

# Minerals Options Paper

Somerset Minerals & Waste Development Framework Minerals Core Strategy



## **How can you get involved in the preparation of the Minerals Core Strategy?**

To ensure your comments are considered please send them to us by **12 February 2012**. Your responses may be included in a summary report and will be treated as in the public domain. If there is a concern relating to confidential supporting information for example, please get in touch with the County Council's minerals and waste policy team, using the contact details listed below.

To improve the accessibility of this document a Glossary is provided at the back containing a definition of the technical terms. We have also produced a shorter summary document which you can find on our website, or contact us for a paper copy.

We are keen to receive as many responses as possible. Please feel free to respond to as many or few issues as you wish. Every response will be considered and is valuable to us. There are various ways you can respond to the consultation, outlined below.

### **Online**

Responding online will help us to reduce printing and posting costs. We have used the council's consultation software which we hope provides a simpler way respond. To access the online version of the consultation, please visit: [www.somersetconsults.org.uk](http://www.somersetconsults.org.uk)

Stakeholders may wish to access the online version of this document at Somerset's libraries, where hard copies of the document should also be accessible.

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Contact the Minerals and Waste Policy Team by one of the above methods if you need a response form in paper format.

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## **1 Chapter 1 - Introduction**

- 1.1 Minerals are essential for economic development, for our quality of life and for the creation of sustainable communities. Mineral planning ensures that the need for minerals by society and the economy is carefully balanced against the impacts of extraction and processing on people and the environment.

### **What is this Options document for?**

- 1.2 The options document identifies a number of relevant issues and potential options relating to future minerals development within Somerset. It provides an opportunity for consultation with a wide range of stakeholders, including the general public. Feedback from this consultation will guide the preparation of the Minerals Core Strategy in 2012.

### **What is the Minerals Core Strategy for?**

- 1.3 The Minerals Core Strategy sets out the vision and planning policy framework for minerals development in Somerset. Policy must be defined for long enough to provide the minerals industry with a clear picture of the future to enable decisions about investment to be made. It gives certainty to local communities about minerals development in their area in terms of where activity is now and is likely to be over the next plan period. It also sets out what limits and controls should be placed on minerals activity to ensure any negative environmental and community impacts are mitigated as far as possible and at an acceptable level.
- 1.4 Government guidance suggests a policy document such as the Minerals Core Strategy should cover a period of at least 15 years beyond the date of adoption. The Minerals Core Strategy is expected to be adopted during 2013, and therefore the Core Strategy should cover the period to at least 2028.
- 1.5 The Minerals Core Strategy has to consider the need to contribute towards national, regional and local need for minerals together with social, environmental and economic considerations.
- 1.6 Current policies and proposals for the development of mineral resources in Somerset are found in the Somerset Minerals Local Plan which was adopted in April 2004 and covers the period up to 2011<sup>1</sup>. Those policies from the Minerals Local Plan that conform to national and regional guidance and are still relevant have been 'saved' and will continue to be in force until they are replaced by policies in the Minerals Core Strategy.
- 1.7 The Minerals Core Strategy will not deal with waste issues unless there is a direct link with minerals (for example, in aggregates recycling). Waste issues are covered in the Waste Core Strategy which is expected to be adopted by December 2012.

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<sup>1</sup> Somerset County Council. Somerset Minerals Local Plan 1997-2011. Adopted April 2004.

## **How is the Core Strategy produced?**

- 1.8 Separate consultation on the three main minerals extracted within the County, namely peat, aggregates and building stones, has already been carried out. Consultation was carried out with both statutory consultees and non-statutory consultees with knowledge and interest in minerals issues. Responses to these consultations have highlighted where there is some consensus and where there is polarisation of views and have guided the policy options proposed via this document. A summary of responses and the issues papers can be viewed on the county council's website<sup>2</sup> [www.somerset.gov.uk/mineralsandwaste](http://www.somerset.gov.uk/mineralsandwaste) .

## **Key stages**

- 1.9 Figure 1 shows the consultation requirements, key stages and anticipated dates in the development of the Minerals Core Strategy.

## **Sustainability Appraisal**

- 1.10 This document identifies the key issues associated with mineral extraction in the plan area and suggests a number of different options for consultation.
- 1.11 Local Planning Authorities are bound by legislation to appraise the degree to which their plans and policies contribute to the achievement of sustainable development. The process of Sustainability Appraisal examines the effects of plans and policies on a range of social, economic and environmental factors. A select number of sustainability objectives were identified through a scoping process which looked at high level international and national policies and plans to local level.
- 1.12 The vision, objectives and options presented in this paper have been reviewed in terms of their sustainability so that the economic, social and environmental effects of each option can be compared, assisting consultees in identifying their preferred option. Options have been amended where appropriate to reflect comments in the interim sustainability appraisal, and additional text incorporated into this paper to highlight sustainability issues or comments. The interim sustainability appraisal itself is available on the council website at [www.somerset.gov.uk/mineralsandwaste](http://www.somerset.gov.uk/mineralsandwaste).

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<sup>2</sup> After going to the link [www.somerset.gov.uk/mineralsandwaste](http://www.somerset.gov.uk/mineralsandwaste) select the Minerals Development Plan Documents link at the top right of the webpage which will take you to the relevant page.

Regulation 25 - Continuous engagement		
When	What:	Who will be consulted
Winter 2009 to Summer 2010	Issues papers on each mineral type extracted in Somerset - peat, aggregate and building stone.	Statutory consultation bodies and consultees with specialist knowledge or interest in minerals planning in Somerset.
8 Weeks Period December 2011 to February 2012	Options paper - Focussed on key issues and options identified through research and issues papers consultation. Seeking consultee input to choose and refine the options to be used for developing policy.	All statutory consultees and selected non-statutory consultees, including the wider public. All consultees from previous consultations must be notified.

Review responses to consultation; national and local policy; plans and programmes; and write the Core Strategy. Ongoing discussion with individual consultees or consultee groups to refine and check policy development.

Full Council		
When	What:	Who will be consulted
July 2012	Full Council approval sought for the Core Strategy, supported by a Sustainability Appraisal, to progress to pre-submission consultation and submission to the Secretary of State.	All County Councillors

Regulation 27 - Pre submission consultation		
When	What:	Who will be consulted
September to October 2012. 8 weeks minimum	Full Council approved Core Strategy published for pre-submission consultation. This will be the minerals policy document the council expects to submit to the Secretary of State for examination by an independent Planning Inspector.	All those consulted and/or who responded to previous consultations. Notices must be placed in the local papers in accordance with statutory requirements.

Major changes required it is likely a further round of consultation will be needed.

