# 

# **ENVIRONMENT AND UTILITIES**



# **Environment and utilities**

# 11.1 This chapter contains policies addressing the following policy themes:

- EU1: Strategic policy for the environment and utilities
- EU2: Smart technology
- EU3: Water
- EU4: Waste management
- EU5: Circular Economy and resource efficiency
- EU6: Decentralised Energy
- EU7: Digital communications infrastructure
- EU8: Green Infrastructure & biodiversity
- EU9: Extraction of minerals
- EU10: Air Quality
- EU11: Noise
- EU12: Land contamination

#### **Questions:**

**QEUa:** Are there any other environment and utilities policy themes that you think OPDC's Local Plan should be addressing?

**QEUb:** Do you agree with the chapter's preferred policy options? If not, what might you change?

**QEUc:** Are there any other policy alternatives that could replace the chapter's preferred policies?

You can provide comments directly through:

# **EVIDENCE BASE**

Table 12: Environment and utilities Evidence base				
Supporting study	Description	Status		
OPDC Draft Smart Strategy Interim Report	Sets out key challenges, opportunities and recommendations in relation to emerging smart technology.	Draft completed		
OPDC Integrated Water Management Strategy	Review of water infrastructure requirements for water demand, drainage, and flood risk (including OPDC's SFRA) and options and costs for integrated water management.	Draft completed		
OPDC Old Oak Decentralised Energy Strategy	Review of the potential for a heat network to supply the Old Oak Common Opportunity Area with competitive low to zero carbon heat.	Draft completed		
OPDC Waste Strategy	A strategy outlining OPDC's approach to waste apportionment, to accord with the requirements of paragraph 5.80 of the London Plan (2015), which requires mayoral development corporations to cooperate with local authorities to ensure their waste apportionment requirements are met.	Draft completed		
OPDC Air Quality Study	Review of the existing and anticipated air quality issues across the construction and built-out phases of development and recommendations for mitigation and measures to ensure the highest possible air quality for future residents and workers.	Draft completed		
OPDC Green Infrastructure Strategy	A strategy reviewing existing GI assets, future GI requirements, and identifying opportunities for improving function, connectivity and integration with other infrastructure.	To be developed		
OPDC Walking, cycling, streets and public realm strategy	A strategy setting out recommendations for the public realm, public open space and walking and cycling infrastructure for the OPDC area.	To be developed		

# EU1: Strategic policy for the environment and utilities

#### **KEY ISSUES**

- OPDC is in a position to work with developers and other stakeholders, to push the boundaries in best practice sustainable development and co-ordinated infrastructure planning and delivery. In doing so, there is an opportunity to exceed Mayoral targets for sustainable development and environmental performance and to support London's transition to the circular and low/zero carbon economy.
- There is potential for OPDC to enhance the natural environment integrating it with new development and infrastructure to improve resilience to the effects of climate change and helping to optimise the efficient use and re-use of previously developed land.

#### **POLICY CONTEXT**

# **National**

- 12.1 The NPPF sets out a number of core principles achieving sustainable development, including;
- support for the transition to a low carbon future in a changing climate, taking account of flooding and encouraging the re-use of existing and renewable resources;
- contributing to conserving and enhancing the natural environment and minimising

- pollution to land, air, and water; and
- promoting healthy communities, taking account of strategies to improve health, social and cultural wellbeing.

# Regional

12.2 The London Plan outlines London's challenges in responding to a changing climate, ensuring that there is infrastructure to support growth and focussing on providing the highest quality of life. The Mayor's objective is that the city becomes a world leader in improving the environment.

#### PREFERRED POLICY OPTION

OPDC will support proposals that:

- a) Promote environmentally sustainable development that utilises the highest standards of design, delivery and operation;
- b) Deliver best practice in utilising innovation and the application of emerging technologies;
- c) Maximise their contribution to a healthy and safe environment for people and for nature;
- d) Increases the area's resilience to the effects of a changing climate and minimises carbon emissions:
- e) Contribute to the achievement of environmental standards set by OPDC (see Table 13); and
- f) Support delivery of coordinated and area-wide utilities infrastructure.

Table 13: Environmental sustainability targets for development in the OPDC area			
Topic Area	Current targets in London Plan / Mayoral Strategies		
Reduce greenhouse gas emis-	■ Reduce CO2 emissions by 60 per cent from 1990 levels by 2025, and 80% by 2050		
sions	■ All new homes to be zero carbon by 2020		
	<ul> <li>Reduce London's waste management to save one mega tonne of CO2 equivalent per year by 2031</li> <li>Application of the Energy (and cooling) Hierarchy in the London Plan.</li> </ul>		
Local energy supply	■ Supply 25 per cent of London's energy locally, including the use of decentralised energy networks.		
Waste reduction and recycling	<ul> <li>Work towards zero biodegradable/recyclable waste to landfill by 2026.</li> <li>90% reuse re-cycling/re-purposing of construction materials.</li> <li>Recycling 70% of commercial/industrial waste by 2020.</li> <li>Recycling of 50% of municipal waste by 2020, and 60% by 2031.</li> <li>1% reduction in municipal waste per capita per annum.</li> </ul>		
Green infrastructure	■ increase tree coverage by at least 25 to 30%.		
Creen initiastructure	<ul> <li>All major buildings to include a green, solar or cool roof and a minimum of 50% of the built environment footprint to include urban greening measures.</li> <li>Achieve net gains for nature.</li> </ul>		
Water management	<ul> <li>Minimising use of mains water.</li> <li>Use SuDS to achieve run-off rate equivalent to a greenfield.</li> <li>Water efficiency of 105 litres per household per day to match higher requirements of Building Regulations.</li> </ul>		
Air quality	<ul> <li>Meet EU values for air pollutants.</li> <li>Seek to achieve Air Quality Neutrality.</li> <li>Apply Ultra Low Emissions Zone standards to Non-Road Mobile Machinery as given in Mayoral SPG on The Control of Dust and Emissions.</li> </ul>		
Digital communications	<ul> <li>To deliver a world-class network.</li> <li>Embed Smart solutions.</li> </ul>		
Circular economy	<ul> <li>Support job creation linked to re-manufacturing, repair, reuse, and recycling.</li> <li>Consider the application of the GLA's Responsible Procurement Policy to the OPDC area.</li> </ul>		

#### **JUSTIFICATION**

12.3 OPDC is in a position to push the boundaries of UK best practice in development and infrastructure and has an objective to be recognised as a leader in sustainability. The preferred policy option reflects this and aims to deliver a place shaped by innovation that showcases exemplar sustainable regeneration. Table 13 above identifies existing environmental targets in the London Plan and in Mayoral strategies which OPDC will be looking to benchmark itself against when setting its own environmental targets which will be included in the next draft Local Plan. As part of the next stage of work, OPDC will assess to what extent these targets can be met or exceeded thereby giving rise to a set of area-specific standards and targets.

- 12.4 Achieving these targets will require:
- collaboration between OPDC, developers, infrastructure providers and other stakeholders, taking advantage of the scale of development and the opportunities this presents;
- an integrated approach to the design, delivery and operation of development and infrastructure;

- taking advantage of the highest standards of design, innovation and the latest technologies; and
- better integration of the built and the natural environment.

12.5 In Old Oak there is a particular opportunity to create a new sustainable community. Within Park Royal there are opportunities to tackle current issues of pollution, surface water drainage and digital connectivity. Across both, there is a need to address resilience to climate change. As part of OPDC's environmental target and performance-setting OPDC will explore the opportunity to achieve a low or zero carbon development, including the delivery of low-carbon networks, decentralised energy supply and districtwide systems for sustainable drainage and for waste.

# **ALTERNATIVE POLICY OPTION**

12.6 No alternative policy options have been identified, as alternatives would not be consistent with the NPPF or in general conformity with the London Plan.

#### **Questions:**

**QEU1a:** Do you agree with those areas identified for setting environmental and sustainability performance targets for the development and infrastructure? If not, what other areas should be identified?

**QEU1b:** Which of these areas do you see as a priority and why?

You can provide comments directly through:



# **EU2: Smart technology**

#### **KEY ISSUES**

- London's continuing growth alongside the transformative scale of regeneration at Old Oak and Park Royal creates significant opportunities to integrate smart city technology solutions and approaches.
- Smart city technology is a rapidly changing field and OPDC should seek to encourage flexibility and adaptability.
- Digital information and data needs to be open and able to be shared and used to support innovation in the design, implementation and operation of development and efficient delivery of services post-development.

#### **POLICY CONTEXT**

# **National**

12.7 The NPPF identifies that advanced, high quality communications infrastructure is essential for sustainable economic growth and that high speed broadband technology and other communications networks also play a vital role in supporting the delivery of local community facilities and services.

# Regional

12.8 The London Plan recognises that smart city technology plays a role in supporting the delivery of a number of policy areas

including economic growth, smoothing traffic flow and energy generation.

#### PREFERRED POLICY OPTION

- a) OPDC will work with partners and stakeholders to position Old Oak and Park Royal as a world-leading location for the exploration, exploitation and implementation of smart city technology, approaches and systems.
- b) OPDC will require proposals to provide interoperable open and usable data to inform OPDC activities and processes.



