OXFORDSHIRE MINERALS AND WASTE DEVELOPMENT FRAMEWORK

MINERALS AND WASTE CORE STRATEGY

MINERALS PLANNING STRATEGY CONSULTATION DRAFT

September 2011

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EXECUTIVE SUMMARY

Introduction

1. The County Council is responsible for minerals and waste planning in Oxfordshire and is preparing a new plan for where mineral working and waste facilities should be located. This consultation document is the Council's draft plan for minerals to 2030. It includes a strategy and policies for sand and gravel, soft sand and crushed rock extraction. The Council's preferred strategy is illustrated on a key diagram. Specific sites will be identified in a subsequent document. The Council is consulting separately on its draft plan for waste. Comments on this document should be made by 31 October 2011.

Local and Policy Context

2. Oxfordshire has extensive sand and gravel resources, particularly along the River Thames and its tributaries. Limestone and ironstone are found in the north and west of the county. Secondary and recycled aggregates make a significant contribution to the overall supply of aggregates, from recycled construction and demolition waste and ash from Didcot A power station.

3. A key challenge for the plan is to make provision for the construction materials (aggregates) required to support planned development in the county. The key locations for housing and economic development are Oxford, Bicester, and Science Vale (including Didcot and Wantage & Grove).

4. The county has a rich variety of landscapes, biodiversity and historic assets, including Areas of Outstanding Natural Beauty, Special Areas of Conservation Sites of Special Scientific Interest and Scheduled Ancient Monuments.

5. The draft minerals plan takes into account relevant legislation and international, national, regional and local policies and plans. A sustainability appraisal report, which incorporates the requirements of the Strategic Environmental Assessment Directive, is published alongside this document. A draft screening report has been prepared in respect of the European Habitats Directive.

Vision and Objectives

6. The strategy, policies and proposals are based on a vision and objectives for minerals planning in Oxfordshire. The vision has three strands:
   - provision of minerals to meet development needs;
   - minimising the distance minerals are transported by road, to reduce impacts on the environment; and
   - restoration of mineral workings to enhance the natural environment and the quality of life for Oxfordshire's residents.

7. The County Council's strategy looks over time to move mineral working closer to areas of development, in order to reduce transport distances, whilst recognising where existing planning permissions for extraction are located.

Preferred Minerals Strategy and Proposed Policies

8. Secondary and recycled aggregates are produced from a range of local sources at a mix of permanent and temporary sites. Policy M1 provides for the development of additional secondary and recycled aggregate facilities to enable the supply of at least 0.9 million tonnes per annum.

9. The County Council commissioned consultants to provide a locally based assessment of how much aggregate supply Oxfordshire should provide for. Policy M2 provides for an annual supply of 1.26 mtpa for sand and gravel and 0.63 mtpa for crushed rock.

10. Principles which underpin the strategy for sand and gravel extraction include:
    - not increasing the rate of sand and gravel working in west Oxfordshire;
    - minimising the distance sand and gravel needs to travel by road; and
    - continuing sand and gravel working to the south of Oxford to enable a local supply to planned development in southern Oxfordshire.

11. Five areas are proposed for sharp sand and gravel working (Policy M3):
    - the existing working areas at: Lower Windrush Valley; Eynsham / Cassington / Yarnton; Sutton Courtenay; and Caversham; and
    - a new area of working at Cholsey, to replace Sutton Courtenay when reserves there become exhausted.

12. Proposed locations for soft sand working are: east and south east of Faringdon; north and south of A420, to the west of Abingdon; and Duns Tew (Policy M3).

13. Proposed locations for crushed rock working are: north of Bicester to the east of the R Cherwell; south of A40 near Burford; and east and south east of Faringdon (Policy M3).

14. Policy M4 provides for existing and permitted aggregate rail depots to be safeguarded and for the development of further depots at suitable locations.

15. Policy M5 provides for important mineral resources to be safeguarded from other development and for mineral safeguarding areas to be defined.

16. Policy M6 requires high quality restoration of mineral workings to an appropriate after-use, such as nature conservation, agriculture, woodland or recreation. Where appropriate, provision should be made for long-term management of restored mineral workings.

Common Core Policies

17. The core policies cover issues common to both minerals and waste development. The plan recognises that development may need to take place in flood risk areas, but only where alternative sites have been considered and discounted (Policy C1). Proposals should demonstrate how water quality, flows and watercourses will be protected (Policy C2).

18. Policies C3 to C6 provide for local residents, environmental interests and other sensitive receptors to be protected from adverse impacts of development. Proposals should provide for protection and where possible enhancement of Oxfordshire's biodiversity and landscape, and should protect the county's historic assets, including important archaeological remains.

19. Policy C7 encourages the use of more sustainable means of transport than road. Where transportation has to be by road, the distance travelled should be minimised, taking into account the suitability of the roads, safety of other road users and residential and environmental amenity. Policy C8 seeks to protect and enhance the rights of way network.

Implementation and Monitoring

20. The concluding section sets out how the minerals strategy will be implemented and the measures that will be taken to monitor implementation.

1. INTRODUCTION

Introduction

1.1 The County Council is responsible for minerals and waste planning in Oxfordshire and is reviewing the policies covering mineral working and waste management. This will result in a new type of plan – the Oxfordshire Minerals and Waste Development Framework. This will comprise four documents: the Minerals and Waste Core Strategy; a minerals site allocations document; a waste sites allocation document; and the Statement of Community Involvement, which the Council adopted in 2006.

1.2 The Minerals and Waste Core Strategy, when adopted by the County Council, will provide the planning strategies and policies for minerals and waste development in Oxfordshire up to 2030.

1.3 This consultation document is the Council's draft plan for minerals. It includes strategies and policies for sand and gravel, soft sand and crushed rock extraction, and a key diagram to illustrate the preferred strategy. The Council is consulting separately on its draft plan for waste.

How to respond to this consultation document

1.4 The County Council wants to get as wide a response as possible to the draft minerals plan. Please let us have your views, preferably using the Council's on-line consultation system.

1.5 Alternatively you can use the response form which can be downloaded from the County Council website or obtained from the address below. Please send response forms by post, fax or email to:

Minerals & Waste Draft Plan Consultation
(Speedwell House)
FREEPOST
Oxfordshire County Council

Fax No: 01865 241577
Email: mineralsandwasteplanconsultation@oxfordshire.gov.uk

1.6 **The closing date for responses is 31 October 2011.**

1.7 For further information, please contact the Minerals and Waste Policy Team on 01865 815398 or 01865 810431, or at the email or postal address above.

1.8 All documents published by the County Council in the preparation of the Minerals and Waste Development Framework are on the County Council website at: www.oxfordshire.gov.uk/mineralsandwaste

What happens next?

1.9 This is an important opportunity to make your views known on our overall approach to planning for minerals and waste development in Oxfordshire. The County Council will consider carefully all comments received in preparing a final plan (the Minerals and Waste Core Strategy). Publication of this for comment and submission to Government for examination is programmed for early 2012[1]. The independent examination by a Government appointed Inspector will be held in 2012 and it is hoped the County Council can adopt the Strategy by early 2013.

[1] The programme for the preparation of the Minerals and Waste Development Framework will be set out in a revised Oxfordshire Minerals and Waste Development Scheme (which will also explain what each development document will cover) which will be placed on the County Council website later in 2011.

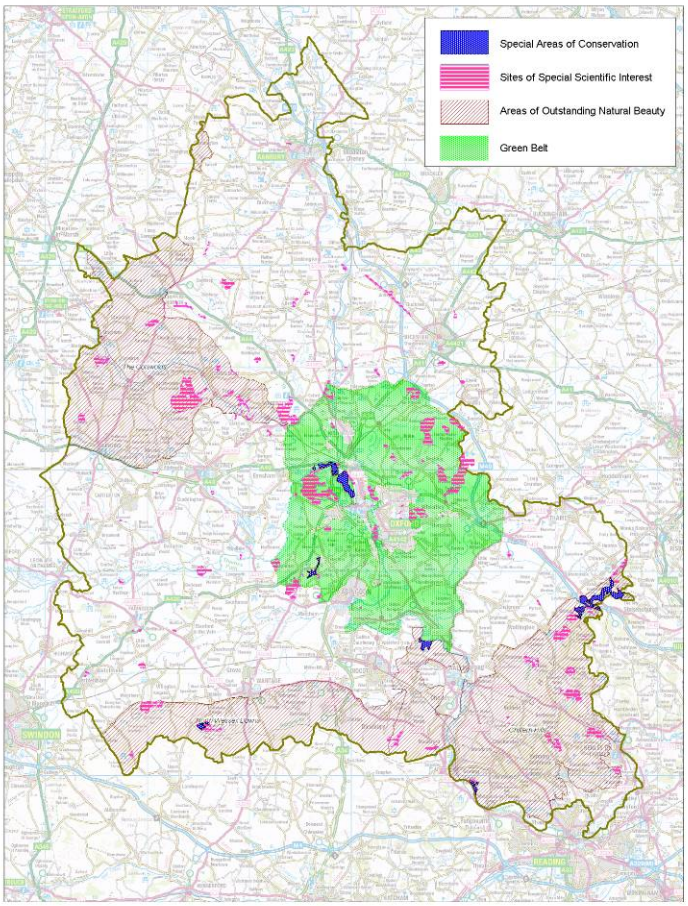
2. BACKGROUND

The Oxfordshire area

2.1 The plan needs to make provision for mineral working and supply to meet the needs for growth and development that is likely to take place in Oxfordshire over the next 20 years and to maintain the existing built fabric of the county.

2.2 Oxfordshire is renowned for its knowledge-based economy and research and development facilities. It is also the most rural county in the South East and almost a quarter of the land area is designated within an Area of Outstanding Natural Beauty. It has seven Special Areas of Conservation which are protected by European legislation, numerous Sites of Special Scientific Interest and regionally important geological sites. It also has a rich variety of landscapes, numerous historic buildings, extensive archaeological remains and areas of high grade agricultural land, particularly where there is sand and gravel along the River Thames and its tributaries. An area around Oxford is Green Belt. Figure 1 shows the main protected areas in the county.

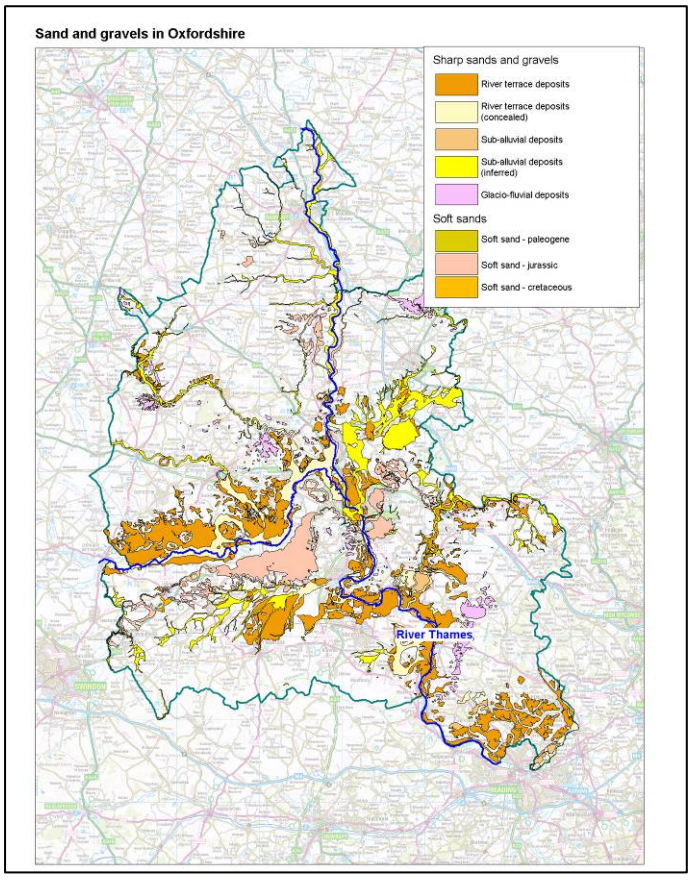
Figure 1: Special Areas of Conservation, Sites of Special Scientific Interest, Areas of Outstanding Natural Beauty and Green Belt in Oxfordshire

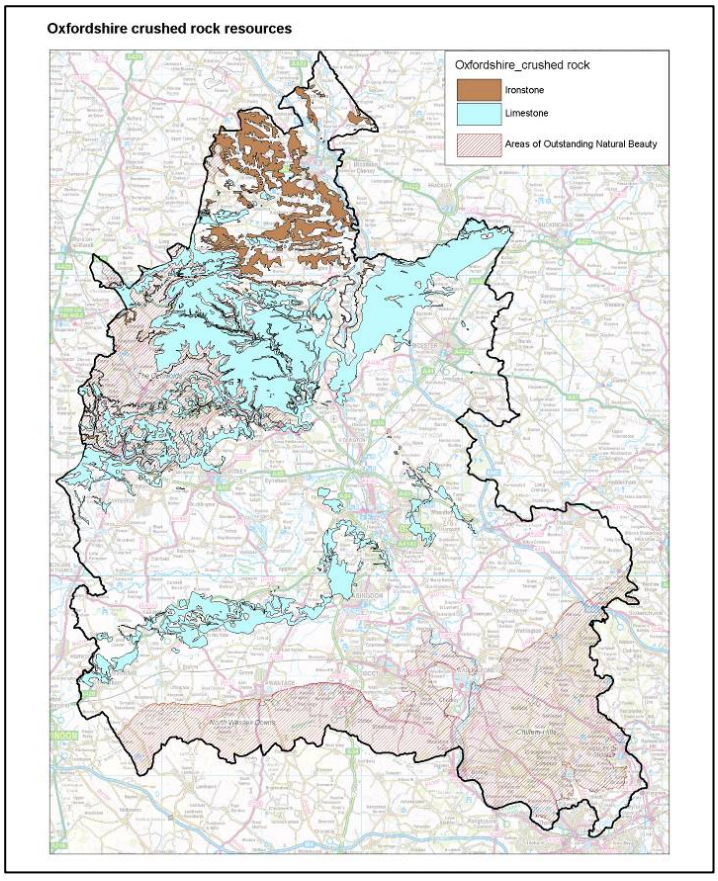


Minerals in Oxfordshire

2.3 Sand and gravel is the most common mineral resource in Oxfordshire and this is typically found in river valley deposits, particularly along the River Thames and its tributaries the Windrush, Evenlode and Thame. Its primary use is to make concrete. Soft sand occurs mainly in the south west of the county; it is used in mortar and asphalt. Limestone and ironstone are found mainly in the north and west of the county; they are used primarily as crushed rock aggregate but also for building and walling stone. Figure 2 shows the location of these mineral resources; and figure 3 shows the location of active mineral workings in the county.