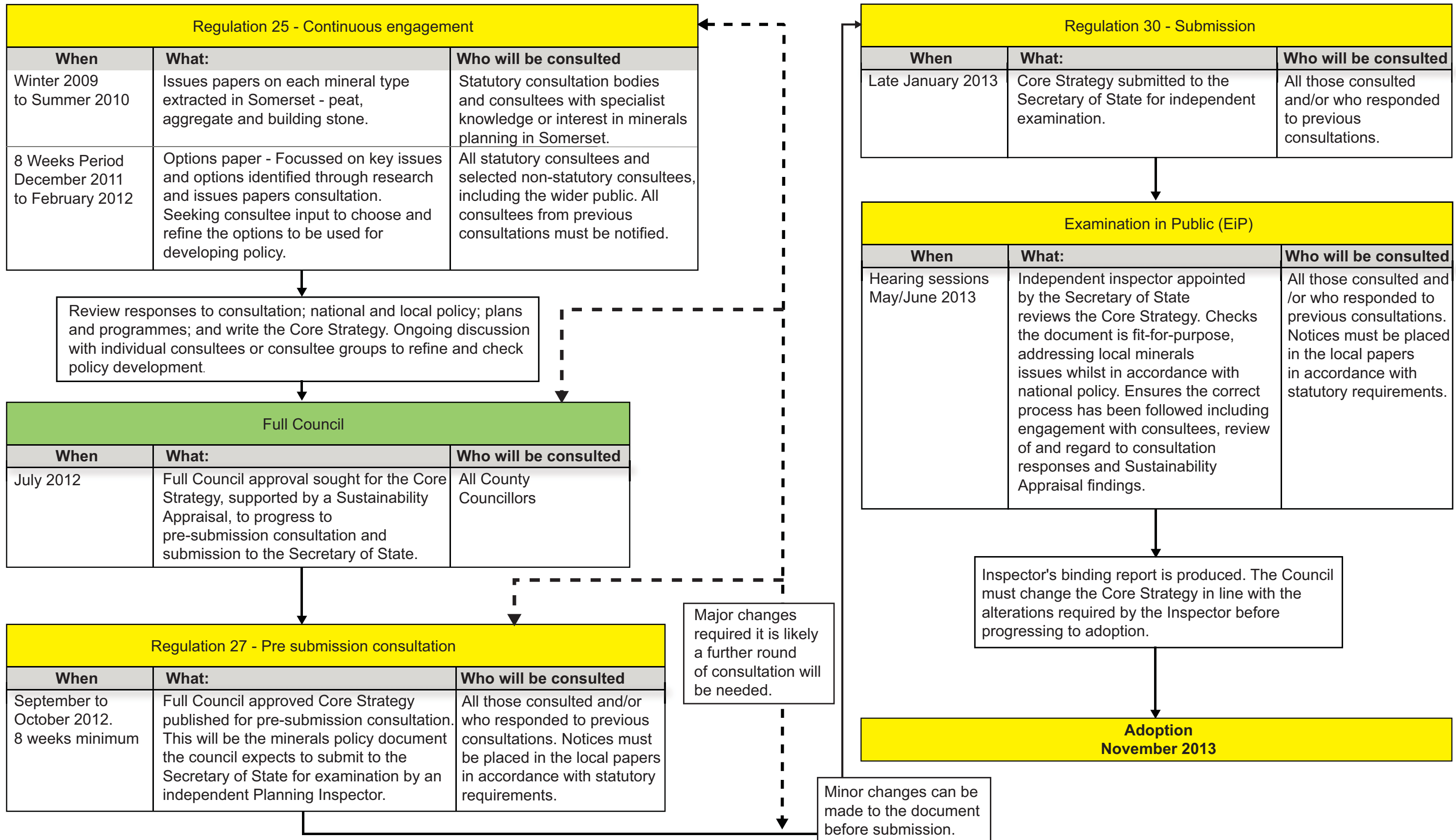
Minor changes can be made to the document before submission.

Regulation 30 - Submission		
When	What:	Who will be consulted
Late January 2013	Core Strategy submitted to the Secretary of State for independent examination.	All those consulted and/or who responded to previous consultations.

Examination in Public (EiP)		
When	What:	Who will be consulted
Hearing sessions May/June 2013	Independent inspector appointed by the Secretary of State reviews the Core Strategy. Checks the document is fit-for-purpose, addressing local minerals issues whilst in accordance with national policy. Ensures the correct process has been followed including engagement with consultees, review of and regard to consultation responses and Sustainability Appraisal findings.	All those consulted and/or who responded to previous consultations. Notices must be placed in the local papers in accordance with statutory requirements.

Inspector's binding report is produced. The Council must change the Core Strategy in line with the alterations required by the Inspector before progressing to adoption.

**Adoption November 2013**





## 2 Chapter 2: Policy Context

- 2.1 The Minerals Core Strategy must have regard to a wide range of policies at national, regional and local levels. The planning policy documents that are most relevant to the Minerals Core Strategy are referenced throughout this document. More details on national planning policy can be found on the Communities and Local Government website [www.communities.gov.uk](http://www.communities.gov.uk).

### National Policy

- 2.2 The government sets out policies and considerations that mineral planning authorities must have regard to in preparing their local planning policy and when determining planning applications.
- 2.3 National planning policy and guidance is currently under review. It is the government's intention to replace the suite of national planning documents with a single slimmed-down National Planning Policy Framework. The aim of this is to delegate more power to local communities so that they can have more influence over the place they live. The draft National Planning Policy Framework<sup>3</sup> has been published and has been taken into consideration in developing this options paper where relevant.

### Minerals Policy Statement 1: Planning and Minerals<sup>4</sup>

- 2.4 Overarching national policy for minerals is set out in Minerals Policy Statement 1 (MPS1) and its supporting guidance notes. The Minerals Core Strategy must be in conformity with MPS1 and reflect the objectives in this national guidance.
- 2.5 The twelve national objectives for minerals planning are listed below as they appear in MPS1 :
1. to ensure, so far as practicable, the prudent, efficient and sustainable use of minerals and recycling of suitable materials, thereby minimising the requirement for new primary extraction;
  2. to conserve mineral resources through appropriate domestic provision and timing of supply;
  3. to safeguard mineral resources as far as possible;
  4. to prevent or minimise production of mineral waste;
  5. to secure working practices which prevent or reduce as far as possible, impacts on the environment and human health arising from the extraction, processing, management or transportation of minerals;
  6. to protect internationally and nationally designated areas of landscape value and nature conservation importance from

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<sup>3</sup> Communities and Local Government. Draft National Planning Policy Framework, July 2011.

<sup>4</sup> Communities and Local Government. MPS1: Planning and Minerals. November 2006.

minerals development, other than in exceptional circumstances;

7. to secure adequate and steady supplies of minerals needed by society and the economy within the limits set by the environment, assessed through sustainability appraisal, without irreversible damage;
8. to maximise the benefits and minimise the impacts of minerals operations over their full life cycle;
9. to promote the sustainable transport of minerals by rail, sea or inland waterways;
10. to protect and seek to enhance the overall quality of the environment once extraction has ceased, through high standards of restoration, and to safeguard the long-term potential of land for a wide range of after-uses;
11. to secure closer integration of minerals planning policy with national policy on sustainable construction and waste management and other applicable environmental protection legislation; and
12. to encourage the use of high quality materials for the purposes for which they are most suitable.

### **Other relevant documents**

- 2.6 Relevant policy documents are referred to and referenced throughout this document. For a comprehensive list of plans and programmes relevant to the developing Minerals Core Strategy, please see the Minerals and Waste Development Framework Scoping Report - Sustainability Appraisal & Strategic Environmental Assessment<sup>5</sup>.

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<sup>5</sup> Minerals and Waste Policy webpage – found at: <http://www.somerset.gov.uk/irj/public>.

### **3 Chapter 3: Minerals in Somerset**

3.1 Somerset County Council is the Minerals Planning Authority for the whole of Somerset, excluding Exmoor National Park.

