

## **Chapter 4:**

### **Making wise use of our resources and securing a good quality local environment**



*It is important to think about how we can make best use of our natural resources such as land, water and energy because we have a limited supply and our choices can have significant environmental impacts. As Oxford's population increases, there will be increasing pressure on these resources. It is therefore important to plan developments to minimise their use of resources.*

*Oxford is a small city with a tight urban boundary. This means that there is limited land available for development. We need to consider how to make best use of the land we do have to provide the homes and jobs we need.*

*We need to ensure that buildings and people can adapt to the changing climate already evident in the form of more extreme weather conditions being experienced in the city and beyond. The impacts of climate change can result in flooding, drought and overheating. These impacts affect the city's residents, have financial implications and can result in the decline of some plant and animal species. New development must be designed to adapt to these risks with the introduction of specific design measures and green infrastructure features that can help to mitigate some of these risks and where possible address damage caused by previous development.*

## **4.1 Sustainable design and construction**

### *Carbon reduction*

The City Council aims to tackle the causes of climate change by ensuring developments use less energy and assess the opportunities for using renewable energy technologies. The City Council is committed to exceed an 80 % reduction in total carbon dioxide (CO<sub>2</sub>) emissions produced in the City by 2050 from 1990 levels to limit climate change. Thus, it is crucial that planning policy limits carbon dioxide emissions from new development wherever possible and supports sensitive energy efficiency improvements to existing buildings. In addition, policy seeks to ensure that the gap between the designed and as built energy performance of new buildings is as little as possible.

When a building is constructed, the accessibility of its location, its density and mix of uses, its detailed design, its orientation, and the mechanical services and materials chosen can all have a major impact on its energy efficiency. The City Council will require all schemes to consider sustainable development principles from the start of the design process and include these in their Design and Access Statement and/or Sustainability Statement.

### *BREEAM*

BREEAM (Building Research Establishment Environmental Assessment Method) is a tool for assessing the environmental sustainability of a development. The BREEAM standards will be applied to non-residential developments including conversions, extensions and changes of use). The Home Quality Mark (2015) is another way of demonstrating the standard of a new residential dwelling, which includes measures for low CO<sub>2</sub>, sustainable materials, good air quality and natural daylight. The City Council will encourage schemes to use the Home Quality Mark. The use of Passivhaus standard is also encouraged in demonstrating energy efficient design.

### *Monitoring*

The local plan supports the monitoring of schemes (threshold 5+ dwellings or 1000m<sup>2</sup>) in the form of post construction testing in order to improve our understanding of these issues and also to ensure that performance standards for low carbon buildings are linked to as-built performance.

### *Sustainable retrofitting of existing buildings*

In Oxford, existing domestic buildings contributed 31%<sup>12</sup> of the city's carbon emissions in 2015. Therefore, retrofitting the existing building stock presents an opportunity to help meet the carbon reduction targets for the city. The Local Plan supports sustainable retrofitting measures for existing buildings. Such measures can range from low cost measures such as loft and cavity wall insulation to complete refurbishment of buildings and their systems. The low energy refurbishment of homes could help reduce fuel bills and create a better environment for occupiers, which will be particularly important for the most vulnerable groups, including those living in fuel poverty. The City Council has produced Technical Advice Notes on External Wall Insulation and the Heritage Energy Efficiency Toolkit to provide information to developers as to how to maximise the opportunities for retrofitting buildings.

Oxford has a wealth of Listed Buildings and traditional buildings in Conservation Areas. These buildings present a considerable challenge when considering how on-site renewables can be incorporated and carbon emissions reduced. The Council supports all measures to retrofit listed

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<sup>1</sup> <https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-2015>

and historical buildings in a sensitive manner and has produced the Heritage Energy Efficiency Tool (HEET). This guidance helps assess energy efficiency improvements for historic buildings<sup>3</sup>.