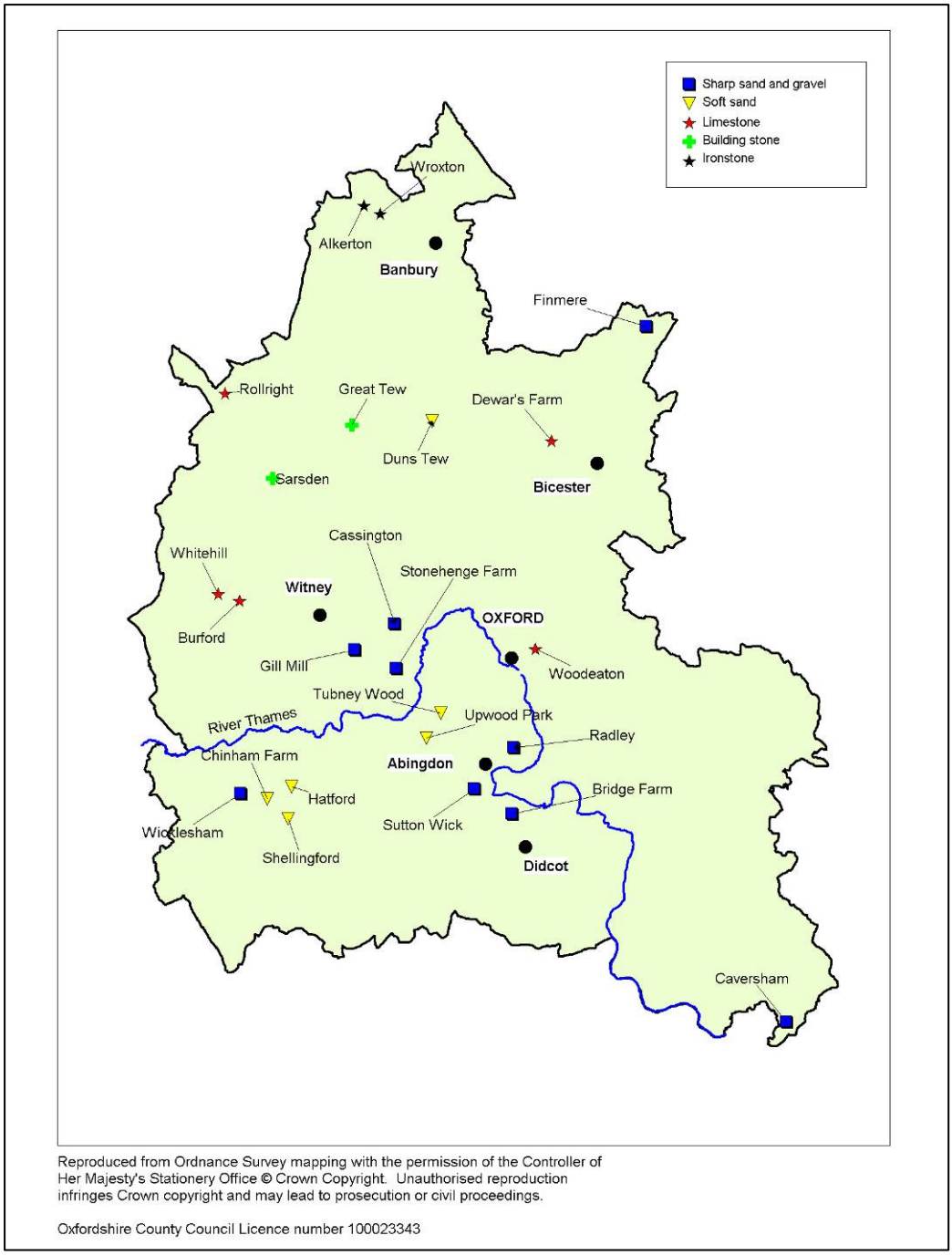
Figure 2: Sand and gravel and crushed rock resources in Oxfordshire





2.4 Annual production of aggregates (sand and gravel and crushed rock) in Oxfordshire fell from approximately 3 million tonnes to about 1 million tonnes over the last 10 years. A survey in 2009 found that 78% of sand and gravel and 51% of crushed rock produced in the county is used in Oxfordshire. The issue of how much should be provided for in future is covered in section 4.

Figure 3: Location of active mineral workings and sites with planning permission

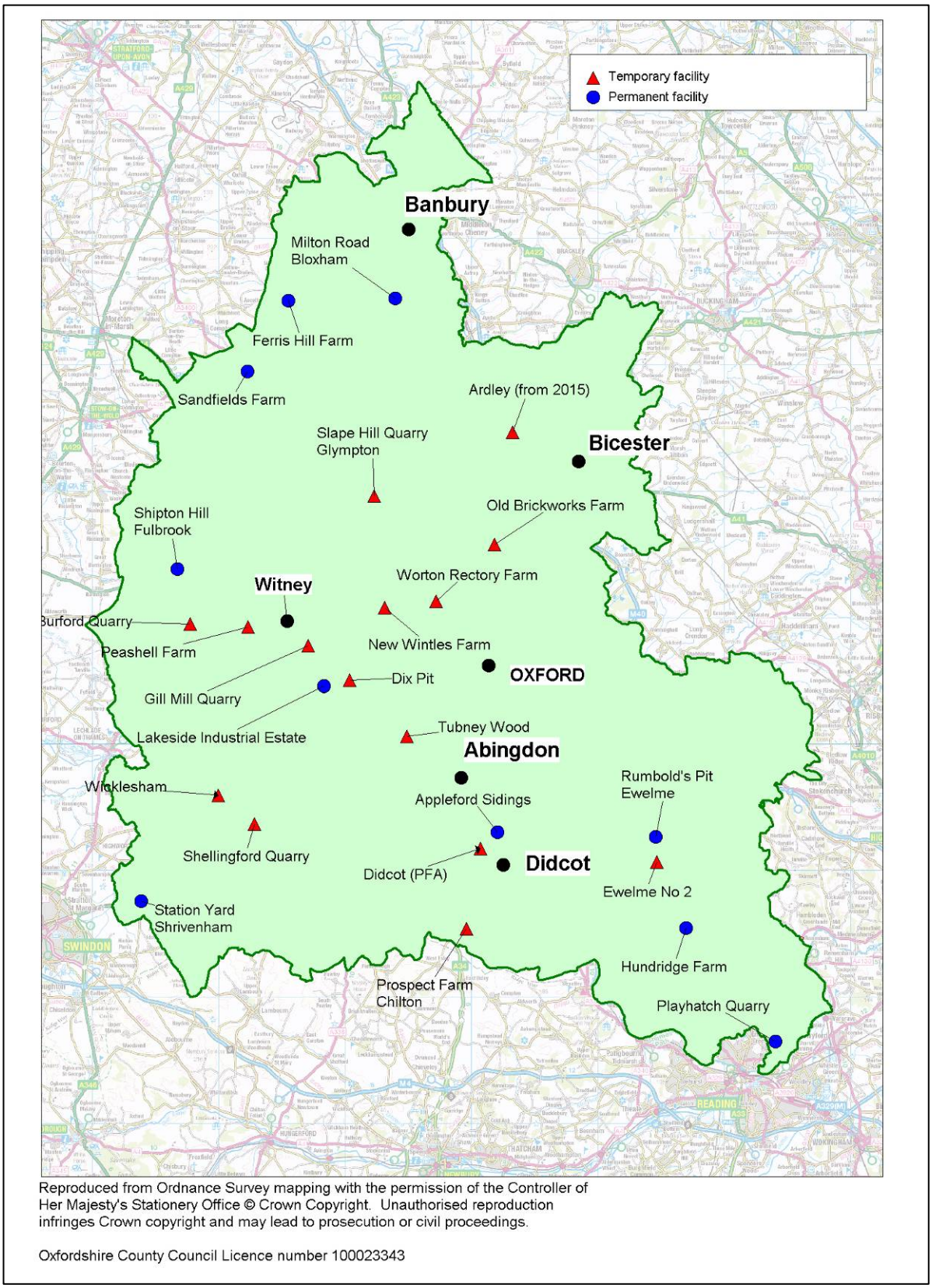


2.5 There are movements of minerals both into and out of the county. The 2009 survey showed that Oxfordshire imported more sand and gravel and crushed rock than it exported. Hard rock aggregates are imported by rail from the Mendips and from Leicestershire, to meet construction needs which cannot be met by local, softer limestone and ironstone.

2.6 Production of aggregates from recycled construction and demolition waste and from secondary materials (mainly ash from Didcot A Power Station) is making

an increasingly significant contribution to the overall requirement for aggregates.

Figure 4: Active temporary and permanent secondary and recycled aggregate facilities



Issues

2.7 The population of the county is currently approximately 635,500[2]. Over the next 20 years significant population growth, new housing, commercial and related development, investment in infrastructure and related traffic growth are expected in Oxfordshire[3] which has implications for the demand for and supply of minerals.

2.8 About 40,000 homes could be built in Oxfordshire between 2011 and 2026. There is a need for considerable investment in new infrastructure to support the objective for Oxfordshire of supporting a thriving economy and to meet the pressures on essential services such as schools, transport and other community facilities. A key challenge for minerals planning is to make provision for the necessary construction materials in an effective and sustainable way. There is also a need to ensure that new developments reduce carbon emissions and are resilient to climate change.

2.9 Key locations for development, as shown on figure 5, are:

- Didcot and Wantage & Grove, which are within the Science Vale UK area which also includes Milton Park, Harwell Science and Innovation Campus and Culham Science Centre;
- Bicester, where the 5,000 home eco-development proposal is acting as a focus for delivering an international exemplar of sustainable development; and
- Oxford, which remains a world class centre of education, research and innovation.

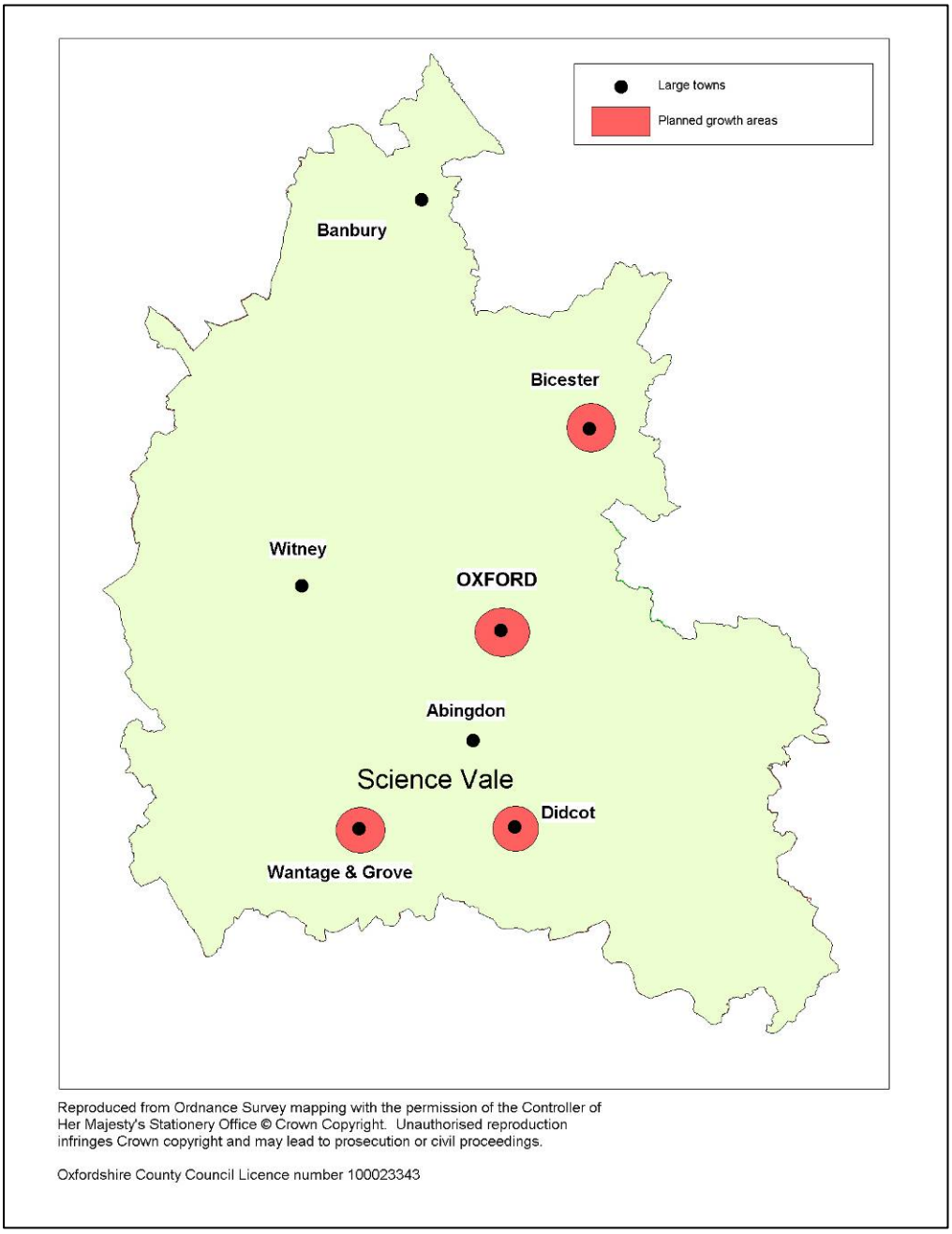
Large housing developments (1000+ homes) are also proposed at Banbury, Upper Heyford, Witney and Carterton.

2.10 Mineral extraction can only take place where the mineral is found. Most mineral workings are located in rural areas, many of which are served only by minor roads. In some cases lorries carrying aggregates have to pass through small villages and towns, contributing to congestion and impacting on local communities and the environment. Some communities have experienced extensive working in the past, and in certain areas the local landscape has been significantly altered by the creation of lakes from sand and gravel workings.

[2] Oxfordshire Data Observatory, 2010.

[3] Oxfordshire's population is forecast to grow by a further 12% to 2026 with the building of about 40,000 new dwellings. Road traffic has grown rapidly in Oxfordshire, particularly on the M40 and A34, and congestion is a significant problem; and growth in all traffic on Oxfordshire roads is predicted to be over 25% over the period to 2026.

Figure 5: Planned growth areas and other large towns



Policy context

2.11 The draft plan reflects international, national and regional policies and plans. Broad areas of policy are outlined below; specific areas of policy are covered later in the document.

International/European

2.12 The key international plans and programmes which are relevant to the draft minerals plan are:

- The World Summit on Sustainable Development, Johannesburg (2002);

- Kyoto Protocol and the UN framework convention on climate change (1997);
- Bern Convention on the conservation of European wildlife and natural habitats.

2.13 The European Union has issued a number of Directives to develop environmental and sustainability policy, which are transposed into national legislation and policy. The Habitats Directive[4] and the Strategic Environmental Assessment Directive[5] are of particular relevance to this plan (see paragraphs 2.20 and 2.24).

National

2.14 The draft minerals plan has been prepared under the Planning and Compulsory Purchase Act 2004; and has regard to a range of national policy and guidance, including national planning and minerals policy statements and guidance (PPSs, PPGs, MPSs, MPGs). Other key publications include the UK Biodiversity Action Plan and the UK Sustainable Development Strategy.