#### **Mineral Resources**

3.2 Somerset produces 3 main mineral types at present. The location of minerals activity in Somerset is shown in Figure 2 in Appendix A:

- Aggregates - The largest producer of crushed-rock aggregate in the south of England with an average of 10 to 12 million tonnes produced over recent years. The vast majority is extracted from the quarries in the east Mendip Hills of which a significant proportion is exported to other counties by rail. Quarries in the Mendip Hills Area of Outstanding Natural Beauty (AONB) and those located close to Bridgwater meet more local construction and limited industrial need. Relatively minor quantities of sand and gravel are worked on the Devon border.
- Building stone - Variety of stones and stone products to meet local need. Quarries tend to be quite small and are spread across the county.
- Sedge peat – Incorporated into horticultural products with varying proportions of imported moss peats and non-peat alternatives. Takes place in an area to the west of Glastonbury on the Levels and Moors.

3.3 Construction aggregates, peat and building stones are all considered in separate chapters within this document.

3.4 Licences have been issued by the Department for Energy and Climate Change for investigation of oil and gas reserves under the Mendip Hills. Further discussion with regards to developing new policy to address potential applications for shale gas and other energy minerals are considered later in this document.

3.5 Historically high quality road stone was excavated within the Quantocks AONB. but nature conservation and landscape constraints together with adequate supply elsewhere in Somerset means that the Quantocks is not identified for further quarrying.

3.6 Other minerals have been worked in Somerset in the past such as brick clay, coal, iron, lead and oil. Although there are no proposals to develop any of these minerals at the present time there may be justification for safeguarding some minerals, such as shallow coal reserves, for future generations. Safeguarding is discussed in a later chapter.

#### **Economics**

3.7 Mineral extraction is of considerable economic importance within the County, providing direct and indirect employment and expenditure within the local community.

3.8 Approximately 1,400 people were employed by quarrying in the Mendips in 2009, while approximately £160million was spent in 2009 in association with the winning, working and processing of crushed rock

into aggregates and the production of associated products within the Mendip Hills<sup>6 7</sup>.

- 3.9 The peat extraction industry is much smaller. It is thought to employ around 41 people, but it nevertheless provides local employment. Similarly building stone quarries have limited employment opportunities but are locally important.

### **Environmental setting**

- 3.10 The Somerset landscape contains a great variety of habitats which not only make the county an attractive place to live and visit, but also make it one of the most biologically diverse and valuable areas for conservation in the UK<sup>8</sup>. Somerset includes a wealth of environmental areas designated for nature and landscape conservation.

### **Built and natural heritage**

- 3.11 Somerset has approximately 660 Scheduled Ancient Monuments with a further 12,000 sites or features recorded on the County Sites and Monuments Record as being of archaeological importance<sup>9</sup>, and 173 building Conservation Areas. On going supply of local building stones for maintenance of Somerset's built heritage is considered later in this document.
- 3.12 The Somerset Levels and Moors, home to peat working in Somerset, contain numerous archaeological remains especially in the Avalon Marshes with finds such as prehistoric wooden trackways, wetland villages and Roman salt mounds.

### **Transport**

- 3.13 Transport accessibility is an issue in the rural areas of Somerset where much of the minerals activity takes place. The A37 and the A361 are the main routes used for exporting aggregates by road. However, aggregates and peat are moved in large HGVs on minor roads before reaching the A roads in many cases.
- 3.14 Two of the east Mendip quarries, Torr Works and Whatley, have their own rail heads which connect to the mainline. These rail-linked quarries are essential for meeting Somerset's contribution to national aggregate supply with almost 50% of Somerset extracted aggregate being exported by rail.

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<sup>6</sup> This includes production of associated products both on and off quarry sites within the Mendip Hills and other facilities which are located outside the Mendip Hills but which are dependant on commercial quarrying that occur within the Mendip Hills.

<sup>7</sup> Brian Perry, MQP. Employment and Financial Benefits of Quarrying in the Mendips. 25/01/2011.

<sup>8</sup> Somerset Biodiversity Partnership. Wild Somerset: The Somerset Biodiversity Strategy 2008-2018. May 2008.

<sup>9</sup> Somerset Minerals and Waste Development Framework. Sustainability Appraisal & Strategic Environmental Assessment: Scoping Report. February 2011.

- 3.15 Somerset is also served by Bridgwater port which has two key wharfs: Dunball and Comwich, both of which are in commercial operation. Dunball, where sand and gravel is landed, has better road access being located off junction 23 of the M5. Peat imports from Ireland and the Baltics are generally brought into the county by lorry. Bulk imports from Ireland are landed at Avonmouth or Cardiff docks.

### **Flood Risk**

- 3.16 Much of Somerset is low-lying and prone to flooding, around 15% of Somerset is at, or a few metres above sea-level<sup>11</sup> and therefore at risk from flooding.

## 4 Chapter 4: Vision and Plan Objectives

- 4.1 In order to guide the documents that will form the Minerals Development Framework, a clear, positive vision is needed that incorporates the aspects of minerals planning that the framework seeks to develop. The following vision has been prepared following informal consultation and officers' knowledge and experience.

### A vision for mineral extraction in Somerset:

#### **Vision for mineral extraction in Somerset:**

To ensure sustainable supply and use of minerals to meet society's needs without unacceptable impact upon Somerset's environment or communities.

### Plan objectives for the Minerals Core Strategy

- 4.2 The Minerals Core Strategy should be based on a series of clear objectives which are designed to help deliver the vision. A total of eight objectives have been developed and are set out below. These have been called "Plan Objectives" to distinguish them from the sustainability objectives that will be identified in the sustainability appraisal. There may be overlap with the two sets of objectives however.

**Objective A:** To ensure that Somerset is able to provide an adequate and steady supply of minerals in accordance with government guidance in order to contribute to national, regional and local requirements within the limits set by the environment.

**Objective B:** To protect Somerset's residents from impacts on human health associated with minerals extraction and transportation whilst recognising the benefits of the minerals industry, including provision of jobs.

**Objective C:** To protect the natural and historic environment of Somerset from impacts associated with minerals extraction and transportation recognising the potential for increased conflicts of interest due to climate change, particularly on the water environment, and opportunities for positive land use change in the long term.

**Objective D:** To promote the efficient production and use of primary minerals, together with the minimisation of waste, increased substitution of alternative materials, and appropriate timing of release of reserves thereby reducing the impact of mineral production on climate change and protecting finite resources.

**Objective E:** To reduce the impacts arising from minerals transportation on local communities and the climate by maximising opportunity for mineral movement by rail or water.

**Objective F:** To seek a positive contribution from the minerals industry whilst sites are operational in terms of improved carbon management and ongoing and final site restoration incorporating environmental and community enhancements such as, biodiversity, geo-diversity, landscape, recreation and access.

**Objective G:** To bring together the minerals industry and local communities to identify and implement suitable reclamation schemes at dormant or abandoned mineral workings that are problematic and unlikely to work again, for the benefit of local communities or the environment.

**Objective H:** To avoid the unnecessary sterilisation of valuable mineral resources by other types of development.

**Question 1: Do you agree with the vision and objectives?**

## 5 Chapter 5: Aggregates

- 5.1 Aggregates are the most commonly extracted and used construction materials in the UK. Primary aggregates include land-won and marine-dredged sand and gravel, and crushed rock. Secondary and recycled aggregates (known as alternative aggregates) include crushed concrete from construction waste, industrial by products such as slag and fuel ash, and waste from mineral production such as spoil from open cast coal and slate workings. In 2005 England used 216 million tonnes of aggregates of which 70% was primary mineral extracted in England, including 12Mt of marine-dredged sand and gravel; and 26% was from secondary and recycled sources with the remaining 4% imported.
- 5.2 Aggregates are an essential part of the economy, critical for both on-going maintenance of infrastructure and new development including housing, roads, railways, power stations and flood protection schemes. Figure 3 shows what purpose aggregates produced in the South West in 2009<sup>10</sup> were used for. Because aggregates are so fundamental to our economy and quality of life, national policy requires mineral planning authorities to ensure that there are enough permitted reserves available to meet the needs of the construction industry.