### *Water Efficiency*

An optional water efficiency standard was introduced in 2015 following the Housing Standards Review. This higher option standard for new development of 110 litres per person per day as set out in Building Regulations Part G2 can be applied where there is an evidence based need that the area is water stressed. The area of South East England in which Thames Water operates and Oxford is located, has been classified by the Environment Agency as being under serious water stress. Thus to ensure adequate water supply during the plan period new development will be expected to meet higher water efficiency standards as set out in Policy RE1. For non-residential development the Local Plan sets a minimum standard that must be achieved within the BREEAM assessment<sup>4</sup>. Opportunities to harvest grey water should be encouraged and developed, where possible, in new development.

#### **Policy RE1: Sustainable design and construction**

Planning permission will only be granted where it can be demonstrated that the following sustainable design and construction principles have been incorporated, where relevant:

- a) Maximising energy efficiency and the use of low carbon energy;
- b) Conserving water and maximising water efficiency;
- c) Using recycled and recyclable materials and sourcing them responsibly;
- d) Minimising waste and maximising recycling during construction and operation;
- e) Minimising flood risk including flood resilient construction;
- f) Being flexible and adaptable to future occupier needs; and
- g) Incorporating measures to enhance biodiversity value.

#### Carbon reduction in new-build residential developments (other than householder applications):

Planning permission will only be granted for new build residential and student accommodation developments (or 25 student rooms or more) which achieve at least a 40% reduction in the carbon emissions from a code compliant base case<sup>5</sup>. This reduction is to be secured through on-site renewable energy and other low carbon technologies (this would be broadly equivalent to 25% of all energy used) and/or energy efficiency measures. The requirement will increase from 2026 to at least 50% reduction in carbon emissions. *After 31 March 2030 planning permission will only be granted for residential and student accommodation (25 or more non self-contained student rooms) development that is Zero Carbon.*

An Energy Statement will be submitted on schemes of 5 or more residential dwellings or 1000m<sup>2</sup>. The Energy Statement will include details as to how the policy will be complied with and monitored once installed.

<sup>3</sup> [https://www.oxford.gov.uk/info/20064/conservation/325/heritage\\_energy\\_efficiency\\_tool\\_heet](https://www.oxford.gov.uk/info/20064/conservation/325/heritage_energy_efficiency_tool_heet)

<sup>4</sup> [https://www.breeam.com/BREEAM2011SchemeDocument/content/08\\_water/wat01.htm](https://www.breeam.com/BREEAM2011SchemeDocument/content/08_water/wat01.htm)

<sup>5</sup> Code compliant base case is the amount of reduction in carbon emissions (from regulated energy) beyond Part L of the 2013 Building Regulations or equivalent future legislation. The current code compliant base case means that the developer has to demonstrate 19% less carbon emissions than Part L of the 2013 Building Regulations.

#### Carbon reduction in new-build non-residential schemes over 1,000m<sup>2</sup>:

Planning permission will only be granted for non-residential development proposals that meet the BREEAM excellent standard (or recognised equivalent assessment methodology). In addition to meeting BREEAM excellent (or recognised equivalent assessment methodology)

Planning permission will only be granted for development proposals over 1000sqm which achieve at least a 40% reduction in the carbon emissions compared with a code compliant base case. This reduction is to be secured through on-site renewable and other low carbon technologies and/or energy efficiency measures. The requirement will increase from 2026 to at least 50% reduction in carbon emissions.

The City Council will encourage the development of city wide heat networks.

If a heat network exists in close proximity to a scheme it is expected to connect to it and this will count towards the development's carbon reduction requirements. Evidence will be required to demonstrate why connection to the network is not possible.

To ensure that the Council can monitor the effectiveness of renewable and low carbon technologies, non-residential, C2, and C4 and Sui Generis developments will be required to install appropriate energy metering and monitoring equipment and a Display Energy Certificate (DEC) The DEC would be secured by planning condition. DEC assessments must be made available to the Council for the three years after occupation and a DEC rating of A will be expected by the end of the three year period. C3 developments will be required to install appropriate energy metering (smart meters).

#### Water efficiency – residential development:

Proposals for new residential development are to meet the higher water efficiency standard within Building Regulations Part G2 of water consumption target of 110 litres per person per day.

#### Water efficiency – non-residential development:

Proposals for non-residential development are to meet the minimum standard of four credits under the BREEAM assessment.