#### JUSTIFICATION

- 12.9 A smart Old Oak and Park Royal will be a place where innovation and technology is explored and harnessed to create opportunities and address challenges / barriers.
- 12.10 The transformative change proposed across Old Oak and Park Royal and the timescales involved requires that OPDC considers how the area will function over the ensuing decades and what role smart city technology and approaches will have.
- 12.11 Smart City technology and practices are not an end in themselves. They present a huge opportunity (as enabling elements) to address a diverse range of challenges. The use of new and innovative technologies may, for example, reduce the need to travel and / or encourage the use of low /zero emissions modes of transport, thus enhancing the area's resilience to climate change by reducing greenhouse gas emissions.
- 12.12 OPDC is developing a Smart Strategy with input from a range of

industry experts. It seeks to identify opportunities and challenges to embed Smart City approaches, concepts, technologies, and systems from the outset across Old Oak and Park Royal.

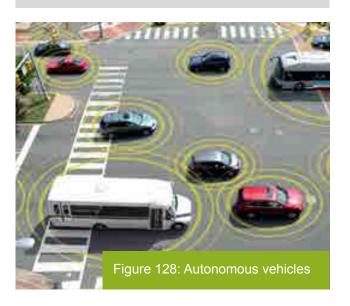
12.13 The Smart London Board and other stakeholders, including the GLA, #HyperCatCity, Future Cities Catapult, Imperial College, University College London and London's tech communities will have a key role in helping OPDC to establish Old Oak and Park Royal as a demonstrator and scale-up location for smart city technology and approaches.

12.14 OPDC will work with partners and stakeholders to position Old Oak and Park Royal as a world-leading location for the exploration, exploitation, evaluation and implementation of smart city technology, approaches, concepts and systems to help:

- i. plan, deliver and manage development;
- ii. improve the quality of life of local people and Londoners;
- iii. create and capture economic, social and environmental opportunities; and
- iv. address challenges and barriers.
- 12.15 New development proposals will be expected to provide open, usable

and inter-operable data, including appropriate digital Building Information Management (BIM) models. This will help OPDC achieve its aspiration to deliver an open and secure digital environment. Specifically, this will aid OPDC to plan, deliver and manage development while creating business opportunities, including application (app.) development for a range of technologies and services during development and for the communities that live, work and visit there.

12.16 Data provided to OPDC will be kept in a secure environment and where appropriate will be used to help inform and shape the development of the emerging OPDC digital model.



### **ALTERNATIVE POLICY OPTION**

- 1. That the provision of interoperable, open and usable data is not specifically required.
- 12.17 The benefit to this approach would be that applicants are able to provide information in the format of their choice. The disadvantage is that this would inhibit OPDC in creating an open digital environment to inform the development management process and wider activities.

# **Questions:**

**QEU2a:** Are there any other challenges and opportunities in addition to those stated in the draft Smart Strategy that smart city technology could address?

**QEU2b:** Should the Local Plan and OPDC provide stronger requirements for proposals to provide relevant interoperable and open data?

You can provide comments directly through:

# **EU3: Water**

#### **KEY ISSUES**

- The area's sewer network is old and has insufficient capacity in places to serve the planned growth and regeneration for the purposes of foul-water and surface water drainage.
- 2. There is a need to manage the increasing demand for clean 'potable' water resulting from new development and population growth, to reduce the deficit in water supply-demand balance and improve water security in London.
- 3. There is a need to manage flood risk from the River Brent and from localised surface water flooding.
- 4. There is a need to protect the water environment and waterways from the risks of contamination and improve the ecological condition of the waterways.
- 5. As the OPDC area is regenerated, area-wide and site-specific solutions will be needed.

#### **POLICY CONTEXT**

#### **National**

12.18 The NPPF requires local planning authorities to adopt proactive strategies to mitigate and adapt to climate change over the longer term, with Local Plans taking full account of flood risk, water supply and demand and wastewater considerations.

# Regional

12.19 London Plan policies set the context

for sustainably managing water, including: managing flood risks; sustainable drainage; ensuring the adequacy of water quality and wastewater infrastructure; and managing water supply-demand. Further information is set out in the Mayor's Water Strategy and Climate Change Adaptation Strategy.

#### PREFERRED POLICY OPTION

Development proposals will be required to:

- a) demonstrate a collaborative approach to working with OPDC and its development partners to implement and manage area-wide water infrastructure options identified in the Integrated Water Management Study (IWMS) that address surface and waste-water disposal capacity issues and sustainable management of water supply and that connect or contribute towards a local rain/grey/storm water management system;
- b) minimise water consumption by seeking to get as close to neutrality in water use and consumption as possible and achieve the water management standards that will be set through this Local Plan;
- c) use sustainable drainage techniques to achieve at least 'greenfield' rates

- of surface water run-off;
- d) implement the flood risk management measures identified in the relevant borough's Surface Water Management Plans and protect existing flood management assets;
- e) due to the limited capacity of combined sewer serving the the Counters Creek catchment. demonstrate that the scheme would result in the release of network capacity, or includes the provision of capacity improvements sufficient to meet its needs without adversely impacting on existing development, or compromising the ability of other developers to meet the future needs of development planned for in the Local Plan:
- f) in the Park Royal area, support the actions identified in the Thames River Basin Management Plan for the River Brent; and
- g) include measures to protect and improve the water environment, water quality and ecological value of the Grand Union Canal and other watercourses.

Table 14	Table 14: IWMS Strategic options					
Option	Pros/Cons	Water recycling	St	orm water manageme	ent	Demand management
1	<ul> <li>Infrastructure provided on-site aiding deliverability and provides a climate resistant means of providing non-potable water for toilet flushing.</li> <li>Lacks environmental/ecological benefits of other options and less efficient in terms of build costs compared to options with strategic measures.</li> </ul>	Building scale grey- water recycling	Residual attenua- tion provided un- derground			
2	<ul> <li>Provides for environmental/ecological benefits from above ground water storage and provides a climate resistant means of providing non-potable water for toilet flushing.</li> <li>Requires a significant amount of space for above ground water storage, which is challenging to deliver and the plot based approach to re-use is much less efficient in terms of build and operational costs.</li> </ul>		Residual attenuation provided above ground	Streetscape strate- gic SuDs network providing convey- ance, filtration and attenuation of storm- water from develop- ment plots to atten-	trol features to manage the quality and quantity of sur- face water generat- ed on site.	Maximising demand management through water efficiency, community engagement and utilisation of smart network tech-
3	<ul> <li>Phasing and deliverability of storm water management measures more straightforward, provides a climate resistant means of providing non-potable water for toilet flushing and the re-use option would be area-wide and hence offer build and operational cost efficiencies.</li> <li>Lacks environmental/ecological benefits of other options, strategic infrastructure required to provide wastewater re-use is more challenging to deliver and also requires more intensive treatment when compared to greywater or stormwater.</li> </ul>	Strategic scale wastewater recycling	Residual attenuation provided underground	uation of discharge locations.		nologies.
4	<ul> <li>Provides for environmental/ecological benefits from above ground water storage, provides a climate resistant means of providing non-potable water for toilet flushing and build and cost efficiencies as water re-use and most of the storm water management is provided by strategic areawide infrastructure.</li> <li>Requires a significant amount of space for above ground water storage and strategic infrastructure to manage both stormwater and provide re-usable water, which are challenging to deliver.</li> </ul>		Residual attenuation provided above ground			

Table 14	Table 14: IWMS Strategic options					
Option	Pros/Cons	Water recycling	Storm water management		Demand management	
5	<ul> <li>+ Phasing and deliverability of stormwater management measures more straightforward. Central treatment unit option would require less intensive treatment than the greywater and wastewater option and would be area-wide with build and operational cost efficiencies.</li> <li>- Lacks environmental/ecological benefits of other options, strategic stormwater infrastructure is challenging to deliver and may not be available for re-use during dry, or drought conditions, offering less climate resilience.</li> </ul>	Strategic scale stormwater recycling	Residual attenuation provided underground	Streetscape strategic SuDs network providing conveyance, filtration and attenuation of stormwater from development plots to attenuation of discharge locations.	manage the quality and quantity of sur- face water generat-	Maximising demand management through water efficiency, community engagement and utilisation of smart network technologies.
6	<ul> <li>Phasing and deliverability of stormwater management measures more straightforward, the re-use option would require less intensive treatment than the greywater and wastewater option and provides for environmental/ecological benefits from above ground water storage.</li> <li>Requires a significant amount of space for above ground water storage and strategic infrastructure to manage both stormwater and provide reusable water, which is challenging to deliver and re-use may not be feasible during dry, or drought conditions, offering less climate resilience.</li> </ul>		Residual attenuation provided above ground			MA THE

#### **JUSTIFICATION**

12.20 In setting environmental standards, OPDC wishes to be recognised as a leader in sustainability and delivering sustainable, resilient development. To achieve this it will be necessary to ensure adequate water supply, surface water and foul drainage and sewerage treatment capacity to serve both existing and new development, and to sustainably manage the risks of flooding on—site and within the wider drainage catchment.

12.21 There is insufficient current capacity in the combined sewer network served via the Counters Creek catchment to receive anything more than the black-water flows from development in the OPDC area. This provides a technical imperative for development to achieve run-off rates equivalent to a green field.

12.22 OPDC's preferred approach is therefore for the area to aim to be as close to water neutral as is feasible. Water neutrality is where the demand for water from development is no greater after it is built than it was before. OPDC's aim to move development towards neutrality will require exemplary design and operation and may require developers to consider off-setting the impacts of their development by making existing homes and buildings in

the area more water efficient, beyond the requirements of the London Plan.

12.23 OPDC wants to realise the sustainability and cost benefits from an integrated approach to water management and has commissioned an Integrated Water Management Strategy (IWMS) to set a framework for how water and wastewater should be managed within the area. The IWMS has considered several water management measures, which have been assessed against a range of criteria, covering deliverability as well as sustainability.