2.15 National policy for minerals[6] includes the key objective of securing adequate and steady supplies of minerals needed by society and the economy within the limits set by the environment, assessed through sustainability appraisal, and without irreversible damage.

Regional

2.16 Under current legislation, this plan must be in general conformity with the South East Plan, May 2009 (the regional strategy). However, the Government's Localism Bill, which is currently going through Parliament, proposes the abolition of all regional strategies. The South East Plan includes strategic policies for mineral supply. The County Council considers that these policies generally continue to be appropriate to Oxfordshire, except that the figures for mineral supply are considered to be unjustifiably high (see paragraph 4.8).

Local

2.17 The Oxfordshire Structure Plan 2016[7] included a policy (M2) which sets out factors to be taken into account in identifying appropriate locations for sand and gravel working. This policy is "saved", i.e. is still in force as part of the development plan for Oxfordshire, and is reflected in the development of the minerals strategy.

2.18 The Oxfordshire Minerals and Waste Local Plan was adopted by the County Council in July 1996. It contains detailed policies for the supply of minerals and

[4] The Conservation of Natural Habitats and Wild Flora and Fauna Directive (92/43/EC) (transposed into UK law under the Conservation of Habitats Species Regulations 2010)
[5] Directive on the Assessment of the Effects of Certain Plans and Programmes on the Environment (2001/42/EC) (transposed into UK law under the Environmental Assessment of Plans and Programmes Regulations 2004)
[6] Minerals Policy Statement 1: Planning and Minerals
[7] The Oxfordshire Structure Plan 2016 adopted in October 2005 was superseded by the South East Plan adopted in May 2009

for the control of minerals developments. Under the Planning and Compulsory Purchase Act 2004 (which introduced the requirement to prepare minerals and waste development frameworks), many of the policies of this Plan are also 'saved' and form part of the development plan until they are replaced by new policies in the Minerals and Waste Development Framework.

2.19 The draft minerals strategy has regard to and is consistent with the existing and emerging new plans (local development frameworks) prepared and adopted by the City and District Councils[8]. The Minerals and Waste Development Framework and the City and District Plans will together form the development plan for Oxfordshire, containing a full set of local planning policies and proposals for the county against which planning applications for development will be considered. The draft strategy also has regard to the principles of the Sustainable Community Strategy, Oxfordshire 2030.

2.20 The draft minerals strategy should take into account and, as far as possible, be consistent with the existing and emerging plans of neighbouring planning authorities and more distant planning authorities which have minerals links with Oxfordshire (e.g. counties which export hard rock to Oxfordshire).

Habitats Regulations Assessment

2.21 The Habitats Directive requires planning authorities to assess the likely impact of their plans on sites which have been designated as being of European importance for the habitat or species they support. In Oxfordshire there are seven sites designated as Special Areas of Conservation (SAC). Natural England has been consulted on a draft Habitats Regulations Assessment screening report, prepared by the council, which identifies the seven sites, describes the conservation objectives of each site and provides an assessment of the likely impacts on them.

2.22 The screening report suggests that there could potentially be an impact of mineral extraction near Oxford Meadows SAC and Cothill Fen SAC. Proposed sand and gravel extraction in some nominated sites in the Eynsham / Cassington / Yarnton area could potentially have an impact on the hydrology of Oxford Meadows SAC. However, the report concludes that it would be possible to deliver the required amount of sand and gravel from this area from other nominated sites within this area which are not likely to impact on Oxford Meadows SAC.

2.23 The report also concludes that working soft sand sites in the area north and south of the A420 to the west of Abingdon is unlikely to have an impact on Cothill Fen SAC as an appropriate assessment of a proposal to extract sand immediately adjacent to the SAC showed that it was possible to put in place buffer zones and to work above the water table to avoid hydrological impacts.

[8] The Oxford Core Strategy was adopted by Oxford City Council in March 2011; the other four Oxfordshire District Councils are preparing Core Strategies but have existing local plans with saved policies which are still in force as part of the development plan for Oxfordshire

2.24 Natural England is currently reviewing the Council's screening report and the Council will seek their approval before submitting the Core Strategy for examination.

Sustainability Appraisal / Strategic Environmental Assessment

2.25 The Strategic Environmental Assessment Directive requires that an assessment is carried out of the likely impacts of the plan on a range of environmental criteria. Policies and proposals in development plan documents must also be subject to sustainability appraisal. A sustainability appraisal scoping report has been prepared and published following consultation with the Environment Agency, Natural England and English Heritage.

2.26 The Council commissioned consultants to carry out a sustainability appraisal incorporating a strategic environmental assessment to assess the likely impacts of the draft plan against a range of environmental, economic and social criteria. An appraisal of draft mineral strategy options carried out in 2010 was used, together with feedback from stakeholder consultation, to help the Council select a preferred minerals strategy. The consultants have now carried out an appraisal of this draft minerals plan; specifically, they have appraised:

- the minerals objectives;
- the options for levels of provision for sand and gravel;
- the preferred minerals strategy and policies; and
- the common core policies.

2.27 The sustainability appraisal report, incorporating the requirements of strategic environmental assessment and providing an appraisal of the economic and social implications of the plan, is published alongside the draft plan as part of this consultation.

Development of the minerals strategy

2.28 In developing the strategy for where new working should take place the County Council has taken account of the distribution of mineral resources; the existing distribution of workings and pattern of supply; proximity to main market areas; accessibility to main transport routes; risk of bird strike; restoration and after use potential; and development plan policies (in particular those which seek to safeguard important environmental features and areas).

2.29 Options for where mineral working might take place were developed over the past year through consultation with a range of stakeholders, including parish and district councils, mineral operators, environmental groups, the Environment Agency, Natural England, the Highways Agency and other interested parties. Initially, seventeen areas of sand and gravel, two areas of soft sand and five areas of crushed rock were identified as potential areas for new working. Seven of the sand and gravel areas were discounted due to the thin and intermittent nature of the resources present in them.

2.30 Stakeholders were consulted on draft strategy options in March and April 2010 at workshops and feedback was sought from statutory and technical

consultees. The feedback informed a revision of these options and stakeholders were consulted on the revised options in July 2010.

2.31 A preliminary site assessment exercise has also been undertaken by the Council to check that there would be sufficient potential sites within these option areas to deliver the required amounts of aggregates over the plan period. This process enabled the Council to develop a preferred strategy for sand and gravel, soft sand and crushed rock, as put forward in this document.

3. VISION AND OBJECTIVES FOR MINERALS IN OXFORDSHIRE

3.1 The vision and objectives for the Minerals Strategy provide a basis for the development of the strategy, policies and proposals for minerals supply.

3.2 The aspirations for Oxfordshire outlined in chapter 2 and the significant growth that is planned present major challenges for minerals planning, including that adequate supplies of the minerals needed for construction are made available when and where required and in the most sustainable way possible.

3.3 The vision and objectives seek to address these and related issues, in particular the need to support Oxfordshire's economy, protect its environment and provide an effective framework for making provision for the supply of minerals.

Minerals Planning Vision

3.4 The vision for Oxfordshire's minerals planning strategy is that:

a) In the period to 2030, the supply of aggregate materials to meet the development needs of Oxfordshire and help sustain its world class economy will be met by:
- an increased use of secondary and recycled aggregate materials;
- a reduced proportion of locally produced sand and gravel, soft sand, limestone and ironstone; and
- the continued import of materials such as hard crushed rock that are not available locally.

b) Mineral working will be located and managed to minimise:
- the distance that aggregates are transported by road;
- the use of unsuitable roads through settlements; and
- other harmful impacts of mineral extraction and transportation on Oxfordshire's environment and communities.

c) The restoration of mineral workings will enhance the quality of Oxfordshire's natural environment and the quality of life for Oxfordshire residents by:
- contributing to the creation of habitats and protection of biodiversity, particularly in relation to the Conservation Target Areas[9]; and
- providing access to the countryside and opportunities for recreation.

Minerals Planning Objectives

3.5 The Oxfordshire Minerals Planning Vision is supported by the following ten planning objectives which set out the principles which underpin the draft plan.

[9] Conservation Target Areas (CTA) are important areas for wildlife in Oxfordshire. The main aim within CTAs is to restore biodiversity at a landscape-scale through the maintenance, restoration and creation of Biodiversity Action Plan priority habitats.

i. Enable Oxfordshire to meet the locally determined requirements for supply of sand and gravel, soft sand, crushed rock and secondary and recycled aggregates over the plan period to meet planned economic growth and social needs.

ii. Enable a continued supply of limestone and ironstone for building and walling stone from small scale quarries for the maintenance, repair and construction of locally distinctive buildings and structures.

iii. Provide a framework for investment and development by mineral operators and landowners through a clear and deliverable spatial strategy which is sufficiently flexible to meet future needs and which is based on existing and planned infrastructure provision.

iv. Facilitate the economically and environmentally efficient supply of minerals in Oxfordshire and encourage the maximum practical recovery of aggregate resources from secondary and recycled materials for use in place of primary aggregates.

v. Minimise the impact of mineral development on climate change by identifying areas for mineral extraction which reduce the need to transport minerals and which minimise the impact of mineral working on areas vulnerable to flooding.

vi. Minimise the distance minerals need to be transported by road and encourage where possible the movement of aggregates by conveyor, rail and on Oxfordshire's waterways in order to reduce adverse impacts of mineral transportation on local communities and the environment; and minimise the impact of mineral traffic on local communities through implementation and monitoring of routeing agreements.

vii. Protect Oxfordshire's important landscapes and ecological, geological and heritage sites, and archaeological and heritage assets from harmful impacts of mineral development and transportation.

viii. Provide benefits to Oxfordshire's natural environment and local communities through the restoration of mineral workings by contributing to nature conservation, enhancing the quality and extent of Conservation Target Areas, contributing to landscape character, improving access to the countryside, safeguarding local amenity and providing opportunities for local recreation.

ix. Safeguard resources of sand and gravel, crushed rock, building stone and Fuller's Earth to ensure that these resources are potentially available for future use and are considered in future development decisions; and

x. Safeguard permanent facilities for producing secondary and recycled aggregate and for importing aggregates into Oxfordshire by rail.

4. DRAFT MINERALS PLANNING STRATEGY

4.1 This section sets out the Council's preferred minerals strategy and proposed policies on minerals for the period to 2030. Provision must be made for an adequate and steady supply of minerals over the plan period. The Council intends that this should be done by encouraging the use of secondary and recycled aggregates as well as by identifying areas for mineral working to meet the need for primary aggregates such as sand and gravel and crushed rock. The proposed minerals strategy for Oxfordshire is illustrated on the key diagram at the end of this chapter.

4.2 The strategy also addresses safeguarding of mineral resources and infrastructure to ensure future availability of supply. A policy for restoration of mineral working recognises the temporary nature of mineral extraction and the importance of restoring sites to enhance the environment and provide amenities for the public.

Secondary and recycled aggregates

4.3 Secondary and recycled aggregates in Oxfordshire currently include:

- Locally derived construction and demolition waste;
- Locally derived road planings;
- Ash from Didcot A power station;
- Spent rail ballast (brought in by rail to a site at Sutton Courtenay).

4.4 Oxfordshire has capacity for recycling approximately half a million tonnes of construction and demolition waste each year (about half in permanent sites and half in temporary sites at quarries and landfill sites). Didcot A power station will cease to operate by the end of 2015, but it is expected that some ash from the energy from waste facility to be built at Ardley will be used as secondary aggregates.

4.5 The total production of recycled and secondary aggregates is difficult to quantify because it includes, for example, material from mobile crushing plants at building and road development sites which is recycled and sometimes re-used on site, and material which passes through waste transfer stations. Production of secondary and recycled aggregates in 2009 in Oxfordshire was estimated at just under 300,000 tonnes, but this may be an underestimate due to an incomplete survey response from operators.

4.6 Policy M1 provides for additional facilities to support a more ambitious level of secondary and recycled aggregate production, in line with the South East Plan target (policy M2 – 0.9 million tonnes per year), to encourage this important source of aggregate supply.

4.7 Provision for additional facilities for the production of recycled aggregates from construction and demolition waste will be made through policy W5 of the waste strategy. Planning applications for such facilities will be considered against policy W6, including the provisions of that policy for recycling facilities to be

located within the Green Belt and Areas of Outstanding Natural Beauty in particular circumstances.

4.8 **Policy M1: Provision for secondary and recycled aggregates**

The production and supply of secondary and recycled aggregates, in place of land won aggregates, will be encouraged.

Provision will be made for facilities to enable the supply of at least 0.9 million tonnes of secondary and recycled aggregates a year, comprising:

- **Permanent facilities; and**
- **Temporary facilities at aggregate quarries and inert waste landfill sites.**

Provision will be primarily through recycling of construction, demolition and excavation waste but also through recycling of road planings and rail ballast and recovery of ash from combustion processes.

How much mineral extraction should be provided for?

4.9 Under the current national and regional arrangements for aggregates planning, policy M3 of the South East Plan states that Oxfordshire should make provision for the supply of 1.82 million tonnes a year of sand and gravel and 1.0 million tonnes a year of crushed rock from local land-won sources for the period to 2016. The Government has however said that planning authorities can choose to use alternative figures for their planning purposes if they have new or different information and a robust evidence base.

4.10 The County Council has adopted the following locally-derived annual supply figures as the basis for its draft minerals plan for consultation[10]:

- sand and gravel – 1.26 million tonnes a year;
- crushed rock – 0.63 million tonnes a year.

These figures are based on work by consultants Atkins[11], commissioned to provide a locally based assessment of Oxfordshire's aggregate requirements as alternative to the top-down figures in the South East Plan.

4.11 In line with current national policy, it is proposed to maintain landbanks of reserves with planning permission of at least: seven years for sand and gravel (based on 1.26 million tonnes a year); and ten years for crushed rock (based on 0.63 million tonnes a year).

4.12 In Oxfordshire sharp sand and gravel and soft sand generally occur in different locations and have distinct and separate uses and markets. In line with current national policy, separate landbanks will be maintained for these minerals. The annual supply figure for sand and gravel (1.26 million tonnes a year) will be divided in the ratio 80:20 between sharp sand and gravel (1.01 million tonnes a

[10] Report to County Council Cabinet 16 February 2011
[11] Local Assessment of Aggregate Supply requirements for Oxfordshire, Atkins, January 2011

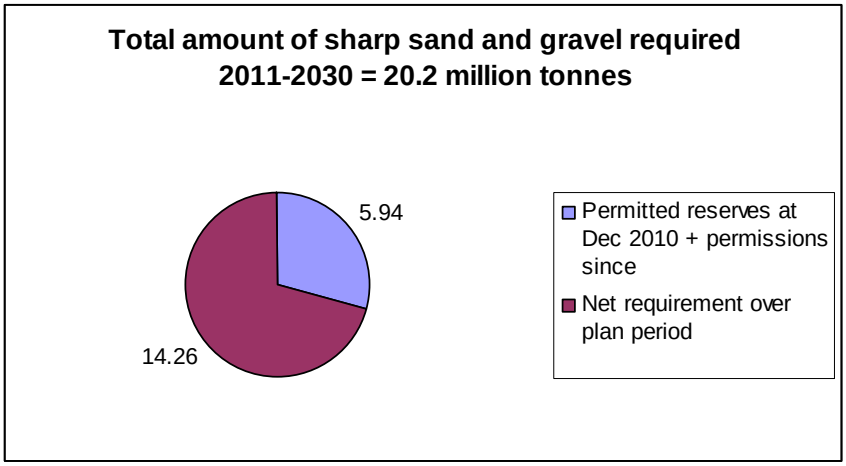
year) and soft sand (0.25 million tonnes a year), based on recent past production.