## **4.2 Efficient use of land**

The NPPF emphasises that “planning policies and decisions should promote the effective use of land in meeting the need for homes and other uses, while safeguarding and improving the environment and ensuring safe and healthy living conditions”. Oxford’s previously developed land has been identified in the Brownfield Register, and making the best use of this land will be encouraged throughout the lifetime of this plan.

Using scarce resources efficiently is vital to ensuring Oxford’s sustainable growth and development. Oxford is a small, constrained city with a growing population. Its total area is approximately 4,600km<sup>2</sup> with some very densely developed urban areas. The river corridors of the Thames and Cherwell penetrate as extensive green and blue wedges into the heart of the city. These corridors, together with their flood plains, form much of the city’s 1,287m<sup>2</sup> of Green Belt land.

Oxford has a good record for re-using previously developed land efficiently. Some parts of the city, including town and district centres, are densely populated but nonetheless have capacity to accommodate further residential development sensitively. This approach should, as it promotes

more sustainable and cohesive communities, have a number of positive environmental and economic effects as development is concentrated in areas where it will support existing facilities and services. However, given that previously developed land can only meet a limited supply of Oxford's economic and housing need; there is a need to look at a range of additional greenfield sites to see if any are suitable to help meet needs. Policy G3 sets out the policy approach to the release of some greenfield sites which could be suitable for development, which include Green Belt sites.

Higher density residential development of 100 dwellings per hectare (dph) is expected in the city and district centres. However, owing to Oxford's historic centre it is acknowledged that this density of development is not always appropriate.

#### **Policy RE2: Efficient use of land**

Planning permission will only be granted where development proposals make efficient use of land.

Development proposals must make best use of site capacity, in a manner compatible with the site itself, the surrounding area and broader considerations of the needs of Oxford, as well as addressing the following criteria:

- a) the density must be appropriate for the use proposed;
- b) the scale of development, including building heights and massing, should conform to other policies in the plan. It is expected that sites at transportation hubs and within the city and district centres in particular will be capable of accommodating development at an increased scale and density, although this will also be encouraged in all other appropriate locations where the impact of so doing is shown to be acceptable;
- c) opportunities for developing at the maximum appropriate density must be fully explored; and
- d) built form and site layout must be appropriate for the capacity of the site.

High-density development (for residential development this will indicatively be taken as 100dph) is expected in the city centre and district centres.

### **4.3 Flooding risk management**

Flooding is the most widespread and frequently occurring of natural hazards. Both the NPPF and the Flood and Water Management Act (2010) highlight the need for effective flood risk management strategy and proactive local plan policies that take account of flood risk and water supply consideration to ensure the impacts of climate change are fully considered and mitigated.

The Oxford City Strategic Flood Risk Assessment Level 1 (November 2017) concludes that a considerable proportion of Oxford is at some risk of flooding. Large parts of the built up areas of South and West Oxford and Lower Wolvercote currently have a 1% or greater annual risk of flooding (Flood Zone 3). Flood risk in Oxford is predominantly fluvial flooding from rivers but there is also some flood risk to properties from other sources including surface water, sewer, groundwater, and flooding from artificial sources such as reservoirs and canals.

The NPPF directs development away from areas of high risk from flooding, and where development within these areas is necessary, makes it safe for users without increasing the risk of flooding elsewhere (sequential test and exception tests). A level 1 Strategic Flood Risk Assessment (SFRA) provides the necessary information for the sequential and exception test to be applied to support the initial allocation of sites for development.

The most recent flood events in Oxford were in January 2014, November 2012 and July 2007, each of which resulted in significant disruption to the city. New development has the potential to interfere with existing drainage systems, decrease floodplain storage, reduce permeable surface areas and increase the volume and speed of runoff through a catchment, ultimately leading to significant changes to river catchment characteristics and subsequently increase flood risk. Proposals for minor household extensions in the flood plain can have a cumulative impact resulting in increased flood risk as flood storage areas are lost to development. As such, householder extensions proposed in either Flood Zone 2 or 3 will require a site specific Flood Risk Assessment (FRA) to be carried out to assess risk on and off site and mitigation measures provided to reduce these risks.