12.24 There are common water management measures which would make up the base of any approach to sustainably managing water in the OPDC area. These are:

- Achieving the highest standards of water demand management, through installation of high specification water efficient fixtures and fittings and use of smart network and metering technologies;
- Management of as much storm water as possible at the place it falls for individual plot development, through the use of 'source control' SuDS measures such as green roofs on buildings. This intervention provides a small amount of rainfall attenuation during smaller, less intense storms; and



Figure 129: Sustainable drainage in Greenwich

Management of storm water runoff within a connected network of SuDS systems located at all public open areas, streets and roads.

12.25 These measures by themselves are not enough to achieve run-off rates equivalent to a green field and the IWMS includes a series of other measures that could help to achieve this. The IWMS incorporates these measures into six 'strategy options' (see table 14), showing how these measures could be packaged up with

the common measures outlined in paragraph 12.24 above.

12.26 Of the six potential strategy options proposed, the IWMS identifies option 4 as the preferred solution and includes recommendations for how this strategy could be taken forward. The IWMS is in draft at this stage and views are sought on this preferred solution (see Question QEU3a below).

12.27 Flood risk within Old Oak and Park Royal is generally low, albeit with some localised higher risk areas around the River Brent, and from localised surface water flooding. These risks will need mitigation, and surface water run-off from the OPDC area will require alternative and sustainable means of management.

12.28 The London Boroughs of Brent, Ealing and Hammersmith and Fulham, as Lead Local Flood Authorities have Surface Water Management Plans (SWMP's) in place. A SWMP is prepared by the boroughs in their role as Lead Local Flood Authority. It is a study to understand the flood risk that arises from local flooding, defined by the Flood and Water Management Act 2010 as flooding from surface runoff, groundwater, and ordinary watercourses. The boroughs identify actions which they and others must

take to mitigate and manage flood risks. Such actions where relevant to the OPDC area have been accounted for in the IWMS and are mainly in regard to the need to mitigate localised areas of surface and storm water flooding, and flooding from sewers.

12.29 Major development will be expected to alleviate localised surface water drainage problems. A site specific flood risk assessment may be required to ensure that the development will remain safe and will not increase flood risk to others.

12.30 Locally, smaller-scale projects that help to separate foul and surface water drainage will also be important to help mitigate the 'poor water quality' status of the River Brent, and poor water quality of the Grand Union Canal, helping to meet the requirements of the EU Water Framework Directive (2000/60/EC) and the objectives and actions of the Thames River Basin Management Plan 2015.

12.31 The opportunities for integrating the delivery of other forms of infrastructure, notably green infrastructure, with water infrastructure will also be needed to realise wider benefits to people and nature, improve climate resilience and secure cost efficiencies.

### **ALTERNATIVE POLICY OPTION**

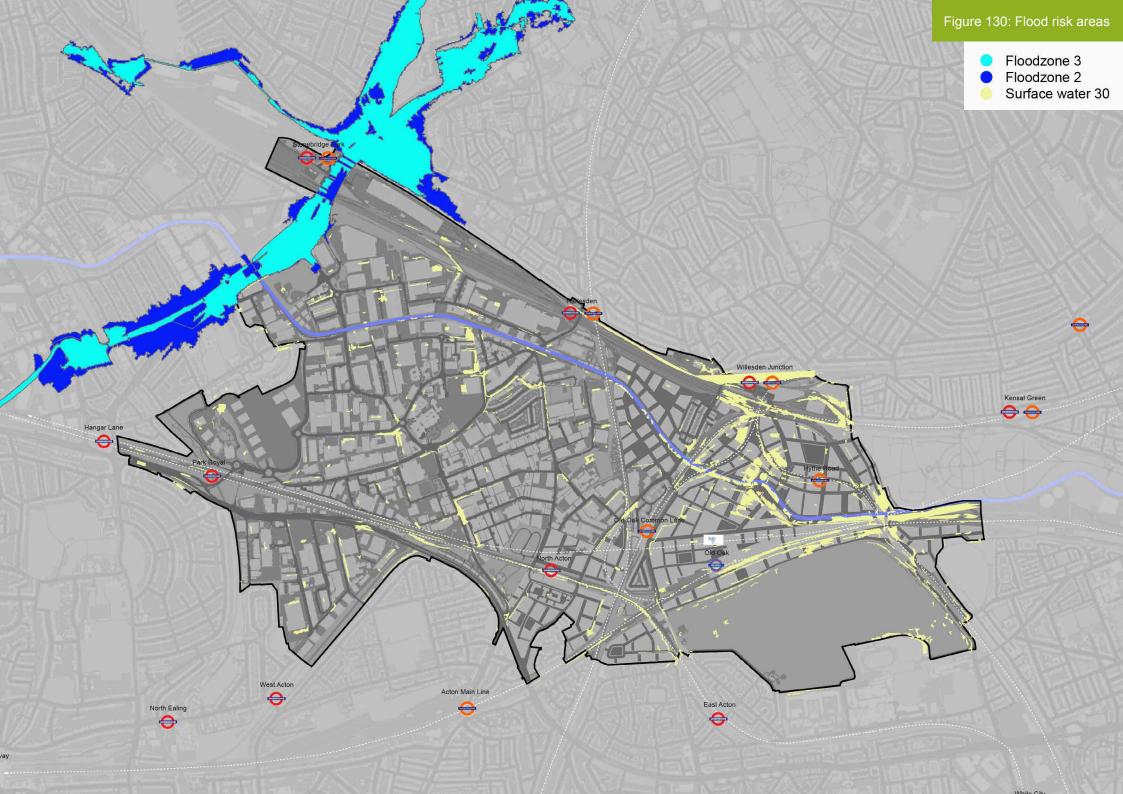
12.32 No reasonable alternative policy options have been identified, as an alternative would be to not achieve greenfield run-off rates, or exemplary standards of water efficiency. This would have an unacceptable impact on the sewer network within and downstream of OPDC and on the demand for water resources.

#### **Questions:**

**QEU3a:** Do you agree with the preferred water management option identified in the IWMS? What might you change? Please refer to the IWMS for additional information if required.

**QEU3b:** Where might features be located outside the core development area to help water management?

You can provide comments directly through:



# **EU4: Waste management**

#### **KEY ISSUES**

- As well as being a Local Planning Authority (LPA), OPDC is a Waste Planning Authority (WPA).
- OPDC is therefore responsible for waste development planning applications and has a statutory duty to prepare a local waste plan, either individually or as part of a joint plan.
- Although OPDC does not have a waste apportionment target in the current London Plan, the London Plan requires Mayoral Development Corporations to work with boroughs to ensure that borough apportionments are met.
- 4. There are existing waste facilities that need to be either re-located, retained or re-orientated

#### **POLICY CONTEXT**

#### **National**

12.33 The NPPF states that Councils should set out the "strategic priorities" for their area in the Local Plan, which includes delivering "waste management" infrastructure.

12.34 The National Planning Policy for Waste (NPPW) provides further detailed policy on waste and the National Planning Practice Guidance (NPPG) on Waste states that

"WPAs should have regard to the apportionments set out in the London Plan when developing their policies. The Local Waste Plan will need to be in general conformity with the London Plan"

# Regional

12.35 The London Plan apportions waste arisings to each London Borough for them each to allocate sufficient land to deal with the apportioned amount of waste per year. This is to work towards net self-sufficiency of waste management in London by 2026.

12.36 Paragraph 5.80 requires that where a Mayoral Development Corporation (MDC) exists or is established within a Borough the MDC will co-operate with the Borough to ensure that the Borough's apportionment requirements are met. OPDC's approach to waste site management must therefore accord with this policy requirement across its area.

# PREFERRED POLICY OPTION

a) continue to safeguard existing waste and recycling sites in Park Royal in accordance with the West London

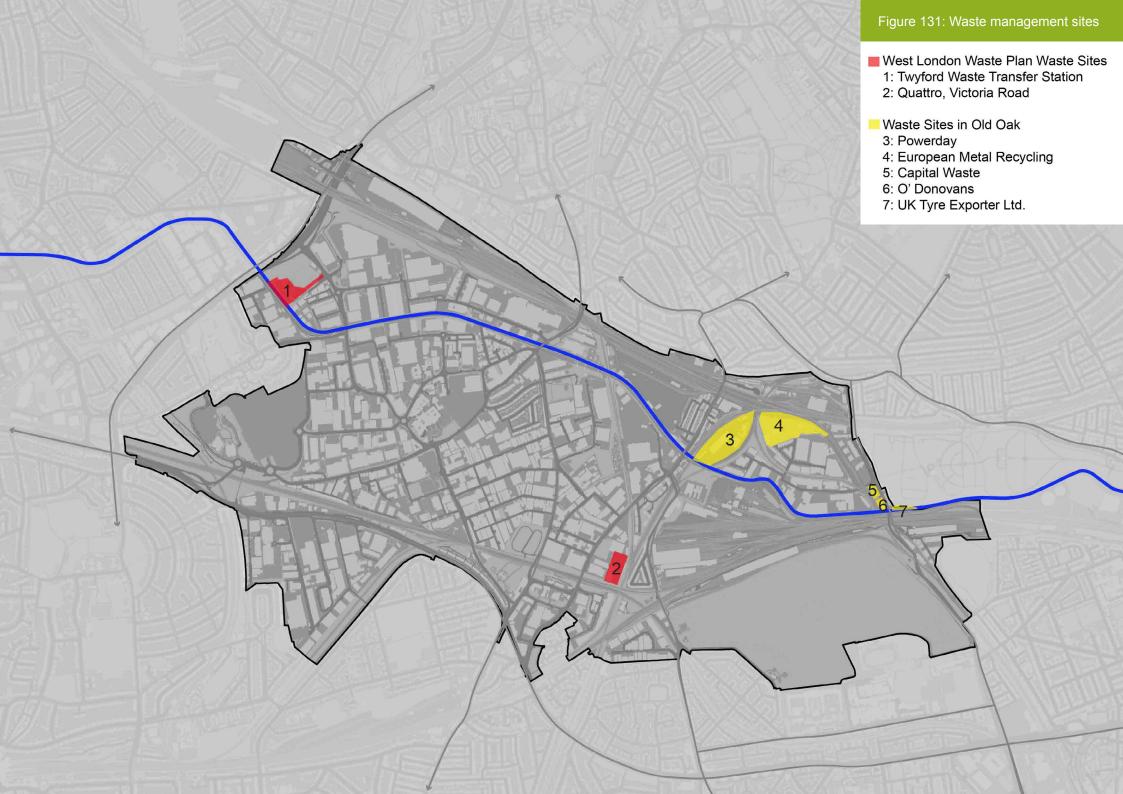
# Waste Plan;