**South West Sales of Primary Aggregates by Major End Use in 2009**

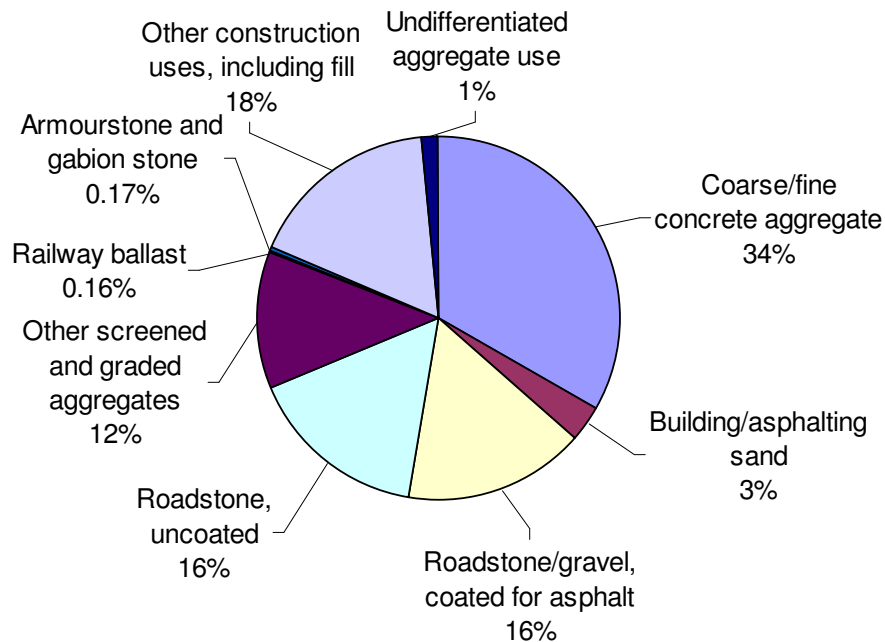


Figure 3 Pie chart. South West aggregate sales by major end use 2009.

- 5.3 Minerals can only be worked where they occur. There is a mismatch between where aggregate resources exist and where they are needed,

<sup>10</sup> Communities and Local Government. Collation of the results of the 2009 Aggregate Minerals Survey for England and Wales. October 2011.

therefore large quantities of aggregates are moved by road, rail and water around the country. Figure 4 shows where aggregates extracted in Somerset ended up in 2009. Around 5 million tonnes (19%) produced in the South West were transported by rail, predominantly originating in Somerset.

- 5.3. The Carboniferous limestone deposit in the Mendip Hills was identified as the only area in Somerset suitable for supplying aggregate at the rate required to meet Somerset’s apportionment. Aggregate extraction has been focused in the East Mendip area for many years, with two large rail-linked quarries, Whatley and Torr, exporting significant quantities of stone by rail since the 1970s. Active quarries are also present in the eastern, central and western Mendips supplying more local markets and working at lower annual outputs. A single quarry, Moons Hill, works an igneous resource which produces both general construction aggregate and road surfacing aggregates. A small quantity of crushed rock is also produced near Bridgwater on the west side of the M5. Figure 5 illustrates the active, inactive and dormant aggregate quarries together with their geological resource.

**Somerset’s Primary Aggregate Sales by Destination Region in 2009**

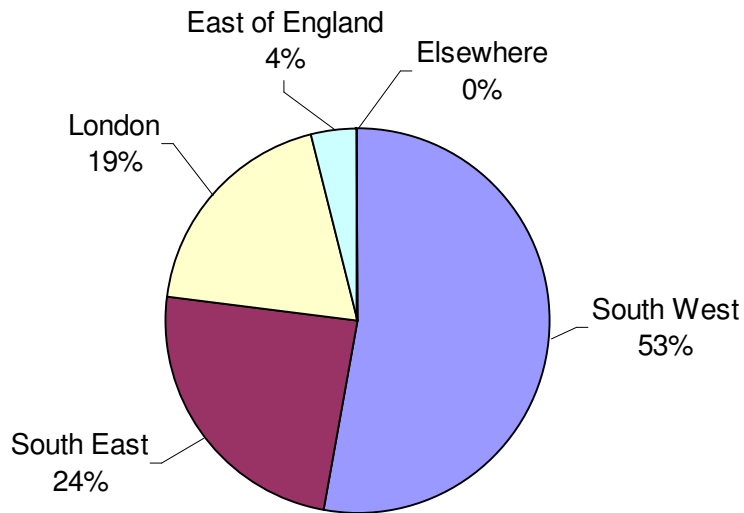


Figure 4: Pie chart. Distribution of Somerset produced aggregates in 2009.

- 5.4 Somerset has a long history of minerals extraction, which continues to be a significant source of employment and economic benefit in the County today (see Chapter 2 for figures). Somerset is the second largest aggregate producing County in the country, second only to Leicestershire. The Carboniferous limestone of the Mendip Hills is of national importance, serving not only the needs of Somerset but also contributing to the needs of the South West region, London and the South East. The aggregate resources in Somerset have supplied major projects such as the development for the 2012 Olympic Games.

## **Somerset's Strategic Aggregate Sites**

- 5.5 A Strategic Sites Assessment<sup>11</sup> was commissioned to identify sites that are essential if Somerset is to continue to meet regional and national aggregates need. This assessment has identified Moons Hill Quarry, Torr Works and Whatley Quarry as strategic sites for the following reasons:

### **Specialist materials**

- 5.6 Moons Hill Quarry is the only active quarry in Somerset producing skid resistant stone with a relatively high Polished Stone Value which makes it suitable for highway surfacing. The nearest alternative source is located in South Wales. As a result, the quarry supplies aggregate to a large geographical area, including Somerset, Wiltshire, Dorset and even as far as London. The site is a sustainable option for Somerset and the markets it supplies since it reduces reliance on imported aggregates which would otherwise have to be transported over longer distances and therefore be associated with higher vehicle emissions.
- 5.7 In the Aggregates Issues Paper it was suggested that a separate landbank for the specialist stone produced at Moons Hill could be created to ensure sufficient provision of road surfacing materials. Although consultees supported this suggestion further investigation showed it to be too complicated to manage a separate landbank in practice. This is because Moons Hill has to extract a more general aggregate material in order to access the high specification stone and the proportion of high quality road stone to general aggregate varies depending on the geological resources being worked.

### **Rail-linked quarries**

- 5.8 It is likely that the bulk transport of aggregates accounts for at least 40% of the energy consumed by the minerals industry<sup>12</sup>. Where aggregate is transported long distances, transportation by rail or water is a more sustainable alternative.
- 5.9 The Mendips are a strategically important source of aggregate. There are only nine large-scale quarries<sup>13</sup> in England that can supply aggregate by rail. Two of these, Torr Works and Whatley Quarry, are located in the Mendips. These quarries will become more important as supplies from Areas of Outstanding Natural Beauty and National Parks are worked out and not replaced<sup>14</sup>.
- 5.10 Almost all of the aggregate supplied by the South West to London and the South East is transported by rail, most of which is derived in Somerset. This demonstrates the considerable importance of rail supplied aggregate from the Mendips.

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<sup>11</sup> Land Use Consultants. Somerset Strategic Sites Assessment. May 2011.

<sup>12</sup> British Geological Survey. Big Feet. NERC 2007.