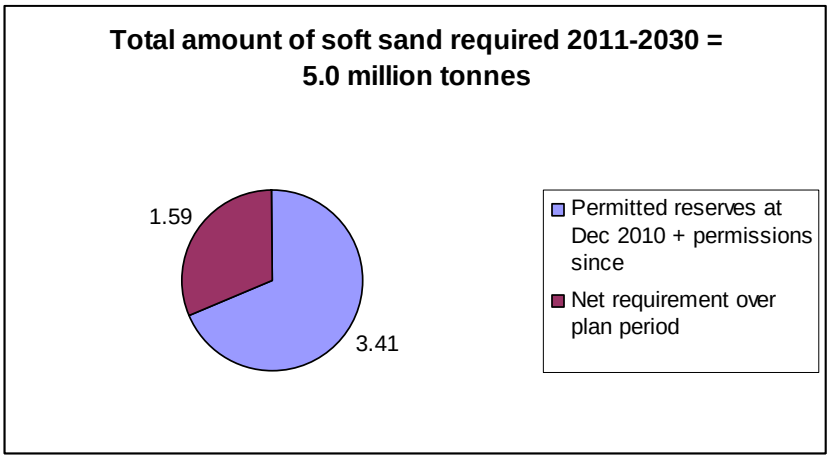
4.13 These annual supply figures result in a requirement over the plan period (2011 to 2030) for:

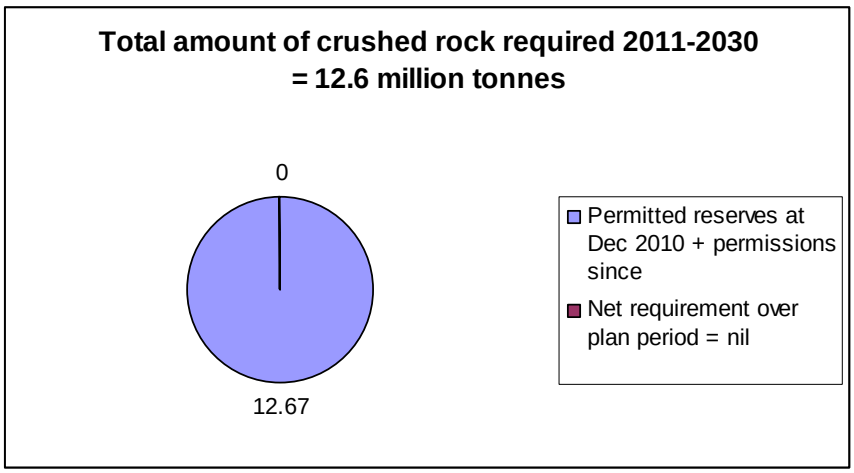
- sharp sand and gravel – 20.2 million tonnes;
- soft sand – 5.0 million tonnes; and
- crushed rock – 12.6 million tonnes.

Figure 6 shows how these requirements will be met.

Figure 6: Planning for sharp sand and gravel, soft sand and crushed rock, 2011-2030







4.14 Taking into account existing planning permissions, the additional requirement over the plan period for which provision needs to be made is:

- Sharp sand and gravel – 14.26 million tonnes;
- Soft sand – 1.59 million tonnes;
- Crushed rock – no additional requirement.

4.15 **Policy M2: Provision to be made for mineral working**

Permission will be granted for mineral working to enable landbanks of reserves with planning permission to be maintained of at least 7 years for soft sand and sharp sand and gravel and 10 years for crushed rock, based on the following rates of extraction:

- **Sharp sand and gravel – 1.01 million tonnes a year;**
- **Soft sand 0.25 – million tonnes a year; and**
- **Crushed rock – 0.63 million tonnes a year.**

Where should future mineral working take place?

4.16 Minerals can only be extracted where they exist in the ground. The identification of areas and sites where extraction can take place acceptably provides greater certainty of where mineral working will take place. This strategy identifies the broad areas where it is proposed that working for sand and gravel, soft sand and crushed rock should take place, as shown in figure 7. It will provide a basis for the subsequent identification of specific sites for working in a separate site allocations document.

Sharp Sand and Gravel

4.17 Existing planning permissions could on average provide a supply of sand and gravel until 2016 at a production rate of 1.01 million tonnes a year, although in practice some sites will be exhausted sooner and others will last longer. The strategy in this document makes provision for sharp sand and gravel for the rest of the plan period, to 2030.

4.18 Principles which have informed the selection of the preferred strategy for sand and gravel extraction are:

- Although there are extensive sand and gravel resources in west Oxfordshire, the rate and intensity of mineral working in the area should not increase due to concerns about generation of traffic, impacts on local rivers and groundwater flows, and cumulative impact on local communities.
- The distances minerals need to be transported from quarry to market should be as short as is practicable.
- There should be continued sand and gravel working in the area to the south of Oxford to enable local supply of aggregates for planned housing and economic growth in southern Oxfordshire, including the Science Vale area.

4.19 An assessment has been made of the likely contribution of each of the strategic areas to meeting the requirement for sharp sand and gravel supply over the plan period. It has been assumed that the rates of working within the existing areas of working (Lower Windrush Valley, Eynsham / Cassington / Yarnton, Sutton Courtenay and Caversham) would be at the levels allowed by existing planning permissions or proposed in planning applications.

4.20 Existing permitted reserves plus potentially deliverable resources within nominated sites would be sufficient for working throughout the period to 2030 in the Lower Windrush Valley, Eynsham/Cassington/Yarnton and Caversham areas. The Sutton Courtenay area is likely to be exhausted by around 2020. A new area is proposed at Cholsey, which would need to come into production at about that time to enable continued local supply of sand and gravel to markets in southern Oxfordshire.

Soft sand

4.21 Soft sand accounts for approximately 20% of sales of all sands and gravels in Oxfordshire. Two types of soft sand are worked, supplying different markets: sand from the Tubney area generally meets higher specifications than sand from the Faringdon area. The strategy should enable both types of soft sand to continue to be worked.

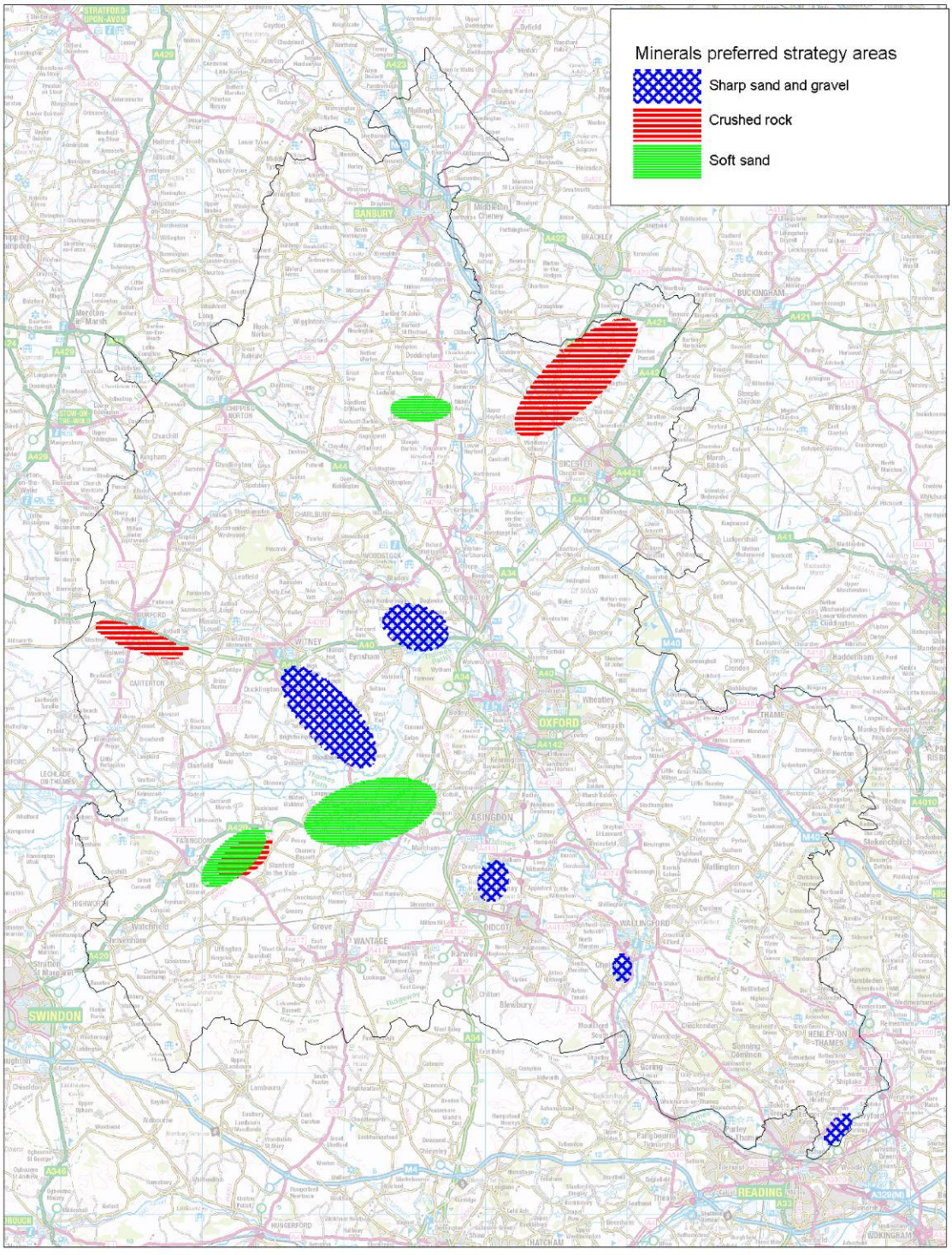
4.22 At a production rate of 0.25 million tonnes a year, existing planning permissions could on average provide a supply of soft sand until 2023, although in practice some sites will be exhausted sooner and others will last longer. For the period 2020 to 2030, it would be preferable for further soft sand working to be from extensions to existing quarries rather then from new quarries to make efficient use of existing plant and infrastructure, and minimize additional impact.

Crushed rock

4.23 At a rate of production of 0.63 million tonnes a year, current permitted reserves of crushed rock could on average last until 2030, although in practice some sites will be exhausted sooner and others will last longer. Existing working areas of limestone are south east of Faringdon, south of Burford and east of the River Cherwell. There is one existing area of ironstone working in the north of the county at Alkerton / Wroxton. Production of crushed rock has fluctuated considerably over past years and, if demand increases, additional permissions may be needed towards the end of the plan period.

4.24 The ironstone resource area in the north of the county is less well located relative to strategic routes and market areas in Oxfordshire than are some areas of limestone resource; and there are substantial permitted reserves of ironstone remaining to be worked. Better quality aggregate is generally available from within the limestone deposits than from the ironstone. Any additional provision should be made within the limestone areas. Such provision should preferably be made through extensions to existing quarries rather than from new quarries, to make efficient use of existing plant and infrastructure, and minimize additional impact.

Figure 7: Locations for sharp sand and gravel, soft sand and crushed rock working



4.25 Government policy is that major minerals developments should only be permitted in Areas of Outstanding Natural Beauty in exceptional circumstances. The Cotswolds Area of Outstanding Natural Beauty should be protected from further limestone working for aggregates. Policy C5 provides protection for the landscape quality of the county.

Building Stone

4.26 The Council recognises the importance of small scale building, roofing and walling stone extraction in rural areas for the conservation and restoration of historic buildings and to maintain local distinctiveness in new development. Limestone is particularly important for maintaining the built environment in the Cotswolds Area of Outstanding Natural Beauty.

Clay

4.27 Clay has been worked at certain sand and gravel quarries to produce material for lining landfill sites and for use in restoration and landscaping.

4.28 **Policy M3: Strategy for the location of mineral working**

The principal locations for sharp sand and gravel working, as shown in figure 7, will be at:

i. existing areas of working at:
- **Lower Windrush Valley;**
- **Eynsham / Cassington / Yarnton;**
- **Sutton Courtenay; and**
- **Caversham;**

through extensions to existing quarries or new quarries to replace exhausted quarries; and

ii. a new area of working at Cholsey, to replace Sutton Courtenay when reserves there become exhausted;

Permission for further working within the Lower Windrush Valley and Eynsham / Cassington / Yarnton areas will not be permitted if it would lead to an increase in the overall level of mineral extraction or mineral lorry traffic above past levels within these areas combined.

The principal locations for soft sand working, as shown in figure 7, will be:
- **East and south east of Faringdon;**
- **North and south of the A420 to the west of Abingdon; and**
- **Duns Tew.**

The principal locations for crushed rock working, as shown in figure 7, will be:
- **North of Bicester to the east of the River Cherwell;**
- **South of the A40 near Burford; and**
- **East and south east of Faringdon.**

Preference will be given to extensions to existing soft sand and crushed rock quarries. New quarries will only be permitted if sufficient provision cannot be made through extensions.

Additional working of ironstone for aggregate use will only be permitted in exchange for revocation, without compensation, of an existing permission containing workable resources.

The working of clay will normally be permitted only from areas where sand and gravel is being worked in the following locations:

- **Lower Windrush Valley;**
- **Eynsham/Cassington/Yarnton; and**
- **Sutton Courtenay.**

Planning permission will not be granted for mineral working outside the locations identified above unless the required provision cannot be met from within these areas.

Applications to work fullers earth, oil, gas, coal or any other minerals not currently worked in the county will be considered in the light of national and development plan policies.

Permission will be granted for extensions to existing quarries and new quarries for extraction of building stone where a local need for the material has been demonstrated and provided that the quarrying is at a scale appropriate to the locality and will not harm the environment or local amenity.

Imported aggregates and rail depots

4.29 Aggregates are imported through three rail depots at Banbury, Sutton Courtenay and Kidlington[12]. Planning permission has been granted for a rail depot at Shipton on Cherwell. Network Rail has a depot in Oxford for its own use to bring in rail ballast.

4.30 There will be an ongoing need for importation of aggregate materials that cannot be quarried locally, particularly hard rock for roadstone. Rail and water transport should take priority over road, particularly for longer distance movements.