- b) safeguard the Powerday (Old Oak Sidings) waste site in Old Oak;
- c) work with other waste operators in Old Oak to coordinate their relocation to other suitable and accessible sites; and
- d) ensure that proposals for waste facilities adequately mitigate their impact on amenity, air quality, noise and other relevant environmental considerations.

#### **JUSTIFICATION**

12.37 For the part of the OPDC area covered by the London Boroughs of Brent and Ealing, OPDC has been working jointly with these boroughs to prepare the West London Waste Plan (WLWP), which was adopted by OPDC in July 2015 as a Development Plan Document and part of OPDC's Local Plan. The plan identifies two specific sites within Park Royal (see figure 131) that should be safeguarded for waste:

- Twyford Waste Transfer Station; and
- Quattro, Victoria Road.



12.38 OPDC will work closely with the London Boroughs of Ealing and Brent and other WLWP authorities to safeguard these waste sites.

12.39 The part of the OPDC area in the London Borough of Hammersmith and Fulham is not covered by the West London Waste Plan. Hammersmith and Fulham is part of the Western Riverside Waste Authority (WRWA), which also covers the London Boroughs of Lambeth and Wandsworth and Royal Borough of Kensington and Chelsea. Within the Hammersmith and Fulham part of the OPDC area there are currently five waste sites (see Figure 131), which are:

- European Metal Recycling;
- Powerday;
- Capital Waste Ltd;
- UK Tyre Exporters; and
- O'Donovan's Waste Disposal Ltd.

12.40 OPDC has produced a Waste Strategy as a supporting study to this draft Local Plan which outlines how these sites contribute to Hammersmith and Fulham Council's apportionment and in accordance with the London Plan, how OPDC can co-operate with the Council to ensure that the Council's apportionment requirements are met. The Waste Strategy identifies that the

Powerday waste site is capable of meeting Hammersmith and Fulham's apportionment (both in terms of tonnage capacity and land) for the London Plan period up to 2036 and this draft Local Plan therefore proposes that this site is safeguarded.

12.41 The Waste Strategy identifies that Powerday currently exports its products overseas; however, the draft Local Plan promotes the use of waste as a resource on-site through processes such as energy from waste and / or the re-use of spoil for construction (see Policies EU5 and EU6). This could see these materials being re-used within the OPDC area in future, helping to transition the OPDC area to a circular economy.

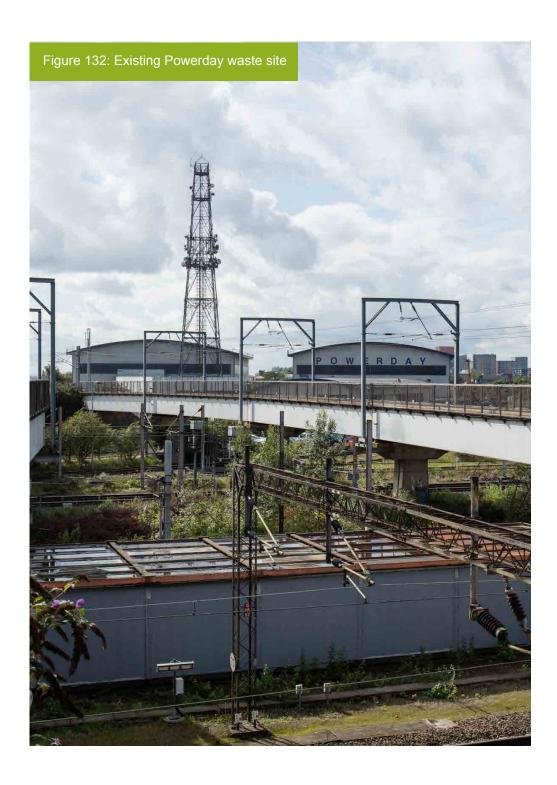
12.42Within Old Oak, it will be necessary to relocate other identified waste sites to accommodate new development and realise the homes and jobs targets set for the area in the London Plan. OPDC is keen to ensure that existing waste management activities in Old Oak continue to operate in the OPDC area where possible, whilst ensuring that this would not adversely impact on local communities, heritage assets or the natural environment, and will work with waste providers to explore ways in which sites could be relocated. Any

relocation deemed necessary will be done in line with London Plan waste policy.

### **ALTERNATIVE POLICY OPTION**

1. Safeguard all waste sites in Old Oak.

12.43 This approach would ensure that borough apportionment targets are exceeded, but would prevent development from being brought forward within the 'Old Oak North' place and would undermine the delivery of homes and jobs in the OPDC area.



# EU5: Circular economy and resource efficiency

#### **KEY ISSUES**

- OPDC aspires to enable a more competitive, resource efficient circular economy, across a range of economic sectors, including waste.
- The scale of new development and regeneration proposed at Old Oak and Park Royal, both in its construction and operation, provides challenges and opportunities to minimise the use of natural resources and waste and to maximise the re-cycling and economic re-use of these resources.
- Existing and new development will need to consider how it can increase its contribution to reducing waste, to the more efficient use of natural resources, and to provide resilience to the effects of a changing climate.

#### **POLICY CONTEXT**

#### **National**

12.44 The NPPF does not deal with waste matters directly, but refers to the Waste Management Plan for England. This plan sets out:

- the Government's ambition to work towards a more sustainable and efficient approach to resource use and management;
- to get the most environmental benefit

- by increased recycling of resources and recovery of energy from residual waste; and
- the Waste Hierarchy, which identifies disposal as the least desirable option and waste reduction and then reuse as the most desirable options.

12.45 The National Planning Policy for Waste (NPPW) provides further detailed policy on waste.

# Regional

12.46 The London Plan sets out the Mayor's policies for London's waste net self-sufficiency, waste capacity, construction-related waste, hazardous waste and aggregates. The Mayor's policies encourage a collaborative approach to working between stakeholders to implement the waste hierarchy embedded in EU and national waste plans, and to enable resource recovery. The Plan sets out the Mayor's aims for London's waste net self-sufficiency, achieved by minimising waste, setting targets for waste recycling, re-use, and composting, and reducing waste export outside the capital.

#### PREFERRED POLICY OPTION

Development proposals, in promoting a circular economy, will be required to:

- a) demonstrate how they have as far as possible designed out waste and ensured the efficient use of building materials through:
  - i. lean design, minimising the use of primary materials and the production of excess or waste material during construction;
  - ii. maximising the use of secondary materials and the opportunities for reuse, remanufacture or recycling of materials; and
  - iii. considering the end-of-operational life use of materials, or if not viable, on-site energy recovery from waste;
- b) make adequate provision for convenient domestic and commercial waste storage and for collection within the development that allows for a range of future collection options;
- c) investigate the potential for the movement of waste and recyclable materials during construction by

- sustainable means of transport, including by rail, and the Grand Union Canal: and
- d) promote other on-site waste management and communal composting.

#### **JUSTIFICATION**

12.47 A circular economy (CE) is one that keeps products, components and materials at their highest use and value at all times. It is an alternative to the current linear economy, where we make, use and then dispose of products, components and materials. By adopting a circular economy approach OPDC can help London unite business interests with the city's wider development needs, and assist London to remain globally competitive.

12.48 EU and national policy sets out a Waste Hierarchy, which identifies disposal as the least desirable option, and waste reduction and then reuse as the most desirable options. The London Plan reinforces the Waste Hierarchy, setting out the Mayor's policy for London's waste net self-sufficiency through managing as much of London's waste as is practicable within London, and for this to equate to 100 per cent by 2026 (within the lifetime of this

Local Plan). OPDC aims to support this objective and London's transition to a circular economy, including turning London's used materials and waste into an economic opportunity.

12.49 Our aim is to promote a local economy which is waste-free, and resilient and remanufacture-able by design to ensure products and materials are kept at their highest utility for as long as possible This approach together with waste recycling and reprocessing offer clear benefits for the local economy, the environment and our resilience to climate change including, the creation of 'green' jobs in the area make new products, contribute to local energy requirements, reduce carbon emissions and avoid the use of virgin materials and associated adverse environmental impacts.

12.50 The scale of construction can be expected to result in significant amounts of construction waste and excavated material. OPDC's expectation is that this material will be re-cycled and re-processed, and re-used on-site, wherever practicable. Applicants will be expected to demonstrate how they support this aspiration.