<sup>13</sup> Capable of producing more than 1Mt aggregate/year.

<sup>14</sup> Report of the UK Minerals Forum Working Group on Mineral Extraction in National Parks and AONBs Working Group. 9 October 2008.

## **Alternatives to primary aggregates**

- 5.11 National minerals policy encourages the greatest possible use of alternatives to primary aggregates. The Aggregates Provision for England 2005 to 2020 report<sup>15</sup> assumes 65 million tonnes of alternative aggregates, principally from construction and demolition waste, will be supplied each year by 2015. For the period 2005 to 2020 approximately 25% of national aggregate need is to be met with alternatives. The proportion of alternative aggregates used to meet annual demand for aggregates has increased over recent years.
- 5.12 The Somerset Aggregates Paper<sup>16</sup> included a question asking how the Somerset minerals industry and the Minerals Planning Authority could facilitate the provision of secondary and recycled aggregates. Responses generally supported the use of quarry sites for recycling aggregates as it is recognised that the infrastructure and markets are compatible, but only where they are suitably located. Construction and demolition waste is bulky and expensive to transport with a relatively low value, it is therefore not viable to transport these materials far for reprocessing. Several operators back haul (or back load) materials for recycling, such as scalplings and black top, where the opportunity arises. Some sites have invested in plant to process waste stockpiles.
- 5.13 The planning authority supports activities to increase the re-use of waste materials including reprocessing of waste to minimise the need for primary aggregate. Safeguarding of aggregates recycling facilities is discussed later in Chapter 9: Mineral Safeguarding Areas under the heading “Production facilities and alternative materials”. Increasing aggregate recycling from construction and demolition waste is covered in the Waste Core Strategy. The potential for aggregates recycling at current minerals workings is also included in the Waste Core Strategy.

## **Managed aggregate supply**

- 5.14 It takes time and significant investment to develop a new quarry, or even an extension, and therefore long-term planning is essential to ensure continued supply. Supply is currently managed by predicting the national need for aggregate which is then apportioned by region and subsequently to each mineral planning authority area. Measurement of supply and remaining reserves is managed through liaison with minerals planning authorities and the minerals industry brought together in a group called the Aggregate Working Party (AWP). This is a critical part of the process of managing aggregate supply to enable authorities to react to over or under supply. It is expected that a similar process will be retained in the National Planning Policy Framework.
- 5.15 The national need for primary land-won minerals is based on previous sales figures, predictions of construction demand, and supply of alternative and recycled materials. National demand for primary

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<sup>15</sup> Communities and Local Government. National and regional guidelines for aggregates provision in England 2005–2020. June 2009.

<sup>16</sup> Somerset Aggregates Paper – issues consultation for the Minerals Core Strategy, January 2010.

aggregates has been falling, largely due to increased use of alternative aggregates and more efficient use of aggregates in construction. During the current economic downturn there has been a fall in demand but it is expected to pick back up when the economy does.

- 5.16 The South West regional apportionment for 2005 to 2020 is 412.73Mt for crushed rock and 85Mt for sand and gravel. The South West Regional Aggregates Working Party (SWRAWP) has recommended to government an apportionment of the regional figure based on averaged historic proportional contributions over the period 2004 to 2008. The apportionments for each mineral planning authority in the South West based on this methodology are set out in
- 5.17 Table 1 below. Each minerals planning authority will test the deliverability of these figures, in environmental terms, during the development of their mineral core strategies.

Mineral Planning Authority	Sub-regional apportionment (million tonnes) 2005 to 2020	
	Crushed rock	Sand and gravel
Avon	79.10	Not applicable
Cornwall	26.94	Included with Devon
Devon, Torbay, Plymouth and Dartmoor National Park	51.21	14.91
Dorset, Bournemouth and Poole	4.82	31.56
Gloucestershire	36.01	16.07
<b>Somerset and Exmoor National Park</b>	<b>214.65</b>	<b>Included with Devon</b>
Wiltshire (including Swindon)	Included with Dorset	22.46
<b>Total</b>	<b>412.73</b>	<b>85</b>

Table 1: Aggregate apportionment recommendations submitted to Department for Communities and Local Government by SWRAWP for years 2005 to 2020.

- 5.18 The Somerset apportionment of crushed rock for the period 2005 - 2020 is 214.65 million tonnes which equates to a provision of 13.41 million tonnes each year.

- 5.19 Somerset's sand and gravel apportionment is included with Devon. Together the counties have an annual apportionment of 0.92 million tonnes.

### **Landbank**

- 5.20 The landbank is the total permitted reserves i.e. the tonnage of mineral in the ground with planning permission for minerals extraction and sale. Only quarries with modern planning conditions for working (i.e. active and inactive sites) are included in the landbank<sup>17</sup> since sites without working conditions can't supply the current market demand.
- 5.21 There are currently ten active and two inactive crushed rock aggregate quarries in Somerset. The majority of these extract the Carboniferous limestone in the Mendip Hills as illustrated in Figure 5 in Appendix A. There is one quarry working sand and gravel on the Somerset border with Devon, the reserves for which are reported with Devon's landbank.
- 5.22 To ensure sufficient aggregates can be supplied to meet national need mineral planning authorities are required to identify sufficient reserves of crushed rock and sand and gravel based on the annual apportionment, or other annual supply rate if shown to be more appropriate<sup>18</sup>. A minimum landbank of 7 years supply for sand and gravel and 10 years for crushed rock is recommended in MPS1 and continued as a proposal in the draft National Planning Policy Framework. This choice of minimum reflects the time it takes to develop new areas of working.
- 5.23 Avoiding over-supply is considered important to encourage the use of alternatives to primary aggregate and to help manage the environmental impacts of quarrying in both the short and long term. Planning and Minerals Practice Guide acknowledges that in some areas the landbank of permissions may already be large and indicate that there is no need for additional permissions in the immediate future<sup>19</sup>. An important part of the Minerals Core Strategy will be establishing the appropriate provision to be made for crushed rock in the County for the plan period and beyond. The supply rate could be the sub-regional or based on the annual sales average 1999 – 2009, which is 11.7Mt.
- 5.24 It is also recognised that the landbank is only one part of the picture and that there are other factors to take into account such as the location of reserves relative to the market, significant changes in demand, aggregates that are required for a particular use because of their nature or quality and constraints on consented reserves, and avoiding stifling competition where the permitted reserves are bound up in only a few sites.

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<sup>17</sup> Department for Communities and Local Government, November 2006. Planning and Minerals: Practice Guide. Paragraph 70.

<sup>18</sup> Communities and Local Government. Draft National Planning Policy Framework. July 2011.

<sup>19</sup> Department for Communities and Local Government. Planning and Minerals Practice Guide, November 2006. Paragraph 72.

## **Crushed Rock**

### **Current policy for crushed rock aggregates**

- 5.25 The Minerals Local Plan committed to maintaining a 15 year landbank throughout the plan period (1997 to 2011) i.e. at least 15 years of landbank at the end of the plan period. Sufficient reserves were identified at the start of the plan and consequently policy only allows grant of new permissions under limited circumstances.
- 5.26 Policy is very clear that relinquishment of planning permissions and restoration of dormant sites will be required if significant reserves are to be released through a new planning permission, other than in exceptional circumstances.
- 5.27 In recognition of the particularly sensitive groundwater situation in the Mendips, due to the geology and the combined pressure of quarry dewatering and abstraction for drinking water supply, the Minerals Local Plan takes a precautionary approach to protecting water interests.