4.31 **Policy M4: Aggregates rail depots**

Existing and permitted rail depots will be safeguarded for importing aggregates at:

- **Banbury (Hennef Way);**
- **Kidlington;**
- **Sutton Courtenay (Appleford Sidings); and**

[12] A fourth rail depot at Hinksey Sidings, Oxford is solely for the supply of ballast to Network Rail and is not therefore considered part of the County's aggregates supply.

- **Shipton on Cherwell Quarry.**

Where proposals for development would result in the loss of a rail depot site, a suitable alternative site should be provided.

The development of further aggregates rail depots will be encouraged at suitable locations outside the Green Belt.

Safeguarding mineral resources and facilities

4.32 Mineral deposits are finite resources and can only be worked where they exist in the ground. It is Government policy that important mineral resources should be safeguarded for the long term. Mineral planning authorities are required to define Mineral Safeguarding Areas in minerals plans so that resources are not sterilised by non-mineral development, although there is no presumption that the resources will be worked.

4.33 Sharp sand and gravel, soft sand, limestone and ironstone are currently worked in Oxfordshire. Fuller's earth is no longer worked but is a nationally scarce mineral. It is therefore proposed to safeguard what are currently considered to be the economically viable areas of these resources.

4.34 Mineral safeguarding areas will be defined in the minerals site allocations document. The extent of safeguarded areas can be reviewed if economic or other considerations change.

4.35 District councils in Oxfordshire are responsible for planning development (other than minerals and waste) in their areas. The County Council, as Mineral Planning Authority, must also identify Mineral Consultation Areas (based on the mineral safeguarding areas) and specify the types of application for non-mineral related development on which the relevant district council must consult the County Council within these areas.

4.36 **Policy M5: Mineral safeguarding**

Mineral resources will be safeguarded for the future and development which would prevent or otherwise hinder the possible future working of minerals will not be permitted unless it can be shown that:

- **The need for the development outweighs the economic and sustainability considerations relating to the mineral resource; or**
- **The mineral will be extracted prior to the development taking place.**

Mineral Safeguarding Areas will be defined, and identified in detailed maps, and will include the following mineral resources:

- **Sand and gravel in the main river valleys and in other areas where there is a proven resource;**
- **Soft sand, limestone and ironstone in existing areas of working, including the areas proposed for working in policy M3;**
- **Fuller's earth.**

Development which would prejudice the operation or establishment of existing or permitted aggregates rail depots identified in or subsequently permitted under policy M4 will not be permitted. Development sensitive to disturbance that could be adversely impacted by the operation of a rail depot will not be permitted in proximity to an existing or permitted rail depot.

Permanent secondary and recycled aggregate production facilities will be safeguarded.

Restoration and after use of mineral workings

4.37 Proposals for restoration, aftercare and after-use should be submitted with applications for mineral working, should include provision for long-term maintenance of the after-use and enhancement of the environment and should accord with District LDF policies, including environmental protection, countryside and access enhancement and noise management.

4.38 Mineral working can provide opportunities for environmental improvements, such as new habitats and improved public access, which benefit the local community and may offset the impact of working. The restoration of each mineral working site should be determined on its individual merits and circumstances. Consideration should first be given to restoration to the original land-use, but this may not be practical and other forms of restoration may be equally acceptable or beneficial. Generally, nature conservation, agriculture, woodland and recreation are acceptable restoration after-uses for mineral workings. Measures to conserve and protect biodiversity should be included in restoration schemes.

4.39 One of the potentially most significant impacts of mineral working is disturbance of and change to the landscape and it is important that restoration takes place as soon as possible. However, it is recognised that where restoration relies on infilling with inert waste it may take some years to complete restoration because of shortage of suitable fill material (due in large part to increased recycling). Effective phasing of restoration is important, to minimise visual intrusion and other local impacts. Where possible, restoration should follow closely behind extraction, to minimise the open quarry area.

4.40 It is also important that after-uses are managed and maintained following restoration, to ensure that they become established. Where appropriate, aftercare schemes and long-term management and maintenance agreements will need to be secured. Operators and landowners will be expected to contribute to an extended period of aftercare and management.

4.41 Because of the generally high water table and a local shortage of inert waste material for infilling, most new sand and gravel workings in the river valleys of Oxfordshire will have to be restored to water bodies. The issue of risk to aircraft from birdstrike is an important consideration which may restrict the location of

workings and affect the design of restoration schemes. Most of Oxfordshire's sand and gravel resources and some sand and limestone resources lie within 13 kilometres of a military airfield or civilian aerodrome. Within these areas, proposals for working, restoration and after-use will need to be drawn up and designed in consultation with the MOD and/or Oxford Airport. A bird hazard management plan may need to be prepared as part of a planning application.

4.42 The County Council proposes to develop broad restoration and after-use proposals for each of the proposed mineral working areas and any specific sites within them, in the subsequent Sites Development Plan Document. These proposals will form a framework within which site restoration plans will be considered.

4.43 **Policy M6: Restoration of mineral workings**

Minerals workings should be restored to a high quality as quickly as possible and in a phased manner to an after-use appropriate to the location and the capacity of the transport network and which is sympathetic to the character of the surrounding landscape and the amenity of local communities.

Planning permission will not be granted for mineral working unless satisfactory proposals have been made for the restoration, aftercare and after-use, including the means of securing them in the long term.

Where mineral working is proposed on best and most versatile agricultural land, the restoration should be back to agricultural land if this is practicable.

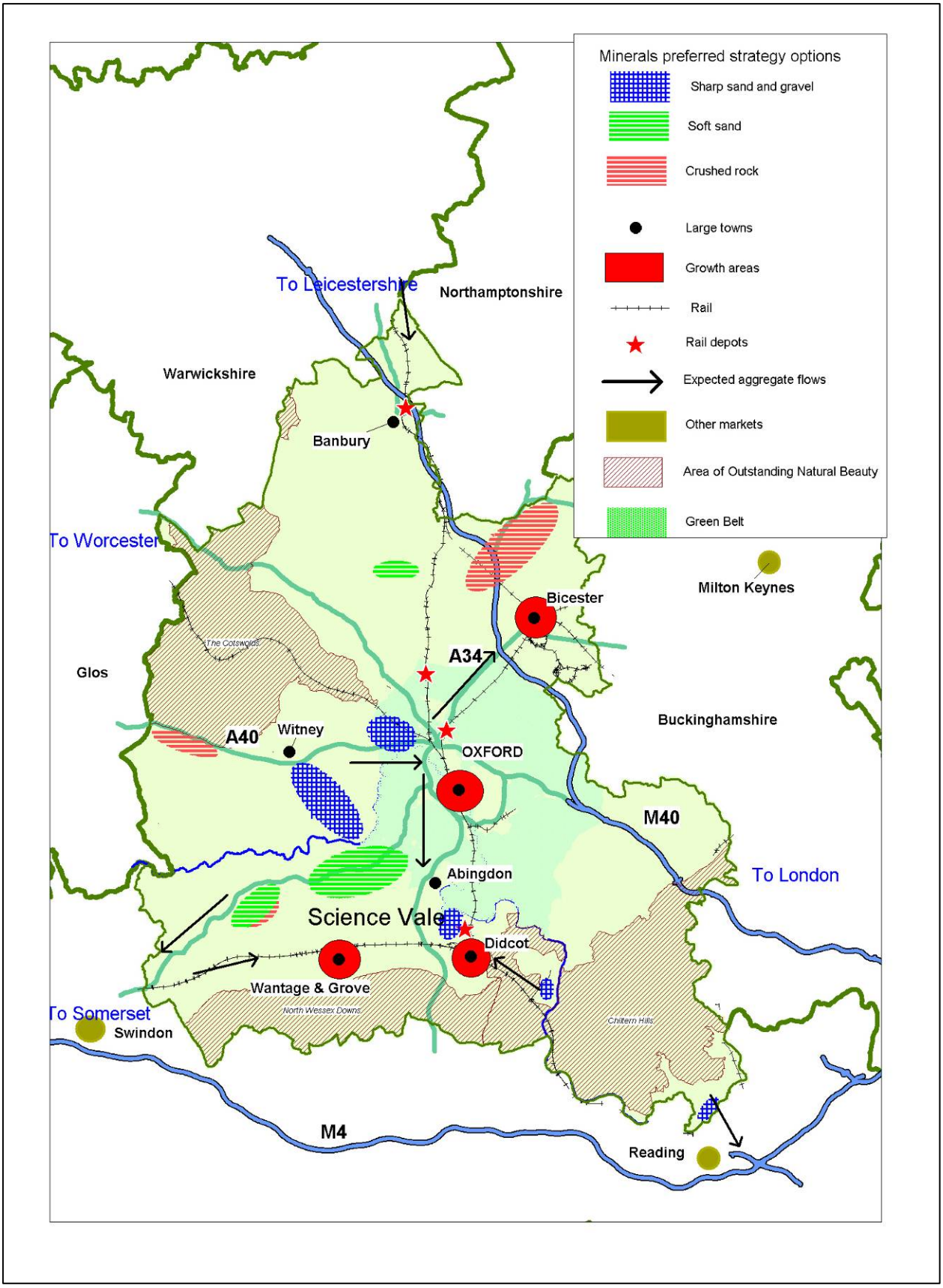
Where restoration could assist or achieve the creation of priority habitats and/or Oxfordshire Biodiversity Action Plan targets, the relevant biodiversity after-use should be incorporated within the restoration scheme.

Where restoration could protect geodiversity and improve educational opportunities this should be incorporated into the proposed restoration scheme, such as by providing for important geological faces to be left exposed and enabling access to the faces.

Where a mineral working site has the potential to provide for local amenity uses, including appropriate sport and recreational uses, these uses should be incorporated into the restoration scheme.

Where appropriate, operators and landowners will be expected to contribute towards the management of restored mineral workings for an extended period beyond any formal aftercare period.

Figure 8: Minerals Key Diagram



5. COMMON CORE POLICIES FOR MINERALS AND WASTE

Climate change

5.1 Carbon dioxide emissions from Oxfordshire are higher than the South East and national averages. The County Council is committed to increasing energy efficiency and reducing emissions. Waste recycling and recovery facilities contribute to reducing emissions by diverting waste from landfill. Minerals and waste facilities that are well located, designed and operated can minimise the generation of greenhouse gases and be resilient to the impacts of climate change.

5.2 Minerals and waste development proposals, including operational practices and restoration proposals, must take account of climate change for the lifetime of the proposed development. This will be through measures to minimise generation of greenhouse gas emissions and to allow flexibility for future adaptation.

5.3 Methods of adaptation include the use of sustainable drainage systems designed to improve the rate and manner of absorption of water from hard and soft surfaces, reducing direct run-off into rivers or storm water systems; the use of sustainable construction methods; sustainable transport methods where possible; and the use of environmentally friendly fuels.

5.4 The County Council expects operators to adopt a low carbon approach in their proposals for minerals and waste development and will consider planning applications in line with national policy on climate change and with policies in the City and District Council Local Development Frameworks. Applications for major developments may also provide information on climate change in their accompanying Environmental Impact Assessment.

Flooding

5.5 In Oxfordshire, the more workable sand and gravel deposits occur in the river valleys and much extraction has already taken place in these areas. PPS25 ‘Development and Flood Risk’, which aims to steer development to areas of lowest flood risk, recognises sand and gravel working as ‘water compatible development’ – that category of development that is least affected by flooding. But a sequential test must still be applied before sand and gravel workings can be identified as appropriate when sited in the flood plain.

5.6 Except for certain types of landfill, waste management facilities can also be regarded as flood compatible development. Such development can take place in areas at risk of flooding providing a sequential test (and in some cases an exceptions test) establishes that there are no better alternatives in areas of lower flood risk.

5.7 A Strategic Flood Risk Assessment (SFRA)[13] has been undertaken to assess the extent to which areas of possible minerals and waste development are at risk of flooding (including the future impact of climate change). A sequential test has informed the selection of the proposed areas for future minerals development in policy M3; due to other planning considerations, some areas have been identified in the floodplain. The SFRA will be used to help identify the most suitable sites for mineral development in the minerals site allocations document. The SFRA has not identified that any of the required waste infrastructure is likely to need to be located in areas at high risk of flooding.

5.8 An individual flood risk assessment will be required for any minerals or waste development proposals in an area at risk of flooding. A flood risk assessment is also required for development of a site of more than 1 hectare elsewhere (further guidance is given in the SFRA).

5.9 Where mineral working takes place in the flood plain, it is expected that associated development (buildings, stock piles etc) will be situated in areas that pose the lowest risk to flooding.

5.10 Mineral working in the flood plain can offer opportunities to increase flood water storage capacity and reduce the risk of flooding elsewhere. Wherever possible this should be taken into account in planning for the eventual restoration of the site.

5.11 **Policy C1: Flooding**

Minerals and waste development will, wherever possible, take place in areas that are not at risk of flooding. Where development takes place in an area of identified flood risk this should only be where alternative locations in areas of lower flood risk have been explored and discounted, and where a flood risk assessment is able to demonstrate that the development will not:

- **impede the flow of floodwater;**
- **displace floodwater and increase the risk of flooding elsewhere;**
- **reduce existing floodwater storage capacity;**
- **adversely affect the functioning of existing flood defence structures.**

Proposals for the restoration of quarries located in areas liable to flood should, where possible, incorporate measures for the storage of floodwater.

Water environment

5.12 Much of the current sand and gravel extraction in the county takes place in the valleys of the River Thames and its tributaries, particularly the River Windrush. Sand and gravel extraction can cause disruption to flows of ground water and surface water through de-watering during working and the creation of lakes.

[13] Oxfordshire Minerals and Waste (Level 1) Strategic Flood Risk Assessment, Scott Wilson, October 2010

Sand and gravel extraction can also impact on water quality. The impact of any proposals for minerals or waste development on water quality and pollution prevention will be considered. This will include dewatering and the impact dewatering may have on regulated groundwater abstractions.

5.13 Waste developments and minerals site restoration which involves infilling with waste have the potential to cause pollution of surface and groundwater resources. In particular, surface run-off, landfill leachate and the discharge of waste water from waste management operations such as composting or recycling plants can cause pollution. Where appropriate, planning conditions may be imposed to ensure that measures are taken to prevent water contamination.

5.14 **Policy C2: Water environment**

Minerals and waste development will need to demonstrate that there would be no unacceptable adverse impact on or risk to:

- **The quantity or quality of surface or groundwater resources;**
- **The quantity or quality of water abstraction currently experienced by water abstractors unless acceptable alternative provision can be made;**
- **The flow of groundwater at or in the vicinity of the site.**

Proposals for minerals and waste development should ensure the protection of watercourses and canals of significant landscape, nature conservation or amenity value.

Environmental and amenity protection

5.15 The need for minerals and waste developments must be balanced against the need to protect the environment. Policy C3 provides for protection to local residents and other interests from unacceptable impacts caused by minerals and waste development. The actual measures required to do this at any particular site can only be established when detailed information is available in a planning application. Setting standard buffer zone distances can lead to unnecessary restrictions being imposed and minerals being unnecessarily sterilised or to inadequate protection measures being required. The buffer zone distances appropriate to any particular development proposal should be decided on a case by case basis at the planning application stage.