In some areas of Oxford a lot of development already exists in areas at the highest risk of flooding. This is generally older development that won't incorporate features such as SuDs that minimise the impacts of flooding on the existing properties and that minimise the risk of flooding elsewhere. The NPPF allows only water-compatible uses and essential infrastructure in Flood Zone 3b. This prevents reuse of existing buildings in areas at highest risk of flooding. The approach of the Local Plan policy is to allow very careful re-development of existing brownfield sites in Flood Zone 3b. This is to make best use of existing sites in the generally sustainable location of Oxford and also because new development has the potential to improve the flood risk situation. The policy sets out conditions for development in Flood Zone 3b that will ensure the flood risk situation is improved. Conditions include that the overall built footprint is not increased and that flood storage is not lost.

### *The Oxford Flood Alleviation Scheme*

The Oxford Flood Alleviation Scheme, a partnership project<sup>6</sup>, will help to convey water away from development infrastructure and will help greatly in reducing flooding in the most at risk areas. It will bring considerable benefits to the city in terms of reduced risk of flooding to homes, businesses, major roads and the railway. The land required for the route of the OFAS will be safeguarded in perpetuity to enable delivery.

#### **Policy RE 3: Flood risk management**

Planning permission will not be granted for development in Flood zone 3b<sup>7</sup> except where it is for water-compatible uses or essential infrastructure; or where it is on previously developed land and it will represent an improvement for the existing situation in terms of flood risk. All of the following criteria must be met:

- a) it will not lead to a net increase in the built footprint of the existing building; and
- b) it will not lead to a reduction in flood storage (through the use of flood compensation measures); and
- c) it will not lead to an increased risk of flooding elsewhere; and
- d) it will not put any future occupants of the development at risk.

<sup>6</sup> Flood management in the city is primarily managed by the Oxford Area Flood Partnership (OAFP) which includes the Environment Agency, Network Rail, Oxford City Council, Oxfordshire County Council, Vale of White Horse District Council and Thames Water PLC.

<sup>7</sup> The functional floodplain is defined as 'Flood Zone 3b', and corresponds to the 5% (1 in 20 year) chance of flooding on the EA flood model.

New development will be directed towards areas of low flood risk (Flood Zone 1). In considering proposals elsewhere, the sequential and exception tests will be applied.

Planning applications for development within Flood Zone 2, 3, on sites larger than 1 ha in Flood Zone 1 and, in areas identified as Critical Drainage Areas, must be accompanied by a Site Specific Flood Risk Assessment (FRA) to align with National Policy. The FRA must be undertaken in accordance with up to date flood data, national and local guidance on flooding and consider flooding from all sources. The suitability of developments proposed will be assessed according to the sequential approach and exceptions test as set out in Planning Practice Guidance.

Planning permission will only be granted where the FRA demonstrates that:

- a) the proposed development will not increase flood risk on site or off site; and
- b) safe access and egress in the event of a flood can be provided; and
- c) details of the necessary mitigation measures to be implemented have been provided.

Minor householder extensions may be permitted in Flood Zone 3b, as they have a lower risk of increasing flooding. Proposals for this type of development will be assessed on a case by case basis, taking into account the effect on flood risk on and off site.

Where development sites are within the proposed defended area of the Oxford Flood Alleviation Scheme (OFAS), which will provide protection up to the 1 in 100 year (1%) flood scenario, both the defended and undefended data may be taken into consideration. Where properties lie within Flood Zone 3b, defended levels will be taken into account with regards to whether the development is appropriate, on the condition that flood mitigation measures are included up to the undefended level, to provide some protection in the event of a breach.

#### **4.4 Sustainable drainage systems**

Sustainable drainage systems (SuDS) may include water conservation (e.g. rainwater collection, grey water recycling, low water use WC's and appliances) as well as surface water drainage (e.g. soakaways, porous hard surfaces, swales, streams and balancing ponds; minimal use of pipes and culverts). SuDS are designed to mimic the natural drainage arrangements of a site, and are used to manage surface water flows, providing an important tool in minimising flood risk. The design of SuDS should be considered at the earliest possible stages of the planning process so that they can be incorporated into the design, and the best management practices can be used. Wherever possible, multiple benefits from SuDS should be sought, such as the provision of open space, wildlife improvements and water conservation. If SuDS cannot be provided on site, consideration should be given to making a contribution to off-site measures.

