology.
Core Strategy Policy EN16 Air Quality	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.
Core Strategy Policy EN17 Water Quality	With reference to the Manchester-Salford-Trafford Strategic Flood Risk Assessment (SFRA) and other relevant documents: • Development should avoid any adverse impact on water quality, including during the construction phase, and wherever possible should seek to enhance water quality, both chemical and ecological; • Development should minimise surface water run-off from development and associated roads, and maximise the use of appropriate sustainable drainage systems, to minimise groundwater contamination, and to avoid pollutants reaching watercourses; • Development close to a watercourse should also ensure that waste or litter cannot enter the watercourse from the site;

ENVIRONMENTAL STANDARDS	DESCRIPTION
	• Development should, where feasible and appropriate, seek to open up any culverted or hidden watercourse beneath the site to improve the ecological status of that watercourse
Core Strategy Policy EN18 Contaminated Land & Ground Stability	The Council will give priority for the remediation of contaminated land to strategic locations. Any proposal for development of contaminated land must be accompanied by a health risk assessment All new development within former mining areas shall undertake an assessment of any associated risk to the proposed development and, if necessary, incorporate appropriate mitigation measures to address them.
Core Strategy Policy EN19 Waste	The Council will: • Promote the principles of the waste hierarchy to prevent, reduce, re-use, recycle, recover energy from and finally dispose of waste • 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. • Encourage communities to take responsibility for the waste they create through the provision of accessible facilities.

Manchester City Councils' Guide to Development in Manchester Supplementary Planning Document

The Core Strategy requires that all new developments should accord with the design guidance set out in the Supplementary Planning Documents. The Guide to Development in Manchester SPD was adopted on 11th April 2007 and provides a set of reasoned principles to guide developers, designers and residents. These principles include a number of environmental standards in Section 4 as follows:

ENVIRONMENTAL STANDARDS	DESCRIPTION
Energy Efficiency Policy 4.5	Developers should aim to reduce CO_2 emissions by at least 25% more than the requirements of the current Building Regulations (2006). *Note: The current version of Building Regulations is the 2013 version which require a greater reduction in CO_2 emissions than the above SPD requirement, as standard.*
Renewable Energy Policy 4.6	Developers should aim for at least 20% of final site energy demand to be met by on-site renewable energy technologies. Developers should investigate energy generation opportunities before designing building envelopes or fixing their location, to optimise utilisation of wind, solar and geothermal resources.
Environmental Design Policy 4.7 & 4.8	For commercial buildings, developers should use the Building Research Establishment Assessment Method (BREEAM). Developments should be achieving a design and post-construction rating of "Very Good".
Water Management & Weather Resilience Policy 4.9	Sustainable urban drainage systems (SuDs) should be included, and the amount of hard surfacing minimised. Developers will be expected to prepare a Flood Risk Assessment for proposals in an area of identified flood risk. Developers should seek to use water efficiently through specification of water efficient devices and through the use of rainwater harvesting and greywater recycling.
Waste Management Policy 4.10	Developers will be increasingly required to consider how reduction and recycling of waste will be tackled on site. All developments should have a waste management strategy included in the Environmental Standards Statement.
Construction Management Policy 4.13 & 4.14	Opportunities for reuse of existing structures should be explored, and where this is not appropriate, materials should be re-used on-site. Materials that are environmentally friendly, of low embodied energy, locally sourced, and can be recycled or reclaimed, should be prioritised. During construction, appropriate measures should be put in place to manage and control the waste generated, the amount of water and energy used, and any potential releases to water, land and air.
Biodiversity Policy 4.15	Developments should result in no let loss in overall biodiversity value and maximise opportunities to meet and exceed a target to achieve a 10% net increase in tree cover across new developments.
Waterways Policy 4.16	Developers working in close proximity to the City's waterways should demonstrate how public access, environment and management will be enhanced. Developers should landscape to ensure that the site run-off and blown waste does not enter watercourses, even during extreme weather conditions.