### **How big should Somerset's crushed-rock landbank be?**

- 5.28 How many years of crushed rock aggregate supply to plan ahead for in Somerset was raised as a question through the aggregates issues paper. Responses varied from 10 years (minimum required) to 20 years throughout the plan period (equivalent to 35 years of reserves with a 15 year plan period plus 20 years still in hand at the end). Respondents generally recognised that because of the scale of Somerset's contribution to national aggregate supply and the size of some individual sites that increasing the landbank to 15 or 20 years was justified and would provide operators with the confidence to invest in a locally important industry. Some contributors are however firmly opposed to the principle that Somerset should contribute to the national need for aggregate, primarily to supply London and the South East.
- 5.29 At the time of going to print Somerset's crushed rock landbank was around 350 million tonnes<sup>20</sup>. The current reserves can provide sufficient crushed rock to the end of 2028 i.e. end of the plan period. The critical question is how many years of provision beyond the plan period should be planned for now, if any, and what annual supply rate to assume. Table 2 below shows what additional reserves are needed to ensure between 10 and 20 years worth of supply remains at the end of the plan period.

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<sup>20</sup> South West Regional Aggregates Working Party Annual Report 2009.  
\*11.7Mt/year is the average annual sales over the period 1999-2009.

Number of years of planned supply beyond 2028	Additional reserves (million tonnes) assuming supply rate of 13.41Mt/year	Additional reserves (million tonnes) assuming supply rate of 11.7Mt/year*
10	12	0
15	79	25
20	146	83

Table 2: Additional reserves required depending on the landbank to be maintained.

5.30 It is relevant to note that:

- A minimum landbank of 10 years for crushed rock is advised in MPS1 and as long as review of the landbank is regular then maintaining a landbank beyond the plan period is not considered to be an issue. The Minerals Planning Authority collects and reports sales and reserves data annually. If a shortfall in supply is identified additional reserves would be required.
- Industry representatives have indicated that applications for additional reserves via deepening or lateral extensions could be submitted during this plan period.
- There are two dormant sites, Westdown and Cloford, which are considered to be suitable for future working although they are not expected to be worked during this plan period. They contain sizeable reserves.

#### **Issue A1: How big should the crushed rock landbank be?**

**Option a:** Additional reserves should be identified now to ensure sufficient reserves remain at the end of the plan period to supply a further 15 years\*.

**Option b:** Additional reserves should not be identified now. Policy will be included in the plan to allow further reserves to be secured, if necessary, towards the end of the plan period to ensure 15 years\* supply is maintained.

\* 15 years has been used as an example. You may consider 10 years or 20 years or more to be more appropriate. Refer to question 2 below.

5.31 Issue A1 Option a. This option gives confidence to the local communities about the pattern of supply in their area for many years to come and will support economic growth of the minerals industry in Somerset. However it also has the potential to result in very large reserves since it is based

on predicted demand. Comparison of predicted demand and actual sales shows that every year Somerset's annual sub-regional apportionment has been greater than sales.

- 5.32 The principle of adequate and steady supply, avoiding over-supply, is fundamental to sustainable minerals planning. However, output is limited at the aggregates sites through planning conditions and annual supply is therefore constrained regardless of the size of the reserves. It is the period of time for which provision is made that is considered here. Very large reserves may delay environmental gains through restoration, reduce opportunity for communities and the planning authority to influence minerals planning outcomes for several decades, and hinder development of alternative more sustainable sources of supply.
- 5.33 Issue A1 Option b provides sufficient crushed rock for the whole of the plan period and recognises the potential need for additional reserves to be secured towards the end of the plan period. Whether additional reserves are needed will depend on the actual rate of sales. On this basis the current reserves may be sufficient for some years beyond the plan period, particularly if the increase in recycled aggregates and improvements in efficiency of use of aggregates is factored in, or marine or imported supplies bolster land-won primary minerals supply or additional reserves are permitted under exceptional circumstances.
- 5.34 It is of course possible that demand will rise or that major projects consume a sizeable portion of existing reserves. Both options will need to retain flexibility to add to the reserves should they be required. Reserves and sales will be monitored so that shortfalls in landbank due to unexpected changes can be addressed.
- 5.35 Preferred sites could be identified based on minerals industry proposals for new reserves. However, several sites are known to have the potential to extend through deepening or lateral extensions. If the additional reserves required during this plan period are limited, applications could be determined in accordance with national policy and policies in the Core Strategy without identifying preferred sites now.

**Question 2:** Which option do you support for Issue A1?

**Question 3:** What are the advantages and disadvantages of identifying preferred areas for future permissions in the Core Strategy?

### **Flexibility - Additions to the aggregates landbank**

- 5.36 The landbank (total permitted reserves) is an indicator of when new permissions are likely to be needed and is a tool used to ensure adequate and steady supply. However, unforeseen circumstances can affect the overall landbank provision or production capacity and ability of the industry to respond to market demands; for example, major projects

using up significant quantities of stone, or a site that supplies a particular market running out of reserves.

- 5.37 MPS1 sets out national policy for aggregate landbanks at present and states that where the landbank is judged by the Minerals Planning Authority to be excessive “permissions should only be given where it can be shown that demand could not be met from existing permitted reserves, for example, for reasons of type and quality of the aggregate and/or distance to the market”. It is noted that the draft National Planning Policy Framework does not include such a statement, however there is the expectation that more detailed policy will be developed at a local level. MPS1 does not define an excessive landbank. What constitutes an excessive landbank is also not defined.
- 5.38 It is likely that Torr Works, Whatley and Moons Hill would find it easier to justify additions to an excessive landbank since there are limited alternative supplies to those provided by these sites.
- 5.39 The minerals planning authority will seek revocation of permissions at dormant or inactive sites, including those in the landbank, when a new planning permission is granted. This would support national minerals policy which states “the industry should consider voluntarily agreeing to revocation or prohibition orders, in respect of planning permissions at sites that are unlikely to be worked again” (MPS1, Annex 4: aggregates, 4.3). It also supports local desire to see dormant sites revoked.

**Issue A2: If additional reserves are needed for a demand that cannot be met from existing reserves, how much more should be permitted?**

**Option a:** The quantity of additional reserves is irrelevant as long as the environmental and local community impacts can be mitigated or are not significant. A proposal should be considered on its own merits.

**Option b:** When the landbank is already sufficient any addition under exceptional circumstances should be limited, for example to 25 years supply, to meet the identified need only.

- 5.40 Option b for Issue A2 is assessed to be the most sustainable option since it constrains additional reserves. However, limiting the size of the additional reserves could have an economic impact on the applicant by reducing investment opportunity for new plant for example. It could also overly complicate site phasing.
- 5.41 In theory sites that secure additional reserves on the basis that they supply a need that cannot be met by other permitted resources can then supply any market. An option was considered that would seek to constrain reserves for supply of the specific demand for which the

permission was granted. Following a review of options internally it was concluded that it is not possible to constrain where reserves go once they have left the quarry gate.

**Question 4:** Which option do you support for Issue A2?

**Question 5:** How should an excessive landbank be defined?

### **Maintaining local supply**

- 5.42 The Minerals Local Plan includes policy which enables small additions to the landbank where there is a significant benefit to the environment or local community. Without continuation of such a policy there is less opportunity to seek benefit for the local community or environment through quarry development such as development of an alternative access route, change in location of processing operations, contributing to flood management schemes, improved restoration schemes or revocation of dormant sites. It could also result in restricted local competition by disadvantaging the smaller non-strategic supply sites.
- 5.43 National policy states that a landbank tied up in a few sites should not be allowed to stifle competition; this is included in the draft National Planning Policy Framework. This is certainly a possibility in Somerset where the two rail-linked quarries have a combined permitted annual output of 14 million tonnes which exceeds the permitted output of all the other aggregates quarries combined and the sub-regional apportionment.
- 5.44 Quarrying activity is not something that can easily be switched on and off. In addition, when a site requires major new investment for new plant there needs to be sufficient reserves to justify that investment.