The City Council deal with proposals requiring SuDS on minor developments (up to 9 dwellings, non-residential floor area less than 1000m<sup>2</sup>, or sites under 1 hectare in size). Oxfordshire County Council as Lead Local Flood Authority respond on all applications for all Major Developments (10 or more dwellings, non-residential floor area of 1000m<sup>2</sup> or more, or sites over 1 hectare in size).

The Flood and Water Management Act 2010<sup>8</sup> addresses the threats of flooding and water scarcity. Under the Flood Risk Regulations 2009, the Environment Agency is responsible for managing flood risk from main rivers, the sea and reservoirs. Lead local flood authorities (LLFAs) are responsible for local sources of flood risk, in particular surface run-off, groundwater, and ordinary watercourses.

<sup>8</sup> Available at [http://www.legislation.gov.uk/ukpga/2010/29/pdfs/ukpga\\_20100029\\_en.pdf](http://www.legislation.gov.uk/ukpga/2010/29/pdfs/ukpga_20100029_en.pdf)

LLFAs are statutory consultees on major development. Local authorities are responsible for ensuring that requirements for preliminary flood risk assessments are met.

#### **Policy RE4: Sustainable drainage, surface and groundwater Flow**

All development proposals will be required to manage surface water through Sustainable Drainage Systems (SuDS) or techniques to limit run-off and reduce the existing rate of run-off on previously developed sites<sup>9</sup>. Surface water runoff should be managed as close to its source as possible, in line with the following drainage hierarchy:

- a) store rainwater for later use; then:
- b) discharge into the ground (infiltration); then:
- c) discharge to a surface water body; then:
- d) discharge to a surface water sewer, highway drain or other drainage system; and finally:
- e) discharge to a combined sewer.

Details of the SuDS shall be submitted as part of a drainage strategy or FRA where required. Applicants must demonstrate compliance with the SuDS Design and Evaluation Guide SPD/ TAN for minor applications and Oxfordshire County Council guidance for major development.

#### Surface and groundwater flow and groundwater recharge:

Planning permission will not be granted or development that would have an adverse impact on groundwater flow. The City Council will, where necessary, require effective preventative measures to be taken to ensure that the flow of groundwater will not be obstructed.

Within the surface and groundwater catchment area for the Lye Valley SSSI development will only be permitted if it includes SuDS and where an assessment can demonstrate that there will be no adverse impact on the surface and groundwater flow to the Lye Valley SSSI.

Development on the North Oxford gravel terrace that could influence groundwater flow to the Oxford Meadows Special Area of Conservation (SAC) will only be permitted if it includes SuDS and if a hydrological survey can demonstrate that there will be no significant adverse impact upon the integrity of the SAC.

### **4.5 Health, well-being, and Health Impact Assessments**

The health and wellbeing of residents is an important priority for the City Council<sup>10</sup> and Local Plan policies recognise the important link between the natural and built environment and long-term health and wellbeing outcomes. A health enabling environment requires high quality urban design which includes green spaces that facilitate social interaction, creating environments that encourage healthier food choices and that facilitate the use of active modes, such as walking and cycling. To ensure that development promotes and contributes to a healthy living environment, proposals

<sup>9</sup> Oxford City Council SuDS Design and Evaluation Guide–

[https://www.oxford.gov.uk/info/20000/planning/1282/flood\\_risk\\_and\\_drainage\\_for\\_planning](https://www.oxford.gov.uk/info/20000/planning/1282/flood_risk_and_drainage_for_planning)

<sup>10</sup> Oxfordshire's 'Joint Strategic Needs Assessment' (JSNA) provides evidence based information about

Oxfordshire's population and the factors affecting health, wellbeing, and social care needs:

<http://insight.oxfordshire.gov.uk/cms/joint-strategic-needs-assessment> Public Health England's 'Local Health tool' provides a ward level overview of the health and wellbeing status of the local population:

<http://localhealth.org.uk/#v=map13;!en>



should consider health outcomes at pre-application stage. For major development a health impact assessment must be undertaken to maximise the opportunities for promoting healthy lifestyles within new development. The fundamental principles of how to carry out good quality Health Impact Assessments (HIAs) are set out in the Department of Health's 'Health Impact Assessment Tools' (2010)<sup>11</sup>.