12.51 The use of recycled materials and waste minimisation in construction

can offset the requirement for energy intensive production of primary materials. The scale of regeneration within OPDC may support the capability for producing heat from waste for local district heating schemes, thus further contributing to OPDC's aims for decentralised energy and local energy generation, and help us move towards a low carbon economy.

12.52 CE thinking is evolving especially in the area of built environment. OPDC will review further, which elements of the circular economy would be most beneficial for Old Oak Park Royal. New development at Old Oak and Park Royal affords the opportunity to explore how existing waste facilities can be incorporated in to solutions for the treatment, re-processing and transfer of the area's waste, and potentially provide for local energy needs. The Powerday waste site for example could be refurbished over time to contribute to district-scale energy generation from waste (refer also to Policies EU4 and EU6).

12.53 OPDC will, in making planning decisions, require new development proposals to demonstrate how they have adopted the Waste Hierarchy and CE principles in their design for construction and operation stages and

how they will enable their residents and users to minimise waste and maximise reuse, recycling and composting.

12.54 The provisions made within new development should not simply seek to meet the requirements of existing waste collection and management practices, but should also provide sufficient on-site space for waste storage and access, to allow for future practices and innovation. These include exploring the provision of separate collection of general waste, recyclable materials and other waste streams.

12.55 Communal composting facilities should be operated in association with proposals for urban food growing and green infrastructure.

### **ALTERNATIVE POLICY OPTION**

1. Safeguard all waste sites in Old Oak.

12.56 This approach would ensure that borough apportionment targets are exceeded, but would prevent development from being brought forward within the 'Old Oak North' place and would undermine the delivery of homes and jobs in the OPDC area.

# **EU6: Decentralised energy**

#### **KEY ISSUES**

- Large-scale regeneration at Old Oak and intensification in Park Royal will place increasing demands on the energy network. The current network is not capable of accommodating future energy requirements and this will need to be addressed to enable timely delivery.
- 2. Integrated delivery of a decentralised energy network at the scale that could be achieved at Old Oak presents a significant opportunity for sustainability.

#### **POLICY CONTEXT**

# **National**

12.57 The NPPF, supplemented by guidance on renewable and low carbon energy in the National Planning Practice Guidance, supports the move to a low carbon future, setting out local planning authorities' and communities' roles in supporting greenhouse gas reduction, energy efficiency, decentralised energy supply, reducing energy consumption and increasing the supply and use of renewable and low carbon energy.

# Regional

12.58 London Plan polices set out aims for residential buildings to be zero carbon from 2016, and non-residential buildings from

2019. Mayoral expectations are for 25% of London's heat and power generation to be from local decentralised energy by 2025.

### PREFERRED POLICY OPTION

OPDC will support and facilitate:

- a) provision of energy supply infrastructure that enables development (electricity and gas);
- b) the provision of infrastructure to deliver a decentralised energy network:
- c) proposals which contribute to the delivery of a decentralised energy network subject to:
  - i. providing evidence that appropriate management mechanisms will be put in place to ensure that end customers are protected in respect of the price of energy provided; and
  - ii. ensuring that heat losses from the network are minimised.

Development proposals will be required to:

d) demonstrate a collaborative approach to working with OPDC

- and its development partners to contribute to the supply and capacity of the decentralised energy network unless it can be demonstrated that this is not technically feasible or economically viable;
- e) be designed to enable connection to the decentralised energy network, where there is no connection to a decentralised energy network yet available, and/or where CCHP or CHP would not be technically feasible or financially viable;
- f) demonstrate that provision is included to accommodate routes and land for energy centres and utilities networks; and
- g) submit an Energy Statement.

#### **JUSTIFICATION**

12.59 Development in Old Oak and Park Royal provides significant potential to contribute to the Mayor's target for reducing London's carbon dioxide emissions, through a co-ordinated and best practice approach to energy provision.

12.60 OPDC has produced a draft Old Oak Decentralised Energy Strategy, which shows how a decentralised energy network could be delivered to supply low or zero carbon heat. Further work will be carried out over the coming years, but initial findings show that this would be done on a phased basis, with initial energy production plant accommodated within three energy centre buildings, and potentially later consolidated into a single energy centre in the early 2030's, subject to development phasing. Proposals would be expected to align their own energy strategies in accordance with the strategic approach and safeguard land for energy centres, routes and infrastructure for new networks or extensions to any existing networks and to connect with these networks. The area's waste sites could contribute over time to the provision of energy from waste and so contribute to districtscale energy generation (refer also to Policy EU5).

12.61 Development will be expected to maximise its contribution to the delivery of, and connection to, the area network. Where this is not currently feasible, development should to be designed to be adaptable to enable future connection to the network.

12.62 Energy Statements should demonstrate that opportunities to connect to existing heat and energy networks and/or to construct and connect to new energy networks have been maximised through provision of localised network connections and Combined Cooling and Heating Power (CCHP) or Combined Heat and Power (CHP) infrastructure within buildings where it is feasible and viable to do so. They should address energy efficiency and renewables, aiming to minimise carbon dioxide emissions to the fullest extent possible by application of the **Energy Hierarchy** 

12.63 OPDC will support development that minimises its need for mechanical heatingand cooling, and its requirements for power by incorporating energy efficiency measures in buildings, and by careful consideration of the site layout and design.

12.64 Opportunities will be expected to be taken by developers for co-delivery

of energy supply with other utilities, and other infrastructure.

12.65 OPDC recognises the relationship between decentralised energy generation and the potential effects on local air quality, noise and light pollution on local communities, heritage assets and the natural environment. Proposals will be expected to demonstrate how they have minimised any negative impacts and be designed to be resilient to the risks of flooding.

### **ALTERNATIVE POLICY OPTION**

1. To delete the policy reference to 'major' development, so that the policy requirements apply to 'all' development.

12.66 This would put the onus on all developments to contribute to the decentralised energy network. This option would deliver greater sustainability but could be difficult and costly to deliver, creating greater uncertainty of delivery and impact on the viability of smaller schemes.

# **EU7: Digital communications**

#### **KEY ISSUES**

- The majority of Old Oak and Park Royal have poor digital communications infrastructure and lacks access to 'next generation broadband' or 'superfast broadband' services.
- Current digital communication infrastructure within Old Oak will not be sufficient to meet the envisaged rising demand for data capacity.
- 3. Current digital communications infrastructure within Park Royal is considered to negatively impact on the functioning of businesses within the estate.
- To optimise development, support economic growth and provide high quality, efficient and agile services, new digital communications infrastructure needs to be provided within Old Oak and Park Royal.
- 5. Digital communications infrastructure will need to be flexible to accommodate technological change and evolution.

#### **POLICY CONTEXT**

#### **National**

12.67 The NPPF identifies that advance, high quality communications infrastructure is essential for sustainable economic growth and that high speed broadband technology and other communications networks also

play a vital role in providing local community facilities and services. Local Plans are required to support the expansion of electronic communications networks while seeking that new equipment is sympathetically designed and camouflaged where appropriate.

# Regional

12.68 London Plan policies provide guidance to encourage a connected economy by facilitating the provision and delivery of the information and communications technology infrastructure.

### PREFERRED POLICY OPTION

- a) OPDC will work with partners and infrastructure providers to deliver exemplar digital communications infrastructure by:
  - i. promoting the delivery of digital communications infrastructure:
  - ii. exploring innovative delivery and management models; and
  - iii. integrating contemporary technology and seeking to accommodate future technologies to address challenges and create opportunities.

b) Development proposals will be required to demonstrate how they will support and integrate the delivery of technology and communication infrastructure.

#### **JUSTIFICATION**

12.69 Digital communications infrastructure refers to a range of contemporary and future technologies and transmission media which currently include transmission lines (including copper, cable, fibre), terrestrial wireless (including fixed, mobile (such as 4G and 5G) and Wi-Fi) and satellites.

12.70 Next generation access or superfast broadband is defined by OFCOM as providing a download speed that is greater than 24 Mbps. This speed is commonly considered to be the maximum speed that can be supported by copper based networks. As such next generation access requires different technologies to deliver this speed.

- 12.71 Ultrafast broadband is defined by the Department of Culture and Media as providing a download speed of at least 100 Mbps.
- 12.72 To support OPDC's aspirations to be an exemplar in innovation, OPDC will work with a range of public, private and community sector stakeholders to deliver a world-class digital communications infrastructure network that meets the needs of existing and future residents, businesses, visitors and service providers.
- 12.73 The UK's digital economy grew over seven times faster than the economy as a whole between 2008 and 2013 with growth expected to continue. SMEs also consider that access to digital communications infrastructure is a critical element to their current and future economic success.
- 12.74 The demand for data capacity is also expected to rise with the emergence of new services, applications and devices being developed to meet a variety of demands alongside other services that have yet to be even considered. These expected new demands will relate to:
- Video services;
- Cloud services;

- Health services:
- Education services; and
- Smart City, utilities networks and Internet of Things requirements.
- 12.75 In light of the above, OPDC considers digital communications infrastructure to be fundamental to the long-term success of Old Oak and Park Royal.

### **ALTERNATIVE POLICY OPTION**

- 1. OPDC does not specifically seek to integrate contemporary technology and accommodate future technologies to address challenges and create opportunities.
- 12.76 The benefit of this approach would be that existing technologies and systems are implemented at less risk to stakeholders. The disadvantage would be that existing challenges aren't addressed and new opportunities aren't created or captured.