### **Issue A3: Maintaining local supply**

**Option a:** Proposals will only be permitted if they result in significant benefits to local communities or the environment and do not significantly increase the size of the landbank.

**Option b:** Proposals will only be permitted if they result in significant benefits to the local community or the environment and are proportionate to the output at the relevant site.

**Option c:** There is no need to make provision for additions to the landbank when the landbank is excessive.

- 5.45 Issue A3 Option a: A significant increase could be more than the most recent total annual crushed rock sales in Somerset, or it could be a fixed amount such as the annualised sub-regional apportionment. It can be

difficult to ascertain the most recent annual sales since collated data takes some time to be published. The annualised sub-regional apportionment could be problematic if government doesn't continue the managed aggregate supply system described above. A fixed figure could be chosen, for example 12 million tonnes but this won't allow for changes in the market over the next 15 years. This option is very much of benefit to the smaller sites. For Whatley and Torr quarries the annual apportionment would only provide a few years worth of supply compared with other sites in the county which would gain 15 to 20 years of supply.

- 5.46 Issue A3 Option b: Proportionate could mean an addition of not more than 10 years output capacity, or recent annual sales or could be linked to the site's reserves such that the total reserves do not exceed 25 years supply or a proportion of the maximum output at each site. An operator would have to supply a detailed assessment of their site reserves with a planning application. The Minerals Planning Authority would be required to review and agree the findings which could be costly and time consuming. This option could see large sites being granted permission for large additions to the landbank but with a cap on each sites total reserves, in the long term the landbank would reduce since all sites would not have 25 years supply at the same time. This option treats all operators on an equal basis; provides opportunity for both large and small quarry sites to identify future reserves when needed to secure long-term investment and maintains output from existing sites whilst viable reserves are present resulting in efficient use of quarried land. A cap on the total permitted reserves at any one site together with controls on annual output and phased restoration schemes will prevent the negative impacts associated with large landbanks.
- 5.47 Issue A3 Option c could result in sites unable to gain additional reserves if the landbank is excessive when their reserves have run down. It will be particularly disadvantageous to sites that supply standard limestone aggregate to the local market i.e. cannot identify a unique market that cannot be supplied by other permitted reserves. This may have environmental and community benefits with minerals working becoming concentrated at fewer sites but conversely the impact will be greater around those sites with increased output. It will have an adverse effect on local competition which could raise the price of aggregates in Somerset. Overall employment would be likely to fall since larger sites have greater economies of scale. Overall transport distances are likely to increase with a reduced geographical spread of sites providing aggregates.

**Question 6: Which option do you support for Issue A3?**

### **Dormant and abandoned sites**

- 5.48 Dormant quarries have a planning permission but do not have agreed modern conditions. They cannot be worked without agreeing conditions first.

- 5.49 MPS1 states that reviews of sites that have not been worked for 10 years or more should be carried out by the Minerals Planning Authority, to assess whether production is likely to begin again. Sites unlikely to be worked again should not be included in the landbank, and revocation or prohibition orders should be considered. These orders require the owner to restore the site in accordance with the planning permission but as the permissions are generally very old this may not result in much physical change. Local residents would however have certainty that the site would not be reopened for quarrying in the future.
- 5.50 Abandoned sites are those that were worked in the past but do not have a planning permission. They are not at risk of reopening but may be adversely impacting on the local environment.
- 5.51 Responses to the issues paper on dormant sites indicated a desire to see the Minerals Planning Authority to take a more proactive role in addressing the issue of dormant and abandoned sites. It was also recognised however that where a site owner is resistant to giving up a dormant permission it is difficult to make any progress in this regard.
- 5.52 The sites listed in Table 3 are identified as dormant and are considered unlikely to work again in the Minerals Local Plan due to unsuitable location or potentially unacceptable impact on the environment.

<b>Dormant site</b>	<b>Site information</b>
Chelmscombe	Located within the Mendip Hills AONB
Cookswood	The site has traffic, groundwater, nature conservation and landscape/visual impact concerns.
Emborough	The site is divided by a disused railway line, the route of which is safeguarded. Also the Emborough Quarries SSSI covers part of the southern half of the site.
Highcroft	Considered to be in an unacceptable location – the site hasn't been worked since the early 1970s.
Lime Kiln Hill (West)	The site is now used for for landfill and recycling and a condition on the IDO scheme prevents further extraction of stone.
Stoke Lane	Very limited quarrying options at this site due to the presence of a Natura 2000 site and caves that cannot be compensated for <sup>21</sup> .
Tadhill	Considered to be in an unacceptable location and unlikely to resume working – no evidence

<sup>21</sup> Somerset County Council. Habitats Regulations Assessment – Screening Report. September 2009.

<b>Dormant site</b>	<b>Site information</b>
	of working since 1966.
Tor Hill	Considered to be in an unacceptable location and unlikely to resume working - industrial units have now been developed within the quarry.
West Quantoxhead	The whole of the site is located within the Quantock Hills AONB and the Quantocks SSSI.

Table 3: Dormant sites unlikely to be worked again.

5.53 Two dormant sites that have potential to be worked again, although they are unlikely to be worked during this plan period, are:

- Cloford: Subject of a planning application in 2006. The application was initially recommended for approval. A change in the definition of landbank resulted in a recommendation to refuse the proposal despite providing potential environmental or local community benefit;
- Westdown: The operator of Whatley expects to replace Whatley quarry with Westdown when Whatley is completed.

5.54 Three mechanisms have been identified that could resolve issues at problem dormant and abandoned sites:

1. Seek relinquishment and reclamation of dormant sites where applications are received for increasing an excessive landbank. However, it is recognised that dormant sites are not necessarily in the control of operators seeking additional reserves and that large costs could result in limited benefit to local communities or the environment.
2. A fund to support initiatives to improve habitat or buy back sites for amenity benefit paid into by minerals operators when agreeing new permissions via a Section 106 agreement. The benefit of a fund for purchase and or/restoration of sites is that it could also be used for improvements at abandoned sites as well as dormant ones.
3. Prohibition orders may be used as a last resort in exceptional cases since this could be a costly and protracted process.

**Question 7:** Are there other sites that are unlikely to be worked again, or sites listed above which should be considered as viable for future working?

**Question 8:** Which former quarry sites (dormant or abandoned) are particularly problematic and why?

**Question 9:** For the sites that you are familiar with, what outcome would you like to see for each? Eg. Remove the risk of reopening, or restore for amenity or wildlife, or development such as housing?

### **Sand and Gravel**

- 5.55 Somerset County Council's sand and gravel apportionment is included with Devon and Cornwall County Councils as shown in Table 1 above. For this reason Somerset does not maintain a separate sand and gravel landbank. Sand and gravel at Whiteball straddles the Somerset - Devon border and supplies aggregate into both counties and contributes to our shared apportionment with Devon and Cornwall.
- 5.56 In recent years Devon has met the bulk of the shared sand and gravel apportionment. Devon proposes to maintain a landbank of 7 years in accordance with MPS1's minimum. A shortfall of sand and gravel reserves has been identified by Devon post-2019.