#### **Policy RE5: Health, wellbeing, and Health Impact Assessments**

Oxford City Council will seek to promote strong, vibrant and healthy communities and reduce health inequalities. Proposals will be supported which help to deliver these aims through the development of environments which encourage healthier day-to-day behaviours and are supported by local services and community networks to sustain health, social and cultural wellbeing. Measures that will help contribute to healthier communities and reduce health inequalities must be incorporated in a development.

For major development<sup>12</sup> proposals, the Council will require a Health Impact Assessment to be submitted, which should include details of implementation and monitoring. This must provide the information outlined in the template provided at Appendix 4.

#### **4.6 Air quality**

Improving local air quality, mitigating the impact of development on air quality and reducing exposure to poor air quality across Oxford is key to safeguarding public health and the environment. The whole of the city was declared an Air Quality Management Area (AQMA) in September 2010. Air quality has been identified as having a negative impact upon the Oxford Meadows SAC. The City Council produced an Air Quality Action Plan (AQAP)<sup>13</sup> to address the issue of AQMA which suggested a range of measures that will be required to reduce emissions across Oxford. The AQAP addresses the integrated approach to air quality and carbon emissions from road transport. In 2014 a low emissions zone was introduced in the city centre. In addition, the plan's support for car free developments and the promotion of electric vehicles are ways of reducing the high levels of air pollution across the city and protecting the Oxford Meadows SAC.

It is important that any negative impacts on air quality from new development are mitigated and that exposure to poor air quality is minimised or reduced. Special attention will be given to developments that are expected to cause traffic increases, and to the type of energy centres/combustion systems that are expected to be installed on-site.

#### **Policy RE6: Air quality**

Planning permission will only be granted where the impact of new development on air quality is mitigated and where exposure to poor air quality is minimised or reduced.

The exposure of both current and new occupants to air pollution during the development's

<sup>11</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/216008/dh\\_120106.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216008/dh_120106.pdf)

<sup>12</sup> Major developments as defined by The Town and Country Planning (Development Management Procedure) (England) Order 2015

<sup>13</sup> More information on AQMA and AQAP is available at [www.oxford.gov.uk/info/20216/air\\_quality\\_management/206/air\\_quality\\_management\\_in\\_oxford](http://www.oxford.gov.uk/info/20216/air_quality_management/206/air_quality_management_in_oxford)

operational and construction phases, and the overall negative impact that proposals may cause to the city's air quality, will be considered in determining planning applications. Where additional negative air quality impacts from a new development are identified, mitigation measures will be required to ameliorate these impacts.

Sensitive uses including residential development, schools and nurseries should be located away from areas of poor air quality, with site layout designed to reduce impact and with any residual impact mitigated through air quality measures.

Planning applications for major proposals (10 or more dwellings or 1000 square metres) which are likely to expose residents to unacceptable levels of air pollution must be accompanied by an Air Quality Assessment (AQA).

Where the Air Quality Assessment indicates that a development would cause harm to air quality, planning permission will not be granted unless specific measures are proposed and secured to mitigate those impacts.

Planning applications for proposals that involve significant demolition, construction or earthworks will also be required to submit a dust assessment as part of the AQA, to assess the potential impacts and health risks of dust emissions from those activities. Any appropriate site-specific dust mitigation measures will be secured as part of the Construction Management Plan (CMP).

Further guidance on meeting the requirements of the policy is set out in the Oxford City Council's Air Quality Planning Application Guidance Note and the up to date IAQM guidelines which applicants are expected to follow.

#### **4.7 Managing the impact of development**

Standards of amenity (the attractiveness of a place) are major factors in the health and quality of life of all those who live, work and visit Oxford. Oxford's constrained nature results in the close proximity of many uses. This, combined with the railway and major roads (A34 and the Ring Road), can result in noise, light and air pollution. Policy RE7 seeks to ensure that standards of amenity are protected.