#### **Questions:**

**QEU7a:** Are there any specific areas within Old Oak and Park Royal that currently have issues with access to digital internet services. Are there any other issues relating to access to internet services?

You can provide comments directly through:

# **EU8: Green infrastructure & biodiversity**

#### **KEY ISSUES**

- The area is highly urbanised and affected by issues, such as poor air quality, higher temperatures, lack of green space and noise from traffic and commercial uses
- The area's existing network of green spaces is limited in extent and functionality by fragmentation that is reinforced by major railway and road corridors and poor connection to its surroundings.
- OPDC's existing green spaces require protection and / or enhancement. These include a hierarchy of sites of importance for nature conservation (SINC's) across the OPDC area.
- 4. The planned regeneration will increase urban density and 'grey' infrastructure, but also provides an opportunity to create new 'green infrastructure' that can provide a range of services.

### **POLICY CONTEXT**

#### **National**

12.77 The NPPF identifies sustainable development as the purpose of the planning system and conserving and enhancing the natural environment as a 'core planning principle'. It also states that local plans should plan positively for the creation, protection, enhancement and management of networks

of biodiversity and green infrastructure, including moving from a net loss of biodiversity to achieving gains for nature.

#### Regional

12.78 London Plan policies set out Mayoral objectives for a multi-functional network of green and open spaces (i.e. green infrastructure), requires London's boroughs to set out a strategic approach by producing green infrastructure strategies, and sets out the Mayor's proactive approach to the protection, enhancement, creation, promotion, and manage of biodiversity and features such as trees, woodlands and waterways.

# PREFERRED POLICY OPTION

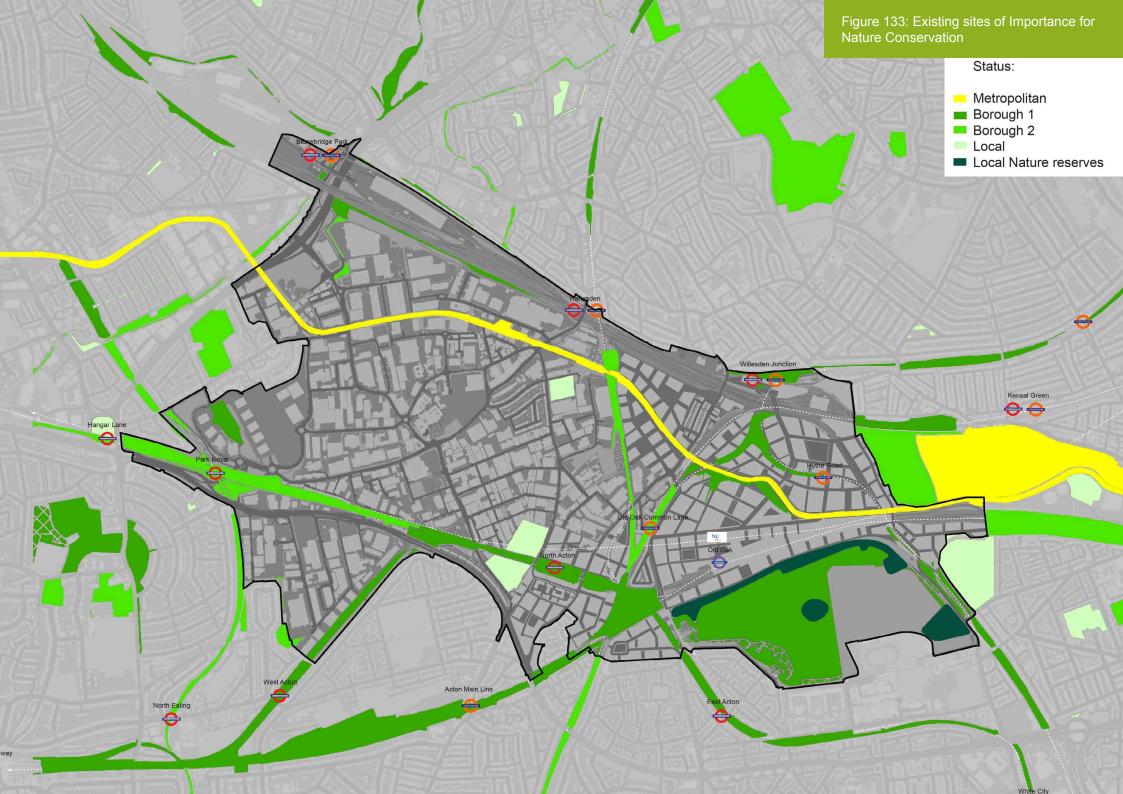
Development will be required to:

- a) protect and/or enhance and create multi-functional green and water spaces and ensure they are connected by street greening and other green links;
- b) demonstrate how green infrastructure has been:
  - i. integrated with utilities infrastructure: and
  - ii. planned, designed and managed

- to contribute to and be integrated with, the wider green infrastructure network;
- c) take account of the proximity of SINCs, and the habitat and species targets in relevant Biodiversity Action Plans (BAPs);
- d) be accompanied by an Ecological Statement for major applications;
- e) have particular regard to the measures for the protection and enhancement of ecology and biodiversity in Wormwood Scrubs and for the Grand Union Canal.

#### **JUSTIFICATION**

12.79 Green infrastructure (GI) is the network of green spaces and waterways and features such as street trees and green roofs, that is planned, designed and managed to deliver a range of benefits, including recreation and amenity, healthy living, mitigating flooding, improving air quality, cooling the urban environment, encouraging walking and cycling and enhancing biodiversity and ecological resilience.



12.80 OPDC recognises that significant new development, especially at Old Oak will provide opportunities for working with developers and stakeholders to provide new GI, secure improved connections, to and within the GI network and to protect and /or enhance these assets. OPDC is developing a GI Strategy which will accompany the next draft of the Local Plan and will demonstrate how the area's GI network can be enhanced.

12.81 Developers will be expected to incorporate a GI approach from early in the design process through to considering management arrangements. Early adoption of a GI approach in development proposals will enable cost-effective, more efficient and more resilient infrastructure solutions to be considered by individual developers and by developers working in co-operation with each other. Incorporating a GI approach will also contribute to the ability of development to respond to the effects of a changing climate over the long-term.

12.82 Green infrastructure assets should be connected through the delivery of street greening. This may include soft landscaping, retaining existing trees and planting new trees to encourage healthy, active and walk-

able neighbourhoods incorporating green features (such as green roofs and walls, etc.) into buildings, and greening our streets and public realm will also help provide a liveable and healthy environment for people and nature. Regeneration also presents opportunities to realise the role of GI in enabling space for utilities and other infrastructure.

12.83 There are opportunities for the co-delivery of GI with other utilities such as SuDS, and district-wide systems for energy and for waste, in addition to providing routes for walking and cycling, which will have sustainability and potential cost benefits.

12.84 London's most important wildlife sites are recognised by the Mayor and London borough councils as Sites of Importance for Nature Conservation (SINCs). There is a hierarchy of SINC's in the area from the most significant of Metropolitan Importance, such as the Grand Union Canal, to those of Borough Importance, such as Wormwood Scrubs and to those of Local Importance, such as green corridors associated with the area's railways and with roads which intersect the area.

### **ALTERNATIVE POLICY OPTION**

12.85 No alternative policy options have been identified as an alternative approach would be to not have proactive policies for the delivery of new and enhance existing GI and this would not be consistent with the NPPF or in general conformity with the London Plan.



# **Questions:**

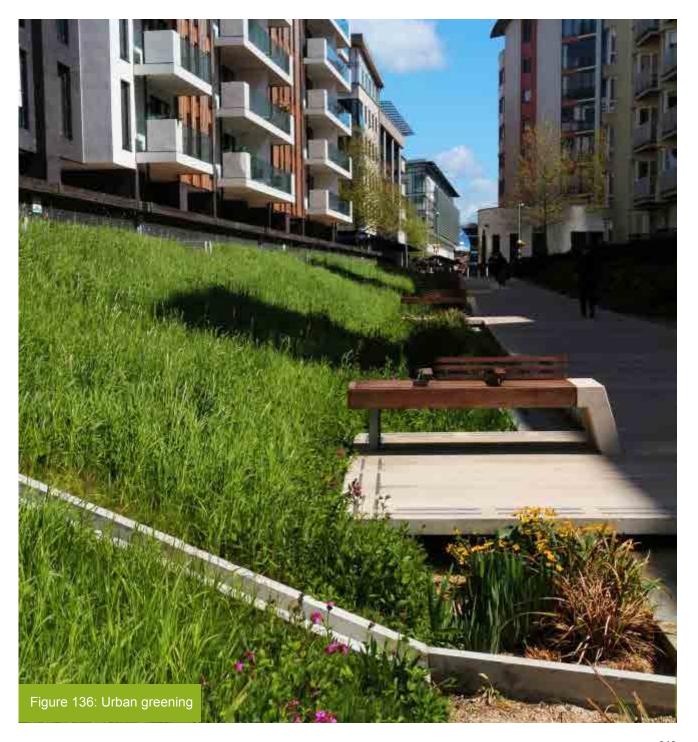
**QEU8a:** Where could new green infrastructure be incorporated into the layout of new development in the OPDC area?

**QEU8b:** Are there any biodiversity designations which could be amended and / or removed?

You can provide comments directly through:



Figure 135: Integrating biodiversity



# **EU9: Extraction of minerals**

#### **KEY ISSUES**

- 1. It is unknown whether there is potential for this activity in the plan area or if the geology is suitable.
- Unconventional oil and gas resources may provide opportunities to contribute to meeting growing energy demands from development within OPDC and in wider London, if this represents sustainable development.