5.16 Applications for minerals and waste development in proximity to settlements should seek to safeguard the character, setting and amenity of those settlements and should include mitigation measures that incorporate an acceptable separation distance, and landscaping and planting appropriate to the existing landscape setting and consistent with the proposed after-use of the site.

5.17 The potential impact of noise, dust, odour, other air emissions, vibration, vermin and litter on sensitive receptors will be assessed in the consideration of proposals for minerals and waste development.

5.18 **Policy C3: Environmental and amenity protection**

Proposals for minerals and waste development should demonstrate that they will not have an unacceptable adverse impact on the environment, residential amenity and other sensitive receptors.

Biodiversity and geodiversity

5.19 The County Council is committed to protecting and, wherever possible, enhancing biodiversity and geodiversity throughout the county. Oxfordshire has a significant number of statutorily designated sites of international, national, regional and local nature conservation importance, intended to protect important species, habitats and geological features.

5.20 Outside these designated sites, Oxfordshire's landscape also supports a wide array of habitats and species, many of which are recognised through the UK and Oxfordshire Biodiversity Action Plans. The Council will seek to ensure that biodiversity in these non-designated areas is protected and enhanced, and that habitat fragmentation is avoided.

5.21 Oxfordshire has very little woodland; only about 6% of the county is woodland, of which half is ancient woodland. Woodland should be protected during mineral working. The County Council will encourage tree planting with native species for screening and landscaping and as a productive land use on restored mineral workings.

5.22 Proposals must address the need to maintain and/or enhance the following features of local and regional importance: Conservation Target Areas, Local Biodiversity Action Plan habitats and species, Local Wildlife Sites, woodlands and Local Nature Reserves.

5.23 Proposals for minerals development should seek to achieve a net gain in natural assets and resources through contributing to Oxfordshire Biodiversity Action Plan targets, which are delivered by the Conservation Target Areas (CTA) approach, and by protecting and enhancing green infrastructure and strategic biodiversity networks.

5.24 Oxfordshire has a rich geological resource. In addition to important geological sites which are designated as Sites of Special Scientific Interest and Regionally Important Geological and Geomorphological sites, previously unknown geological remains may sometimes be discovered. Where such finds are made, all efforts should be made to protect those of regional, national or international importance and, if this is not possible, they should at least be recorded.

5.25 **Policy C4: Biodiversity and geodiversity**

Proposals for minerals and waste development should demonstrate that the development will not have an unacceptable adverse impact on sites designated as internationally, nationally or locally important for nature conservation, including the Oxfordshire Conservation Target Areas and the setting of those areas.

Mineral working and waste management development should not damage or destroy irreplaceable habitats or biodiversity, including ancient woodland and species rich grassland.

The County Council will seek the enhancement of Conservation Target Areas to implement Oxfordshire Biodiversity Action Plan (BAP) targets within and close to areas of mineral working. Mineral extraction will not be permitted unless the long term maintenance of BAP Priority Habitats and appropriate contributions to Oxfordshire BAP targets through the Conservation Target Area approach have been secured.

Nationally and regionally important geological features including geological Sites of Special Scientific Interest and Regionally Important Geological and Geomorphological Sites should be protected from harmful development and retained in situ unless there are exceptional reasons justifying their removal, in which event their presence should be appropriately recorded.

Landscape

5.26 Proposals for minerals and waste development should include appropriate provisions to protect and where possible enhance the quality and character of the countryside and landscape of the whole county. In particular proposals for development should demonstrate that they will not have a negative impact on views and settings associated with the Chilterns, Cotswolds and North Wessex Downs Areas of Outstanding Natural Beauty (AONB). Government policy is that major minerals developments should only be permitted in these areas in exceptional circumstances. Where development is proposed within or in proximity to an AONB, the assessment should be informed by the relevant AONB Management Plan. Development proposals should also take into account the landscape character areas, which are not statutory designations.

5.27 **Policy C5: Landscape**

Proposals for minerals and waste development should demonstrate that the development will protect and where possible enhance the landscape quality of Oxfordshire and will take account of the landscape character areas identified in the Oxfordshire Wildlife and Landscape study. Appropriate measures should be taken to mitigate potential adverse visual impacts through siting, design and landscaping.

Historic environment and archaeology

5.28 Before determining an application for mineral extraction the County Council will normally require the applicant to carry out a preliminary, desk-based archaeological assessment to determine the nature and significance of any archaeological assets. The County Council may, subject to the results of this initial assessment, require an archaeological field evaluation of the site to determine the appropriate means for mitigating the impact of extraction on the archaeological assets.

5.29 Where proposals for minerals development involve a site which includes heritage assets, appropriate desk based and / or field evaluations should be undertaken in order to identify and determine the nature, extent, and level of significance of each heritage asset, the contribution of its setting to that significance, as well as any potential impacts on the asset or its setting.

5.30 **Policy C6: Historic environment and archaeology**

Proposals for minerals and waste development will be considered in the light of the need to protect and conserve Oxfordshire's historic assets and the setting of those assets, including Blenheim Palace, scheduled ancient monuments, listed buildings, conservation areas, historic battlefields, and registered parks and gardens.

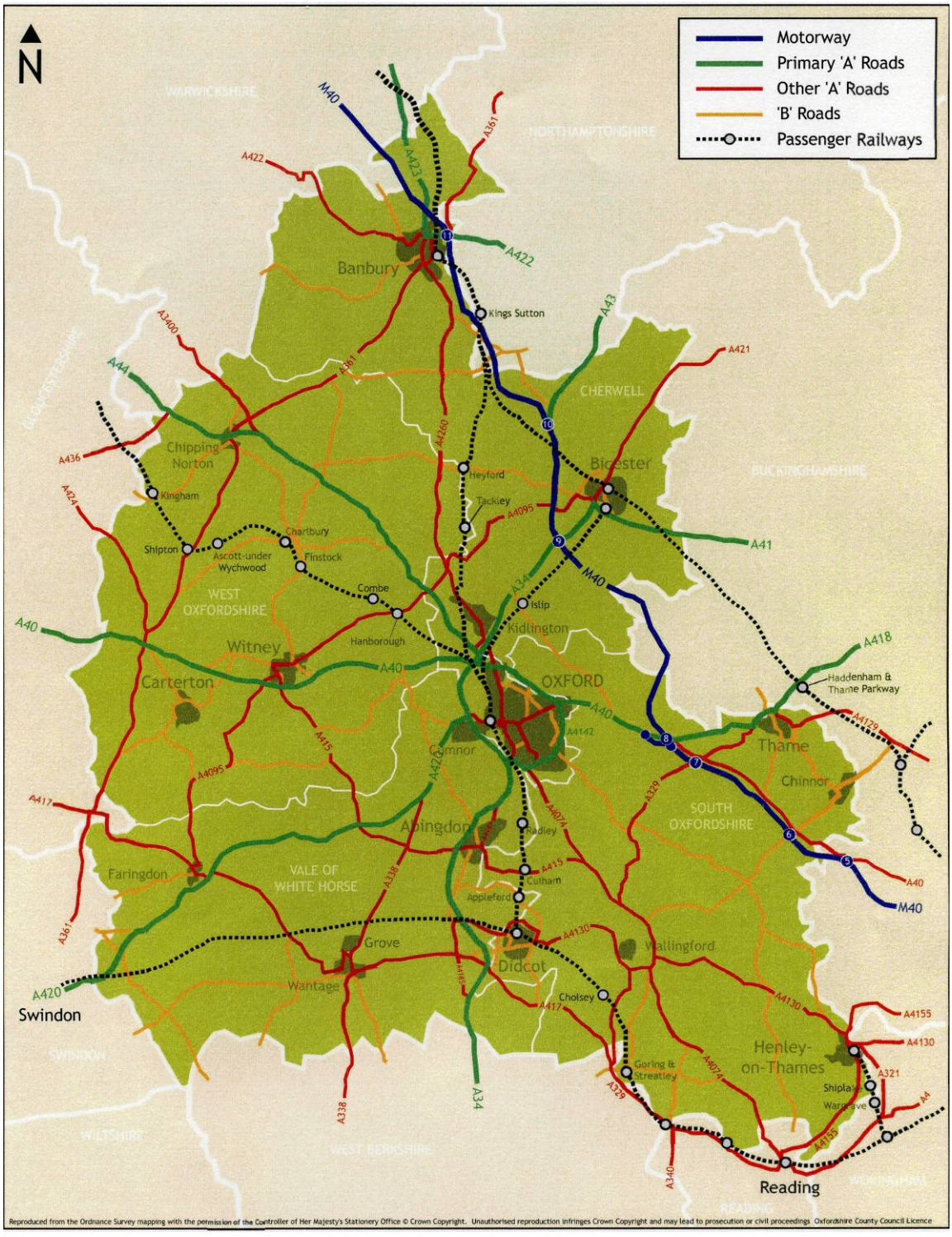
Scheduled Ancient Monuments, other archaeological remains of national importance and their settings should be preserved in situ. For all other remains of regional or local importance preservation in situ will be preferred; where this is not appropriate, and for all other remains, adequate provision should be made for their excavation and recording.

Transport

5.31 The Oxfordshire Local Transport Plan (LTP3) notes that the County Council will seek to enable development through securing infrastructure and services, to reduce carbon emissions from transport, improve air quality and reduce other environmental impacts, and to ensure that the operation of the transport network balances the protection of the local environment with efficient and effective access for freight and distribution.

5.32 Figure 9 shows the Oxfordshire transport network. The impact on the local environment and amenity from traffic associated with minerals development is an important matter to be taken into account in considering proposals. An objective of this plan is to minimise the distances minerals need to be transported, to achieve a commensurate reduction in air pollution, greenhouse gas emissions and impact on environmental and residential amenity.

Figure 9: The Oxfordshire transport network



5.33 The impacts of transporting minerals and waste can be reduced by encouraging the uptake of alternative transport methods such as rail, conveyor, pipeline and water. But these are usually only practicable where movement of large quantities between particular points or over long distances is involved. Crushed rock is brought into Oxfordshire by rail to the aggregates rail depots at Banbury, Kidlington and Sutton Courtenay; and waste from London is delivered by rail to the Sutton Courtenay landfill site. However, most of the quarries and

waste facilities in Oxfordshire are not able to take advantage of alternative methods of transport. Even where an alternative mode of transport is potentially available, it may not be economically viable or practicable given that most of the minerals extracted in Oxfordshire are distributed to local markets and most of the waste handled at facilities in the county is produced locally. Therefore the main method of transporting aggregates and waste in Oxfordshire is expected to continue to be by road.

5.34 Lorries can damage highways and lead to a need for more frequent maintenance. Where this is likely the Council will seek contributions to improvements before development starts and may seek commuted sums towards ongoing maintenance. The impact of lorry traffic in environmentally sensitive locations and settlements can be reduced by routeing agreements to control traffic movements. Routeing agreements will direct development traffic onto the primary road network by the most appropriate route available taking into account road standard, settlements, road safety issues and other factors, although this needs to be balanced against potentially making vehicles drive further and therefore increasing carbon emissions and pollution.

5.35 **Policy C7: Transport**

Minerals and waste development will only be permitted where provision is made for convenient access to and along the primary road network in a way that maintains or improves:

- **the safety of all road users including pedestrians;**
- **the efficiency and quality of the road network;**
- **residential and environmental amenity.**

Proposals for mineral working and waste facilities should:

a) wherever possible, transport minerals or waste by rail, water, pipeline or conveyor, rather than by road;

b) as far as possible, minimise the distance of mineral workings from locations of demand for aggregates, via roads suitable for lorries;

c) as far as possible, minimise the distance of waste facilities from locations of waste production, via roads suitable for lorries, taking into account that some facilities are not economic or practical below a certain size and may need to serve a wider than local area.

Rights of way

5.36 The Oxfordshire Rights of Way Improvement Plan has been incorporated into the Oxfordshire Local Transport Plan. That plan states that the County Council will protect and maintain public rights of way and natural areas so that all users are able to understand and enjoy their rights in a responsible way. The plan also notes that the County Council will seek opportunities for network improvements and initiatives to better meet the needs of walkers, cyclists, and horse riders, including people with disabilities, for local journeys, recreation, and health.

5.37 Proposals to enhance, promote and improve the rights of way network and to increase access to the countryside should be encouraged as part of restoration plans for mineral workings. Operators and landowners will be expected to contribute to an extended period of aftercare and management of rights of way.

5.38 If a proposal for mineral extraction would necessitate the temporary diversion or closure of a right of way, the planning application should provide all details, including the proposed route, the width, the materials to be used and the access implications for users, which demonstrate that a safe and convenient right of way will be maintained. Where temporary diversions are required applications should also provide details of how the right of way will be restored when the mineral workings are completed. The process for diverting a public right of way whether on a temporary or permanent basis follows a separate application process and advice from Oxfordshire County Council should be sought beforehand.

5.39 **Policy C8: Rights of way**

The integrity of the rights of way network should be maintained and if possible retained in situ in safe and useable condition. Diversions should be safe, attractive and convenient and, if temporary, should be reinstated as soon as possible. If permanent diversions are required, these should seek to enhance and improve the public rights of way network. Improvements and enhancements to the rights of way network will be encouraged and public access will be sought to restored mineral workings, especially if this can be linked to wider provision of green infrastructure.

6. IMPLEMENTATION AND MONITORING

Implementation of the minerals strategy

6.1 Implementation of the Minerals Planning Strategy will be achieved primarily through the determination of planning applications for mineral working and other minerals developments. In carrying out its responsibilities as mineral planning authority for dealing with applications for minerals development, the County Council will cooperate with the District Councils (the local planning authorities). The County Council will seek to work closely with local stakeholders, other statutory bodies and the minerals industry, to provide appropriate advice, prior to the submission of applications.

6.2 The aim will be to ensure that development delivers the objectives of the Minerals Planning Strategy. This will be done by taking due account of the policies and proposals in the strategy in pre-application discussions and when determining planning applications; and by imposing appropriate planning conditions and, where necessary, negotiating legal agreements when permissions are granted.

6.3 The minerals strategy aims to enable sufficient supply of aggregate minerals to meet the development needs of Oxfordshire. The quarries and other minerals supply facilities and infrastructure that will be needed will be delivered through investment and development by the private sector, in particular landowners and the minerals industry. Implementation of the strategy will depend on proposals for sufficient sites (for recycling plants, quarry extensions and/or new quarries) in appropriate locations coming forward as planning applications in time to be available to enable supply needs to be met.

6.4 The minerals strategy identifies the provision for minerals supply that needs to be made over the plan period. It makes separate provision for secondary and recycled aggregates; and for locally extracted aggregates: sharp sand and gravel; soft sand; and crushed rock; and includes a policy on importation of aggregates by rail.

6.5 The strategy indicates the additional provision required for mineral working over the plan period: 14.26 million tonnes of sharp sand and gravel; 1.59 million tonnes of soft sand; and no specific additional requirement for crushed rock. Principal locations where the required mineral working should take place are identified (policy M3). Sites to enable this provision to be made will be identified in the minerals site allocations document.