#### **Policy RE7: Managing the impact of development**

Planning permission will only be granted for development that:

- a) ensures that the amenity of communities, occupiers and neighbours is protected; and
- b) does not have unaddressed transport impacts affecting communities, occupiers, neighbours and the existing transport network; and
- c) provides mitigation measures where necessary.

The factors the City Council will consider in determining compliance with the above elements of this policy include:

- d) visual privacy, outlook;
- e) sunlight, daylight and overshadowing;
- f) artificial lighting levels;
- g) transport impacts, including the assessment of these impacts within the Transport Assessments, Travel Plans and Delivery and Servicing Management Plans Policy T2;
- h) impacts of the construction phase, including the assessment of these impacts within the

Construction Management Plans ;

- i) odour fumes and dust;
- i) microclimate;
- j) contaminated land; and
- k) impact upon water and wastewater infrastructure

#### **4.8 Noise and vibration**

Noise and vibration have a significant effect on amenity and people's health and wellbeing. The management of noise should be an integral part of development proposals and considered as early as possible. The management of noise is about encouraging the right acoustic environment in the right place at the right time. This is important to promote good health and a good quality of life within the wider context of achieving sustainable development. Managing noise includes improving and enhancing the acoustic environment and promoting appropriate soundscapes. This can mean allowing some places or certain times to become noisier within reason, whilst others become quieter.

Consideration of existing noise sensitivity within an area is important to minimise potential conflicts of uses or activities. The City Council will seek to ensure that noise sensitive developments (residential, educational and health care facilities) are separated from major sources of noise, or that appropriate attenuation measures are taken. Such attenuation measures should be included on plans. In cases where noise sensitive development is proposed in close proximity to an existing noise generating use (e.g. music venues and pubs) the Council will consider whether the introduction of the sensitive use might threaten the continued operation of the existing premises, which might mean the development is inappropriate in that location. Measures to mitigate the impacts of noise and vibration associated with demolition and construction will be secured by legal agreement through Construction Management Plans which form part of the Transport Assessment.

#### **Policy RE8: Noise and vibration**

Planning permission will only be granted for development proposals which manage noise to safeguard or improve amenity, health, and quality of life.

Planning permission will not be granted for development that will generate unacceptable noise and vibration impacts.

Planning permission will not be granted for development sensitive to noise in locations which experience high levels of noise, unless it can be demonstrated, through a noise assessment, that appropriate attenuation measures will be provided to ensure an acceptable level of amenity for end users and to prevent harm to the continued operation of existing uses.

Conditions will be used to secure such mitigation measures and operational commitments.

Measures to mitigate the impacts of noise and vibration associated with demolition and construction will be secured by legal agreement through Construction Management Plans (Refer to Policy T2).

#### **4.9 Land quality**

Oxford has a number of closed landfill sites of varying ages, some of which are still actively producing landfill gas. There are also previously developed sites that have been contaminated by historic industrial processes. The presence of contamination can affect or restrict the use of land but development can address the problem for the benefit of the wider community and bring the land back into beneficial use.

Land contamination may be associated with sites previously used for industry but can also arise from natural sources as well as from human activities. In assessing whether land contamination is an issue that needs to be taken into account when a planning application is submitted, the Council will have regard to a range of information sources including its database of potentially contaminated sites, information provided by developers and third parties, and the advice from the Council's Environmental Health department.

#### **Policy RE9: Land quality**

Planning applications where proposals would be affected by contamination or where contamination may present a risk to the surrounding environment, must be accompanied by a report which:

- a) details the investigations that have been carried out to assess the nature and extent of contamination and the possible impacts it may have on the development and its future users, biodiversity, the natural and built environment; and
- b) sets out detailed mitigation measures to allow the development to go ahead safely and without adverse effect, including, as appropriate:
  - i) removing the contamination;
  - ii) treating the contamination;
  - iii) protecting and/or separating the development from the effects of the contamination;
  - iv) validation of mitigation measures

Where mitigation measures are needed, these will be required as a condition of any planning permission.