#### **POLICY CONTEXT**

### **National**

12.86 The NPPF and the associated Technical Guidance addresses facilitating the sustainable use of minerals and states that in addressing local plans, local planning authorities should identify and include polices for the extraction of minerals and set out environmental criteria against which to assess applications for development.

# Regional

12.87 The London Plan does not contain any policies that directly relate to oil and gas exploration.

#### PREFERRED POLICY OPTION

Applications for mineral extraction, including the exploration, appraisal and operation of unconventional oil and gas resources, will be considered against the following criteria:

- a) Protection of nearby residents and businesses from the effects of the operations, particularly in regard to air quality and noise;
- b) The operation's design, including its sensitivity to the character of the urban landscape and to features of national, London, and local importance;
- c) Site access, traffic generation and the routing of heavy vehicles;
- d) Safeguarding of water supplies and the water environment, the safe and sustainable disposal of waste water and flood risk management including surface water;
- e) The effects on public rights of way, open spaces or outdoor recreation;
- f) The control and mitigation of greenhouse gas emissions and dust during construction and operation;
- g) The efficient use of resources (such as construction materials or water);

- h) The contribution of the operation to the development of heat and energy recovery or low carbon technologies;
- i) Site restoration, and effective afteruse following development; and
- j) the safeguarding of biodiversity, and sites of interest for nature conservation.

### **JUSTIFICATION**

12.88 Mineral extraction is any process that involves isolating minerals from natural sources such as rock or soil. Minerals are essential to support sustainable economic growth and our quality of life. Minerals Planning Authorities such as OPDC are required by government to identify and include policies for the extraction of minerals. The sustainable use of the UK's own mineral resources is a key focus of national policy in securing energy supply. Consequently, this is an important issue for London and for the Old Oak and Park Royal area, as its communities and economy grow, supported by more sustainable, decentralised, local sources of energy supply.

12.89 The OPDC area is not currently covered by Department of Energy & Climate Change (DECC) licences allowing companies to search for minerals, including unconventional oil and gas. It is unknown whether there is potential for this activity in the OPDC area or if the geology is suitable. Nonetheless, should future exploration demonstrate the presence of oil and gas resources, these may provide opportunities to contribute to meeting growing energy demands from development planned both within OPDC's boundaries and in wider London, if this represents sustainable development.

12.90 OPDC will consult with the relevant boroughs in regard to any proposals for minerals extraction. Outside the planning system, licences for exploration are dealt with by the Oil and Gas Authority as an executive agency of DECC, again working with their regulatory partners.

#### **ALTERNATIVE POLICY OPTION**

12.91 No reasonable alternative policy options have been identified. The NPPF requires Local authorities to address minerals extraction.

# **EU10: Air Quality**

#### **KEY ISSUES**

- 1. The London Boroughs of Ealing, Brent and Hammersmith and Fulham experience significant air pollution, directly attributable to emissions from road traffic, as in many parts of London.
- 2. The Old Oak and Park Royal area is particularly affected. The nature of industrial uses and the strategic road network in the area both give rise to air pollution.
- 3. The three local authorities have designated Air Quality Management Areas across the whole of the Old Oak and Park Royal for Nitrogen Dioxide (NO2) and particulate matter (PM10). They are each preparing Air Quality Management Plans covering the area.

#### **POLICY CONTEXT**

#### **National**

12.92 The NPPF requires planning to contribute to and enhance the natural and local environment by preventing development contributing to being put at risk by air pollution. Planning policies should sustain compliance to EU and national objectives for pollutants, taking into account Air Quality Management Areas and cumulative impacts and that decisions need to be consistent with local Air Quality Action Plans.

# Regional

12.93 London Plan policies state that local plans should seek reductions in the levels of pollutants having regard to the Mayor's Air Quality Strategy and take into account their own air quality assessments and action plans, particularly where Air Quality Management Areas have been designated.

#### PREFERRED POLICY OPTION

Development will be required to demonstrate through an air quality assessment how it:

- a) implements the recommendations of the Old Oak and Park Royal Air Quality Study (summarised in Table 15 below);
- b) has regard to the relevant borough's Air Quality Management Plans and the mitigation measures identified therein:
- c) considers air quality impacts during construction and operation with the aim of being air quality neutral, with mechanisms for how this will be monitored over time; and
- d) seeks to minimise air quality impacts from surrounding uses.

#### **JUSTIFICATION**

12.94 Air quality has a significant role to play in the health and wellbeing of occupants. The OPDC area is particularly affected by poor air quality, thanks to its high levels of traffic and industrial uses. The London Boroughs of Brent, Ealing and Hammersmith and Fulham have each identified incidences of poor air quality in OPDC are and have designated Air Quality Management Areas covering the entire OPDC area for Nitrogen Dioxide (NO2) and particulate matter (PM10).

12.95 As a result of these air quality issues, OPDC has published its own draft Air Quality Study (AQS) to inform the draft Local Plan. It identifies measures to support improvement in the area's air quality which are listed in Table 15 below. Where relevant these recommendations have also been incorporated in other preferred policy options in this draft Local Plan.

12.96 OPDC will need to work with others on the implementation of the measures necessary to address poor air quality as some measures require