6.6 Provision for secondary and recycled aggregates (policy M1) is to be made through a mix of permanent facilities and temporary facilities at aggregate quarries and inert waste landfill sites. Supply is expected to be primarily from recycling of construction and demolition waste. Provision for this will need to be made in conjunction with the provision for construction, demolition and excavation waste facilities as part of the Council's waste planning strategy. Many existing aggregates recycling facilities are operating on temporary permissions; these will need to be replaced or have their operational life

extended in order to maintain supply capacity. Sites for recycled and secondary aggregate production facilities will be identified in the minerals site allocations document and, where appropriate, will be cross-referenced to sites in the waste site allocations document.

6.7 Five areas for working of sharp sand and gravel are identified (four existing working areas and one new area) (policy M3). It is anticipated that current permitted reserves will on average last until around 2016. Further working is to be through extensions to existing quarries or new quarries to replace exhausted quarries, but with no increase in the overall level of working in the two West Oxfordshire areas (Lower Windrush Valley and Eynsham / Cassington / Yarnton). The new area (at Cholsey) is proposed to replace the existing Sutton Courtenay area around 2020. Implementation of the strategy will depend on sufficient applications coming forward in acceptable locations to enable all five areas to make an appropriate contribution to the overall level of supply, including a phased transition of working from the Sutton Courtenay area to the Cholsey area.

6.8 Three areas of existing working are identified for further provision of soft sand (policy M3). It is anticipated that current permitted reserves will on average last until around 2023. Continuation of supply is preferentially to be through extensions to existing quarries, to make the most efficient use of existing plant and infrastructure. But new quarries will be permitted if sufficient supply cannot be made through extensions. Implementation of the strategy will depend on sufficient applications coming forward in acceptable locations to enable each area to make an appropriate contribution to the overall level of supply.

6.9 Three areas of existing working are identified for further provision of crushed rock (policy M3). It is anticipated that current permitted reserves will on average last until 2030. Additional provision may be needed towards the end of the plan period, especially if demand increases. If so, this is preferentially to be through extensions to existing quarries, to make the most efficient use of existing plant and infrastructure. But new quarries will be permitted if sufficient supply cannot be made through extensions.

6.10 Proposals for mineral working may come forward in other locations, but these will not normally be permitted unless the provision required to deliver the strategy cannot be met from identified areas.

6.11 Possible sites for mineral working have been put forward (nominated) to the County Council by mineral operators and landowners. A preliminary technical assessment of these site options has been undertaken to check that the minerals planning strategy is potentially capable of being delivered. (A more detailed assessment of sites will be carried out when the minerals site allocations document is prepared.)

6.12 Provision to meet requirements for non-aggregate minerals, in particular building stone and clay, will depend on applications coming forward in acceptable locations, which will be considered against policy M3.

6.13 Improvements to infrastructure, particularly roads and junctions, may be required in order that new quarries or extensions to existing quarries can be developed in a way that is locally acceptable. Where possible, such requirements will be identified in the minerals site allocations document. Appropriate financial contributions for such improvements will be sought from mineral developers and operators through legal agreement at the planning application stage. Provisions for obtaining developer contributions are changing with the introduction of the Community Infrastructure Levy, which will need to be taken into account in implementing the strategy.

6.14 The strategy depends on permitted mineral working sites, secondary and recycled aggregates production sites and aggregates rail depots being available to be worked or operate to their full extent or capacity; and on potentially workable mineral resources being kept available throughout the plan period and not being sterilised by other development. This is also important for ensuring that mineral resources are potentially available for the longer term. Mineral safeguarding areas will be defined and identified in the minerals site allocations document; and mineral consultation areas will be drawn up to define areas wherein the District Councils must consult the County Council on applications for specified types of development. Delivery of this part of the strategy will require liaison with the District Councils.

6.15 The core policies have been developed to ensure the minerals strategy is delivered in an environmentally acceptable way, including by setting out criteria against which planning applications will be considered. These policies will be implemented by the County Council through the development management process.

Monitoring of the minerals strategy

6.16 The Minerals Planning Strategy is based on current circumstances and currently available information, but it must be able to respond to changing circumstances and needs. The County Council as Mineral Planning Authority will monitor the effectiveness of the policies and proposals in delivering the vision and objectives of the strategy; and the changing context within which the strategy is being used.

6.17 The Council will produce an Annual Monitoring Report on its minerals and waste plans each year, in accordance with the Planning and Compulsory Purchase Act 2004. These reports will include an assessment of:

- the extent to which the policies in minerals and waste plans are being achieved;
- any changes needed where policies are not working or objectives are not being met; and
- progress on the preparation of minerals and waste plans.

Any relevant changes in government or other policy will be addressed through the annual monitoring reports.

6.18 The Council will continue to carry out regular monitoring of sales and reserves of aggregate minerals and of planning applications and decisions, as well as monitoring of mineral working sites. The Council will work with the minerals industry and with other mineral planning authorities, including through the South East Aggregates Working Party, in monitoring sales, distribution and reserves of aggregates and changes in patterns of supply, and in forecasting future demands.

6.19 The Council will also make use of monitoring and survey work undertaken by other agencies, such as the Environment Agency and Natural England, and on other work carried out within the Council such as for transport planning and biodiversity, to monitor change.

6.20 Observations recorded in the annual monitoring reports will feed into reviews of the Minerals Planning Strategy. It is intended that the strategy will be reviewed and rolled forward every five years. But monitoring may indicate a need for review of part or the whole of the strategy sooner. For example, if it becomes clear that the provision for minerals supply in the strategy is insufficient or excessive, or that sites are not coming forward as planning applications within strategy areas and site allocations, a review of the strategy may be required.

6.21 The implementation and monitoring framework for the minerals planning strategy is set out in table 1. The indicators and targets have been developed to provide a consistent basis for monitoring the performance of the strategy's vision, objectives and policies for minerals development to 2030. The indicators reflect the intent of the strategy objectives, taking into account recommendations in the Sustainability Appraisal Report.

6.22 In the case of some of the common core polices it is not possible to set a specific target. However, it is still possible to assess the effectiveness of these policies in relation to minerals development.

6.23 The results of monitoring against the implementation and monitoring framework will be reported in the annual monitoring reports.

Table 1: Minerals Strategy Implementation and Monitoring Framework

Minerals strategy policy	Related minerals objectives	Indicators	Targets	Implementation partners
Minerals Core Policies				
M1: Provision for secondary and recycled aggregates	i, iii, iv	Capacity of secondary and recycled aggregates supply facilities Annual production of secondary and recycled aggregates	Total capacity 0.9 million tonnes a year	Minerals, waste, demolition and construction industries; Environment Agency; District Councils; WRAP
M2: Provision for mineral working	i, iii, iv	Landbanks of permitted reserves for sharp sand and gravel, soft sand and crushed rock Annual sales of sharp sand and gravel, soft sand and crushed rock extracted in Oxfordshire	Landbanks of at least 7 years for sand and gravel (at 1.01 mtpa), and soft sand (at 0.25 mtpa); and at least 10 years for crushed rock (at 0.63 mtpa)	Minerals industry; South East Aggregates Working Party
M3: Strategy for location of mineral working	i, ii, iii, iv, v, vi, vii	Percentage of permissions for mineral working (by tonnage yield permitted for each mineral type) consistent with spatial strategy	90% of tonnage permitted for each mineral type consistent with strategy	Minerals industry
M4: Aggregates rail depots	iii, iv, vi, x	Number of developments permitted that adversely affect operation or implementation of a safeguarded depot site Number of permitted aggregates rail depots in Oxfordshire Annual tonnage of aggregates imported into Oxfordshire by rail	Unimpeded operation of all existing and planned rail depots	Minerals industry; District Councils; development industry

M5: Mineral safeguarding	iv, ix	Number and area of developments permitted within mineral consultation areas contrary to the advice of the County Council Area of district local plan allocations within mineral consultation areas contrary County Council advice	No significant sterilisation of mineral resources within mineral safeguarding areas; no significant prejudice to operation or establishment of rail aggregate depots and permanent secondary and recycled aggregate facilities	Minerals industry; District Councils; development industry
M6: Restoration of mineral workings	viii	Proportion of restoration schemes approved and implemented that accord with policy Proportion of restoration schemes approved and implemented that include biodiversity gains or local amenity, sport and recreational benefits	100% of restoration schemes accord with policy 75% of restoration schemes secure biodiversity gains or local benefits	Minerals industry; biodiversity partner organisations; Parish and District Councils
Common Core Policies				
C1: Flooding:	v	Number and area of permissions in areas at risk of flooding contrary to the advice of the Environment Agency	No permissions granted contrary to Environment Agency advice	Minerals and waste industries; Environment Agency
C2: Water environment	v, vii, viii	Number and area of permissions which could adversely impact on or create risk to significant water resources	No permissions granted without appropriate protection or mitigation measures	Minerals and waste industries; Environment Agency; British Waterways; District Councils
C3: Environmental and amenity protection	vi, vii	Number of permissions which could adversely impact on the environment, residential amenity or other sensitive receptor to an unacceptable extent	No permissions granted without appropriate protection or mitigation measures	Minerals and waste industries; District Councils

C4: Biodiversity and geodiversity	vii, viii	Number and area of permissions which would adversely impact on important biodiversity or geodiversity interests Number and area of permissions for mineral working which will help to meet Oxfordshire Biodiversity Action Plan targets through enhancement of Conservation Target Areas	No permissions granted without appropriate protection or mitigation measures 75% of mineral working permissions contribute to meeting biodiversity targets	Minerals and waste industries; Natural England; other biodiversity partner organisations
C5: Landscape	vii, viii	Number and area of permissions which would adversely impact on important landscape interests	No permissions granted without appropriate protection or mitigation measures	Minerals and waste industries; AONB Management Boards
C6: Historic environment & archaeology	vii	Number and area of permissions which would adversely impact on important historic environment assets or archaeological remains	No permissions granted without appropriate protection or mitigation measures	Minerals and waste industries; English Heritage
C7: Transport	v, vi, vii	Number of permissions which would adversely impact on the road network or on residential and environmental amenity as a result of traffic generation; and the extent of the impact Number of permissions for developments including non-road transportation of minerals or waste	No permissions granted without appropriate protection or mitigation measures, e.g. routeing agreement	Minerals and waste industries; Highways Agency; District and Parish Councils
C8: Rights of way	vii, viii	Number and extent of permissions which would adversely impact on the rights of way network.	No permissions granted without appropriate protection of or safeguards for rights of way	Minerals and waste industries; District and Parish Councils; the Ramblers

Glossary

Aggregates – sand, gravel, crushed rock that is used in the construction industry to make things like concrete, mortar, drainage, and asphalt. For secondary or recycled aggregates, see below.

Agricultural waste – waste from a farm or market garden including pesticide containers, tyres, and old machinery.

Aftercare The management and treatment of land for a set period of time immediately following the completed restoration of a mineral working to ensure the land is returned to the required environmental standard.

Afteruse – The long term use that land formerly used for mineral workings is restored to. This use can be agricultural, forestry or public amenity such as country parks.

Anaerobic Digestion Facility - facility involving process where biodegradable material is encouraged to break down in the absence of oxygen, which changes the nature and volume of material and produces a gas which can be burnt to recover energy and digestate which may be suitable for use as a soil conditioner.

Annual Monitoring Report (AMR) – assesses the implementation of the Local Development Scheme and the extent to which policies in Local Development Documents are being achieved.

Apportionment – the allocation between minerals and waste authorities of the total regional amount of required mineral production or quantities of waste to be managed, for a particular period of time, as set out in the South East Plan.

Area of Outstanding Natural Beauty (AONB) – area with statutory national landscape designation, the primary purpose of which is to conserve and enhance natural beauty.

Biodegradable waste– materials that can be broken down by naturally-occurring micro-organisms. Examples include food, garden waste, and paper.

Biodiversity Action Plan (BAP) - strategy prepared by the local planning authority together with nature conservation organisations to aimed at protecting and enhancing the biological diversity.

Biological Diversity / Biodiversity - The variety of life including plants, animals and micro-organisms, ecosystems and ecological processes.

Buffer zones – These are areas drawn around settlements or properties in which mineral development is prohibited. The purpose of these zones is to protect settlements from disruption caused by the working of minerals or prevent sterilisation on minerals resources by the encroachment of other developments.

Climate change – long-term changes in temperature, precipitation, wind and all other aspects of the earth's climate.

Commercial and Industrial waste - waste from factories, or premises used for the purpose of trade or business, sport, recreation or entertainment.

Composting – the break down of organic matter aerobically (in presence of oxygen) into a stable material that can be used as a fertiliser or soil conditioner.

Conservation Target Areas (CTAs) - important areas for wildlife in Oxfordshire, wherein the main aim is to restore biodiversity at a landscape-scale through the maintenance, restoration and creation of Biodiversity Action Plan priority habitats.

Construction, Demolition and Excavation waste - Waste arising from the building process comprising demolition and site clearance waste and builder's waste from the construction/demolition of buildings and infrastructure. Includes masonry, rubble, and timber.

Core Strategy - sets out the long-term spatial vision for local planning authority area and the strategic policies and proposals to deliver that vision.

Crushed rock – Naturally occurring rock which is crushed into a series of required sizes to produce an aggregate.

Development Plan Documents (DPDs) - Spatial planning documents that are subject to independent examination. They will have 'development plan' status. A Core Strategy DPD and a Site Allocations DPD are key parts of any Local Development Framework or Waste and Minerals Development Framework.

Energy from Waste (EfW) Facility/Plant Residual waste treatment facility where energy (heat and/or electricity) is recovered from waste; either from direct combustion of waste under controlled conditions at high temperatures; or from combustion of by-products derived from the waste treatment process such as biogas or refuse-derived fuel.

Energy Recovery – covers a number of established and emerging technologies, though most energy recovery is through incineration technologies. Many wastes are combustible, with relatively high calorific values – this energy can be recovered through processes such as incineration with electricity generation, gasification or pyrolysis.

Environment Agency (EA) – Government advisors that aim to protect and improve the environment (including air, land and water).

Gasification - A technology related to incineration where waste is heated in the presence of air to produce fuel rich gases.

Greenfield site – site previously unaffected by built development.

Greenhouse gases – gases such as methane and carbon dioxide that contribute to climate change.

Groundwater - water held in water-bearing rocks, in pores and fissures underground.

Hazardous waste -waste that may be hazardous to humans and that requires specific and separate provision for dealing with it. Categories are defined by regulations. Now includes many “everyday” items such as electrical goods. Previously referred to as Special Waste.

Household Waste Recycling Centres (HWRCs) - place provided by the Waste Disposal Authority where members of the public can deliver household wastes for recycling or disposal (also known as Civic Amenity Sites).

Household Waste - waste from household collection rounds, street sweeping, litter collection, bulky waste collection, household waste recycling centres and bring or drop-off recycling schemes.