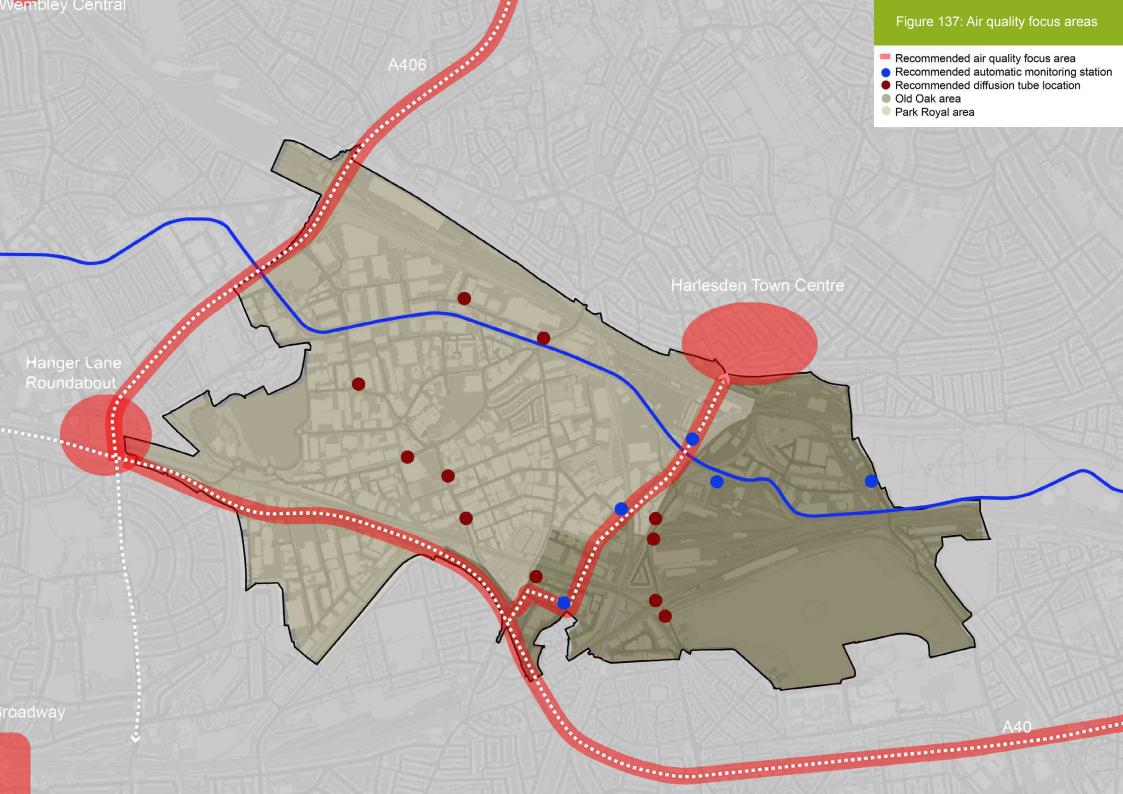


Table 15: Summary of the draft Air	Quality Study (AQS) recommendations
Policy Area	Policy action / mitigation measure
Transport	<ul> <li>Minimise demand for travel by private motor vehicles and encourage transport by shared, low and zero emission modes.</li> <li>Provide no more than 1 car parking space per 5 residential units and ensure sufficient provision of electric charging points.</li> <li>Encourage the uptake of Low and Zero Emission Vehicles by providing vehicle re-fuelling / charging infrastruc-</li> </ul>
	ture.  Design local roads to restrict vehicle speeds to 20mph.
Energy	<ul> <li>CHP / biomass should meet the highest emissions standards detailed in the Mayor of London's Supplementary Planning Guidance (SPG) on Sustainable Design and Construction.</li> <li>Development design should be optimised to ensure adequate dispersion of emissions from discharging stacks and vents.</li> </ul>
Waste	All new waste treatment and handling facilities will require to be fully enclosed.
Overall Emissions	<ul> <li>Designate a Low Emissions Neighbourhood for the OPDC area.</li> <li>Establish a Class C Clean Air Zone to encourage the use of low emissions vehicles.</li> <li>Minimise air pollution making new developments 'air quality neutral' in accordance with the Mayor SPG on Sustainable Design and Construction.</li> <li>Proposals should not increase the area of exceedance of EU established health-based standards and objectives for NO2 and PM10. Where new developments are introduced into area where the standards and objectives are exceeded, developments should be designed to minimise and mitigate against increased exposure to poor air quality.</li> <li>Developers should produce an air quality assessment with the planning application. The AQS provides further recommendations on matters for inclusion within the air quality assessment.</li> </ul>
Monitoring	<ul> <li>Support the installation of new automatic monitors for NO2 and PM10 on the main A-roads in the area (see figure 137)</li> </ul>
Design / Public Realm	<ul> <li>Development and building design should not inhibit the effective dispersion of pollution. In particular, bus and taxi facilities should be designed to avoid the build-up of pollution.</li> <li>Developments should provide adequate, appropriate and well located green space and infrastructure.</li> </ul>
Construction and logistics	<ul> <li>Minimise emissions from freight, delivery and servicing during the demolition and construction phase.</li> <li>Follow the guidance set out in the Mayor's SPG on 'The Control of Dust and Emissions during Construction and Demolition' to assess the impact on air quality during construction and to inform mitigation.</li> <li>Localised AQ measures to tackle known issues in the OPDC area, particularly those associated with high NO2 within the GLA's Air Quality 'Focus Areas' (see Figure 135).</li> <li>Renewable, mains or battery powered plant items should be used for Non-Road Mobile Machinery (NRMM) on construction sites.</li> <li>All demolition and construction sites should be monitored for the generation of air pollution. PM10 monitoring should be carried out at medium and high risk sites.</li> </ul>

broader changes in practice and behaviour. The matter is not confined to one planning authority area and development is often governed by separate regulatory regimes and legislation such as building regulations and environmental permitting.

# **ALTERNATIVE POLICY OPTION**

12.99 No alternative policy options have been identified as alternatives would be to not have policies promoting improvements to air quality and this would not be consistent with the NPPF or in general conformity with the London Plan.

# **EU11: Noise**

#### **KEY ISSUES**

- The existing road and rail transport network and the predominance of industrial uses and heavy traffic associated with them means that the area suffers from significant ambient and background noise levels.
- To a lesser extent, there is ambient noise from air traffic associated with the area's proximity to Heathrow airport and flightpaths.
- Noise can impact on the quality of life and the natural environment. It will be important to carefully plan for this through development.

#### **POLICY CONTEXT**

#### **National**

12.98 The NPPF states that planning policies and decisions should aim to avoid noise from giving rise to significant adverse impacts on health and quality of life as a result of new development, mitigate and reduce to a minimum other adverse impacts on health and quality of life arising from noise from new development, including through the use of conditions and identify and protect areas of tranquility which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason.

# Regional

12.99 London Plan polices set out the Mayor's approach to the management and reduction of noise to improve health and the quality of life and to support the spatial planning objectives of the Mayor's published Ambient Noise Strategy.

#### PREFERRED POLICY OPTION

Development proposals should submit a noise assessment that demonstrates:

- a) how design has minimised adverse noise impacts from both surrounding and internal uses on future occupants. In high density development noise attenuation measures will be of particular importance; and
- b) where development is proposed close to existing noise generators such as waste sites, cultural facilities, strategic roads or uses within Strategic Industrial Locations (SIL), how it will ensure the continued effective operation of those uses.

#### JUSTIFICATION

12.100 Noise is an inherent part of everyday life. It contributes to the character of different places High levels can have a considerable effect on human health, productivity, quality of life and amenity, and on wildlife.

12.101 The impact of noise is a material planning consideration in the determination of planning applications. Given the significant amount of regeneration and new development planned there is the potential for conflict between noise sensitive and noise generating developments. New development in the OPDC area may create more noise, but there may be opportunities to consider improvements to the acoustic environment.

12.102 Where a proposed development has the potential to negatively impact on a noise sensitive development or new noise sensitive development is proposed near major sources of noise, OPDC will require major development proposals to include a noise assessment to investigate noise levels and determine the effectiveness

of proposed mitigation measures. OPDC will apply 'agent of change' principles when considering the impact of noise, i.e. if there is an existing use that generates noise, such as a cultural facility or an industrial use, the onus will be on the new development to adequately mitigate against the impacts of this noise. When assessing proposals, OPDC will have regard to relevant noise exposure standards and internal noise standards which apply to particular uses.

# **ALTERNATIVE POLICY OPTION**

12.103 No alternative policy options have been identified as alternatives would be to not have policies mitigating the impacts of noise and this would not be consistent with the NPPF or in general conformity with the London Plan.

# **EU12: Land contamination**

#### **KEY ISSUES**

- 1. The OPDC area is 650ha of brownfield land with a long industrial history, along-side significant corridors of transport infrastructure.
- Past uses are likely to have left a legacy of contamination within the ground. If not dealt with appropriately, it has the potential to affect human health and natural habitat, including the water environment and groundwater.
- 3. Remediation or clean up may be required for large development.

#### **POLICY CONTEXT**

#### **National**

12.104 The NPPF requires that local planning authorities, though Local Plans and planning decisions, ensure that a site is suitable for its use, having regard to ground conditions, including previous activity pollution and, remediation proposals. After remediation under planning, as a minimum, land should not be capable of being determined as contaminated.

# Regional

12.105 London Plan Polices Identify the need for local planning authorities to encourage remediation and to set out policy to deal with contamination and prevent its spread and re-activation.

### PREFERRED POLICY OPTION

#### **OPDC** will:

- a) assess development proposals in relation to the suitability of the proposed use for the conditions on that site;
- b) require applications for new development to be supported by:
  - i. a site investigation;
  - ii. an assessment to establish the nature, extent, and risk presented by contamination; and
  - iii. remediation proposals, to be agreed before planning permission is granted;
- c) expect, as a preferred approach, the treatment of contamination to take place on-site; and
- d) require developers to complete the implementation of agreed measures to assess and abate any risks to human health or the wider environment, prior to the first occupation and use of the development, or as otherwise agreed by planning conditions.
- e) Require development proposals to set out practicable and effective measures to manage the risks from contamination and decontamination by treating, containing or controlling any contamination so as not to:
  - i. expose the occupiers of the

- development and neighbouring land uses including, in the case of housing, the users of open spaces and gardens to an unacceptable risk;
- ii. threaten the structural integrity of any building built, or to be built, on or adjoining the site;
- iii. lead to the contamination of any watercourse, water body or aquifer; or
- iv. cause the contamination of adjoining land or allow such contamination to continue.

#### **JUSTIFICATION**

12.106 The OPDC area contains a significant amount of brownfield land with a long industrial history. Much of this land is expected to be contaminated and remediation or clean up may be required on development sites. Given the scale of regeneration planned, OPDC wants to ensure the impacts of these past and future land uses do not affect the health of people and the environment.

12.107 Land contamination and remediation is the subject of planning and other regulatory regimes. A key to the successful redevelopment of brownfield land is therefore early and continual engagement between developers, planners and regulators. OPDC will expect developers to work

with OPDC, the relevant London Boroughs and the Environment Agency in assessing the risks and the management of contamination, in assessing the suitability of the proposed use for the conditions on that site, and in agreeing any necessary steps for remediation.

- Regulatory advice 12.108 guidance is available to identify the principal matters which both the Planning Authority and environmental regulator look to be undertaken when approaching redevelopment and land contamination. The Environment Agency documents 'Model Procedures' and 'The Guiding Principles' are particularly useful as they highlight the main stages in the process, best practice and refer to further guidance.
- 12.109 Where land is known or found to be contaminated, or where a sensitive use is proposed or exists, developers will be expected to assess their proposals using the seven stage process below:
- 1. Preliminary Risk Assessment. Comprising a desktop study including details of past and present uses at the site and the surrounding area to identify any potential sources of contamination, potential risks and sensitive receptors. A conceptual site model should be produced to demonstrate where any

- pathway connects any of these sources to the sensitive receptors.
- 2. Site Investigation Scheme. Based upon stage one, setting out how the site investigation will be carried out, how the sources of pollution identified in the conceptual site model will be targeted and to determine the existence of the pathway to the identified receptors.
- 3. Site Investigation. To be undertaken using current guidance and methods.
- 4. Risk Assessment. Based upon site investigations, to determine the degree and nature of any contamination on the site and the risks posed by any contamination to human health, controlled waters and the wider environment.
- 5. Remediation Strategy. A detailed method statement for required remediation works identified through stage four, with the aim of breaking any pollutant linkages. The Strategy should support waste minimisation and maximising resource use by promoting the sustainable remediation and re-use of contaminated soils.
- 6. Verification. A report which validates and verifies that all of the works outlined in stage five have been undertaken as agreed.
- 7. On-going monitoring. If during development, contamination not previously identified is found to be present at the site, the local authority should be immediately informed and no

further development should be carried out until a report indicating the nature of the contamination and how it is to be dealt with is agreed in writing.

- 12.110 Sending contaminated soils to landfill is no longer considered to be sustainable, or economic. Sustainable, economic and local alternatives are required. At OPDC the opportunity exists to promote strategic and sustainable risk based approaches to land assessment and remediation based upon current best practice and guidance.
- 12.111 In some cases, the polluted layers in a site may contain rubble, rubbish and coarse waste materials. Often, on-site recycling and re-use of debris and treated material is possible and can reduce demand for primary aggregate resources, the need to transport material off-site and reduce the potential risks from pollution. This will be encouraged wherever possible.

# **ALTERNATIVE POLICY OPTION**

12.112 No reasonable alternative policy options have been identified. There are no options but to require the decontamination and remediation of 'brownfield' land to ensure its suitability for future uses.