Incineration – burning of waste at high temperatures under controlled conditions. This results in a reduction bulk and may involve energy reclamation. Produces a burnt residue or 'bottom ash' whilst the chemical treatment of emissions from the burning of the waste produces smaller amounts of 'fly ash'.

Independent Examination - process whereby an independent Planning Inspector publicly examines a Development Plan Document for its soundness before issuing report which (under current legislation) is binding on the planning authority.

Inert waste -waste that does not normally undergo any significant physical, chemical or biological change when deposited at a landfill site. It may include materials such as rock, concrete, brick, sand, soil or certain arisings from road building or maintenance. Most of the category “construction and demolition” waste is inert waste.

Industrial waste - wastes from any factory, transportation apparatus, from scientific research, dredging, sewage and scrap metal.

Intermediate Level Waste (ILW) - radioactive wastes which exceed the upper activity boundaries for Low Level Waste but which do not need heat to be taken into account in the design of storage or disposal facilities.

In-Vessel Composting Facility - facility where the composting process takes place inside a vessel where conditions are controlled and optimised for the aerobic breakdown of materials.

Landbank - the reserve of unworked minerals for which planning permission has been granted, including non-working sites. It can be expressed in tonnage or years.

Landfill– permanent disposal of waste into the ground by the filling of voids.

Landfill Allowance Trading Scheme (LATS) - a government scheme to reduce the amount of biodegradable municipal waste sent to landfill, under which Waste Disposal

Authorities are allocated annual allowances for the amounts of biodegradable municipal waste that may be landfilled, and the allowances are tradeable between authorities.

Landfill gas – gas generated by the breakdown of biodegradable waste within landfill sites, consists mainly of methane and carbon dioxide.

Landfill tax – Government-introduced tax on waste disposed of at landfill sites. Aims to encourage more sustainable waste management methods.

Landraise - permanent disposal of waste material above ground, resulting in the raising of the ground level.

Local Development Framework (LDF) – folder of local development documents prepared by district councils and unitary authorities, that set out the spatial planning strategy for the local area.

Local Development Scheme – the programme for the preparation of local development documents.

Local Nature Reserve - an area of particular wildlife interest declared by a local authority under Section 21 of the National Parks and Access to the Countryside Act 1949, and usually managed by them.

Local Plan – part of the statutory development plan that sets out detailed development policies prepared by district and unitary planning authorities. This form of plan is being replaced by Local Development Frameworks since the coming into force of the Planning and Compulsory Purchase Act 2004.

Low Level Waste (LLW) - radioactive waste having a radioactive content not exceeding four gigabecquerels per tonne (GBq/te) of alpha or 12 GBq/te of beta/gamma radioactivity, but not including radioactive materials that are acceptable for disposal with municipal and general commercial or industrial waste; includes soil, building rubble, metals and organic materials arising form both nuclear and non-nuclear sources; metals are mostly in the form of redundant equipment; organic materials are mainly in the form of paper towels, clothing and laboratory equipment that have been used in areas where radioactive materials are used, such as hospitals, research establishments and industry.

Marine aggregates – aggregates sourced by dredging from the sea bed rather than being dug from the land.

Marine borne material - sand and gravel that is taken from the sea bed and imported to land.

Materials Recovery/Recycling Facility (MRF) - facility where recyclable materials are sorted and separated from other wastes before being sent for reprocessing.

Mechanical and Biological Treatment (MBT) - residual waste treatment process involving the mechanical separation of recyclable materials followed by composting of the remaining material to produce a fuel or stabilised waste for landfilling.

Mineral Consultation Areas - areas of potential mineral resource where district and borough planning authorities should notify the County Council if applications for development come forward. This should prevent mineral resource being lost ('sterilised').

Mineral reserves – Mineral deposits which have been investigated and are proven to be of economic importance due to the quality, quantity and nature of the deposit. Permitted reserves also have planning permission for extraction.

Mineral resource – A potential source of a mineral without permission for extraction, where the deposit's nature, quality and quantity may not yet have been assessed.

Mineral Safeguarding Areas - areas of known mineral resource that are of sufficient economic or conservation value (such as building stones) to warrant protection for generations to come.

Mineral Local Plan – a statutory development plan that sets out the policies in relation to minerals within the minerals planning authority (unitary or county council). This form of minerals plan is being replaced by Minerals Development Frameworks since the coming into force of the Planning and Compulsory Purchase Act 2004.

Minerals Planning Authority – the planning authority responsible for planning control of minerals development.

Minerals and Waste Development Framework (MWDF) – portfolio of plans and policies about waste and minerals planning.

Mitigation measures – actions to prevent, avoid, or minimise the actual or potential adverse affects of a development, action, project, plan, or policy.

Municipal waste/municipal solid waste (MSW) – waste that is collected by a waste collection authority. Mostly consists of household waste, but can also include waste from municipal parks and gardens, beach cleansing, waste resulting from clearance of fly-tipped materials, and some commercial waste.

National Nature Reserve - nationally important area of special nature conservation interest, designated by Natural England under Section 16 of the National Parks and Access to the Countryside Act 1949.

Natural England - the Government's advisor on the natural environment.

Non-Hazardous Waste - waste, which is neither inert nor hazardous, which is permitted to be disposed at a non-hazardous landfill; also referred to as non-inert waste.

Non-inert waste - Waste that is potentially biodegradable or may undergo any significant physical, chemical or biological change when deposited at a landfill site. Also referred to as “non-hazardous waste”.

Nuclear Decommissioning Authority (NDA) - a non-departmental public body with responsibility to deliver the decommissioning and clean-up of the UK’s civil nuclear legacy.

Permitted reserves – Mineral reserves with planning permission for extraction.

Planning Policy Guidance (PPG) - documents issued by Central Government setting out its national land use policies and guidance for England on different areas of planning. These were gradually being replaced by Planning Policy Statements.

Planning Policy Statements (PPS) - documents issued by Central Government to replace the existing Planning Policy Guidance in order to provide clearer and more focused polices for England on different areas of planning (with the removal of advice on practical implementation, which is better expressed as guidance rather than policy).

Planning permission - formal consent given by the local planning authority to develop and use land.

Primary aggregates – naturally-occurring mineral deposits that are used for the first time as an aggregate.

Pyrolysis – a technology related to incineration where waste is heated in the absence of air to produce gas and liquid fuel plus solid waste.

Recycled aggregates - are derived from reprocessing waste arisings from construction and demolition activities (concrete, bricks, tiles), highway maintenance (asphalt planings), excavation and utility operations. Examples include recycled concrete from construction and demolition waste material, spent rail ballast, and recycled asphalt.

Recycling - the recovery of waste materials for use as or conversion into other products (including composting but excluding energy recovery).

Recovery - obtain value from wastes through one of the following means:

- Recycling
- Composting
- Other forms of material recovery (such as anaerobic digestion)
- Energy recovery (combustion with direct or indirect use of the energy produced, manufacture of refuse derived fuel, gasification, pyrolysis or other technologies).

Residual waste – the waste remaining after materials have been recovered from a waste stream by re-use, recycling, composting or some other material recovery process (such as anaerobic digestion).

Residual Waste Treatment Facility - facility for processing waste which has not been re-used, recycled or composted in order to recover resources and minimise the amount of waste that needs to be disposed by landfill; the two most common forms of residual waste treatment are energy from waste and mechanical and biological treatment.

Resource Park – a site comprising a number of different waste recovery, treatment and reprocessing facilities which enables synergy between those facilities to be realised through common location.

Restoration - methods by which the land is returned to a condition suitable for an agreed after-use following the completion of waste or minerals operations.

Re-use - the repeat utilisation of an item/material for its original (or other) purpose.

Secondary Aggregates - usually the by-products of other industrial processes Examples include blast furnace slag, steel slag, pulverised-fuel ash (PFA), incinerator bottom ash, furnace bottom ash, recycled glass, slate aggregate, china clay sand, colliery spoil.

Sewage Sludge or **Sludge** - the semi-solid or liquid residue removed during the treatment of wastewater.

Site of Special Scientific Interest - site notified by Natural England under Section 25 of the Wildlife and Countryside Act 1981 as having special wildlife or geological features worthy of protection.

Sludge Treatment Centre - facility at a sewage treatment plant where sludge removed from waste water (sewage) is subject to a treatment process to enable it to be recovered and/or disposed.

Soundness – in accordance with national planning policy, local development documents must be 'soundly' based in terms of their content and the process by which they were produced. They must also be based upon a robust, credible evidence base. There are nine tests of soundness.

South East Aggregates Working Party (SEERAWP) - a non-executive technical group with the role of advising government (the Department for Communities and Local Government), Mineral Planning Authorities and industry on aggregates, comprising officers of the mineral planning authorities, the minerals industry through the Mineral Products Association and the British Aggregates Association, and government representatives from DCLG and the Government Office for the South East (GOSE).

South East Waste Planning Advisory Group (SEWPAG) – a non-executive technical group comprising the waste planning authorities of South East England and representatives of the Environment Agency, the waste industry and the environmental sector which provides advice to help waste planning authorities fulfil the duty to cooperate on strategic planning issues, as proposed in the Localism Bill.

South East Plan – the Regional Spatial Strategy for the South East region, was prepared by the South East England Regional Assembly and approved by the Secretary of State in May 2009.

Special Area of Conservation - site of international importance for nature conservation, designated under the EU Habitats Directive.

Special Protection Area (SPA) – designation made under the Birds Directive to conserve the best examples of the habitats of certain threatened species of birds.

Statement of Community Involvement – A document which outlines the standards and approach that the County Council will undertake in engaging stakeholders and the local community in producing Minerals and Waste plans and in considering planning applications.

Statutory consultee - Organisations with which the local planning authority must, by regulation, consult with on the preparation of its land use plan or in determining a planning application. Includes the Environment Agency, Natural England and English Heritage.

Sterilisation – This occurs when developments such as housing, roads or industrial parks are built over potential mineral reserves.

Strategic Environmental Assessment (SEA) - an environmental assessment of certain plans and programmes, including those in the field of planning and land use, which complies with the EU Directive 2001/42/EC; it involves the preparation of an environmental report, carrying out of consultation, taking into account of the environmental report and the results of the consultation in decision making, provision of information when the plan or programme is adopted and showing that the results of the environment assessment have been taken into account.

Structure Plan – framework of strategic planning policies, produced by Oxfordshire County Council. The Structure Plan was largely replaced as a statutory planning document by the South East Plan in May 2009.

Sustainability / Sustainable Development - development that meets the needs of the present without comprising the ability of the future generations to meet their own needs, by taking into consideration long-term social, economic and environmental impacts.

Sustainability Appraisal - a tool for appraising policies to ensure they reflect sustainable development objectives. The Planning and Compulsory Purchase Act requires a sustainability appraisal to be undertaken for all development plan documents.

Sustainable Community Strategy – statutory strategy for promoting the economic, social and environmental well-being of the area. Prepared through partnership working between statutory sector providers, the community and voluntary sector, businesses, residents and the local authorities.

Thermal Treatment - generic term encompassing incineration, gasification and pyrolysis.

Transfer Station - a bulk collection point for waste prior to its removal for treatment or disposal.

Very Low Level Waste (VLLW) - radioactive waste with very low concentrations of radioactivity, arising from both nuclear and non-nuclear sources, which because it contains little total radioactivity can be safely treated by various means, including disposal with municipal and general commercial and industrial waste at landfill sites. Formal definition:
(a) **in the case of low volumes ('dustbin loads') of VLLW** "Radioactive waste which can be safely disposed of to an unspecified destination with municipal, commercial or industrial waste ("dustbin" disposal), each 0.1m3 of waste containing less than 400 kilobecquerels (kBq) of total activity or single items containing less than 40 kBq of total activity. For wastes containing carbon-14 or hydrogen-3 (tritium):
• in each 0.1m3, the activity limit is 4,000 kBq for carbon-14 and hydrogen-3 (tritium) taken together; and
• for any single item, the activity limit is 400 kBq for carbon-14 and hydrogen-3 (tritium) taken together. Controls on disposal of this material, after removal from the premises where the wastes arose, are not necessary."
(b) **in the case of high volumes of VLLW** "Radioactive waste with maximum concentrations of four megabecquerels per tonne (MBq/te) of total activity which can be disposed of to specified landfill sites. For waste containing hydrogen-3 (tritium), the concentration limit for tritium is 40MBq/te. Controls on disposal of this material, after removal from the premises where the wastes arose, will be necessary in a manner specified by the environmental regulators".

Voidspace - volume within landfill or landraising sites that is permitted and/or available to receive waste.

Waste Collection Authority – local authority that has a duty to collect household waste, -usually district or unitary authorities.

Waste Disposal Authority – local authority responsible for managing the waste collected by the collection authorities, and the provision of household waste recycling centres - usually county or unitary councils.

Waste Planning Authority – local planning authority responsible for planning control of waste management and disposal - usually county or unitary councils.

Waste Local Plan - a statutory document that sets out the land-use policies in relation to the management and disposal of waste within the plan area. This form of waste plan is being replaced by a Waste Development Frameworks following the coming into force of the Planning and Compulsory Purchase Act 2004.

Waste water - the water and solids from a community that flow to a sewage treatment plant operated by a water company.
Waste and Resources Action Programme (WRAP) - a quango which helps to develop markets for material resources that would otherwise have become waste,

provides advisory services and helps influence public behaviour through national level communication programmes.

Abbreviations

AMR	Annual Monitoring Report
AD	Anaerobic Digestion
AONB	Area of Outstanding Natural Beauty
BAP	Biodiversity Action Plan
CDE	Construction, demolition and excavation waste
C&I	Commercial and industrial waste
CTA	Conservation Target Area
DPD	Development Plan Document
EA	Environment Agency
EfW	Energy from Waste facility
EIA	Environmental Impact Assessment
HWRC	Household Waste Recycling Centre
ILW	Intermediate Level Waste
IVC	In vessel composting facility
LATS	Landfill Allowance Trading Scheme
LDF	Local Development Framework
LLW	Low level waste
LNR	Local Nature Reserve
LTP	Local Transport Plan
MBT	Mechanical and Biological Treatment
MPA	Minerals Planning Authority
MPS	Minerals Policy Statement
MRF	Materials Recycling/Recovery Facility
MSW	Municipal Solid Waste
MWDF	Minerals and Waste Development Framework
NDA	Nuclear Decommissioning Authority
NHW	Non Hazardous Waste
PPG	Planning Policy Guidance
PPS	Planning Policy Statement
RSS	Regional Spatial Strategy
SA	Sustainability Appraisal
SAC	Special Area of Conservation
SEA	Strategic Environmental Assessment
SEERAWP	South East Regional Aggregates Working Party
SEWPAG	South East Waste Planning Advisory Group
SSSI	Site of Special Scientific Interest
SPA	Special Protection Area
SPD	Supplementary Planning Document
VLLW	Very low level waste
WCA	Waste Collection Authority
WDA	Waste Disposal Authority
WPA	Waste Planning Authority
WRAP	Waste and Resources Action Programme