#### **Issue A4: How should we manage the shortfall in sand and gravel reserves?**

**Option a:** Retain the Areas of Search and Preferred Areas around Whiteball to help meet the apportionment in conjunction with Devon.

**Option b:** Review potential Areas of Search or Preferred Areas through a call for sites from the minerals industry.

**Option c:** Criteria based policy approach for new sand and gravel reserves.

- 5.57 Devon will seek to maintain a spread of sand and gravel sites to reduce transportation of these minerals and have proposals that could reduce the shortfall. In addition to these sites an Area of Search and a Preferred Area are identified at Whiteball in the existing Somerset Minerals Local Plan located on the border with Devon. These terms, defined in the glossary at the back of this report, signify that there is potential for future mineral extraction. They are located close to existing plant which is located in Devon. Part of the Preferred Area has been granted permission for extraction since the Local Plan was adopted. Unless there has been a change in local circumstances that would make these areas unsuitable, or further investigation has shown there are no mineral resources present, it is considered reasonable to bring those areas still without permission forward into the Somerset Core Strategy. The total reserves within the Area of Search and Preferred Area around Whiteball will contribute to the shortfall in our apportionment group, and maintain supply close to the Somerset market.

- 5.58 A review of sand and gravel sites in Somerset could be carried out to identify whether additional sites could assist in meeting Somerset's contribution to the apportionment and provide a greater spread of supply which would reduce transport distances. A sustainability appraisal of sites would compare the proposed sites and establish which should be identified as Areas of Search or Preferred Areas.
- 5.59 Any application for sand and gravel sites outside of the mineral designated areas can be considered on its merits in accordance with a criteria based policy. Such a policy could be used in addition to or instead of minerals designated areas. For example, requiring an application for a site outside a minerals designated area to show that there is an environmental benefit to working that site rather than a site identified as having potential minerals reserves (Area of Search or Preferred Area).

**Question 10:** Which of the options do you support for Issue A4?

### **Quarry Extensions**

- 5.60 In order to provide additional resources MPS1 states a preference for deepening and/or lateral extensions to existing quarries rather than the development of new ones. Through the aggregates issues paper it was concluded that in general, deepening of sites to maximise mineral extraction for a given land-take is preferable. This conclusion would be subject to impacts on the water regime being manageable and the resulting lake on completion of quarrying containing some shallower margins and landscaped sides to improve the final landscape, biodiversity and safety of the site.

### **Water Resources**

- 5.61 There is potential for quarrying to impact significantly on groundwater resources and as proposals for quarrying become deeper and deeper the risks are increased. The Minerals Core Strategy will continue to place a very high importance on the protection of the water regime.
- 5.62 The water resources in the Mendips are particularly pressured because they are important for public water supply, local agricultural supply and are within an area of particularly deep quarrying activity. The Mendip Hills groundwater system is complex and predicting the effects of drawdown to access minerals is also complex. The Minerals Local Plan policy advocated a precautionary approach regarding water impacts. There is no reason to alter this approach in the Core Strategy.

### **Restoration of sites**

- 5.63 Minerals development inevitably results in changes to the landscape. Careful site management, restoration and after-use has the potential to deliver social, environmental and economic benefits. The draft National

Planning Policy Framework<sup>22</sup> requires local planning policies to plan for biodiversity at a landscape-scale, promote the preservation, restoration and re-creation of priority species populations linked to national and local targets such as those identified by local biodiversity partnerships. Policy should also aim to prevent harm to geological conservation interests. These policies are presently supported at national level in Planning Policy Statement 9: Biodiversity and Geological Conservation.

- 5.64 MPS1 requires the Minerals Planning Authority to provide guidance on suitable or preferred after-uses and reclamation standards. Furthermore MPG 7 (Minerals Planning Guidance 7: Reclamation of mineral workings<sup>23</sup>) states that restoration and aftercare should provide the means to maintain or, in some circumstances, even enhance the long-term quality of land and landscapes taken for mineral extraction.
- 5.65 Restoration and aftercare schemes provide opportunities to develop and increase biodiversity (as demonstrated by the Nature After Minerals programme<sup>24</sup>), thereby helping to deliver Local Biodiversity Action Plan (BAP) targets and ultimately contribute towards national and international targets and the success of the UK BAP.
- 5.66 Research by the RSPB indicates that minerals sites could meet 100% of the targets for nine out of the 11 priority habitats in the UK BAP<sup>25</sup>. Moreover the delivery of priority BAP habitats on former sites may contribute to the value of green infrastructure networks<sup>26</sup>. The recently published Natural Environment White Paper<sup>27</sup> highlights the importance of creating better and connected habitat which is given support in the draft National Planning Policy Framework<sup>28</sup> enabling planning to contribute to the delivery of these aims.
- 5.67 Restoration and aftercare schemes provide an opportunity to support plans like the Mendip Hills AONB Management Plan<sup>29</sup>, with ambitions such as ‘in 20 years time there will be a stop in the decline of certain habitats and species and the restoration and after use of working quarries is planned and carried out to minimize their impact on the landscape’. To contribute to this, conservation work and biodiversity need to be extended off site beyond planning permission boundaries as wildlife does not recognise such boundaries.
- 5.68 Recent work<sup>30</sup> has indicated that long term development and restoration spanning a period of maybe 50 years or more and encompassing a

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<sup>22</sup> Communities and Local Government. Draft National Planning Policy Framework. July 2011.

<sup>23</sup> Communities and Local Government. Minerals Planning Guidance 7: Reclamation of minerals workings. 1996.

<sup>24</sup> Available at <http://www.afterminerals.com/>

<sup>25</sup> Mineral Products Association. Building on our legacy...realising our potential – the Minerals Planning Authority Biodiversity Strategy. 2011.

<sup>26</sup> David Tyldesley and Associates. Nature after Minerals – Review of Minerals Development Frameworks In Respect to Delivery of BAP Targets through MDF Policy. 2010.

<sup>27</sup> The Natural Choice: securing the value of nature. HM Government. June 2011.

<sup>28</sup> Communities and Local Government. Draft National Planning Policy Framework. July 2011.

<sup>29</sup> Mendip Hills AONB. Mendip Hills AONB Management Plan 2009-2014. November 2008.

<sup>30</sup> An Ecosystems Approach to Long Term Minerals Planning in the Mendip Hills. Available at [http://www.sustainableaggregates.com/strategic\\_research/sr\\_keyarea3.htm](http://www.sustainableaggregates.com/strategic_research/sr_keyarea3.htm)

cluster of sites such as those in the East Mendips, could result in more varied and beneficial quarry after-uses. However, this would entail reduced extraction in some existing sites and the allocation of new areas for future extraction in one or more less sensitive areas to make up for this reduction.

- 5.69 Guidance will be provided on preferred after-uses of individual sites isolated from other quarry operations. Depending on a site's scale and location a variety of after-uses may be suitable. Prioritisation for only BAP-focused mineral site restoration may be unreasonable as the framework of minerals planning policy (MPS1, MPG7 etc) allows Minerals Development Frameworks to support a broad range of potential after uses: amenity, geodiversity, industrial and other development. Development of sites for renewable energy generation or flood mitigation could also be considered.

**Issue A5: Restoration and after-use in the East Mendips**

**Option a:** Restoration and after-use of quarry sites should be determined on a site by site basis.

**Option b:** Restoration should be determined by meeting criteria defined in an agreed long term strategic landscape scale restoration strategy for the East Mendips.

- 5.70 The intensity of quarrying activity in the East Mendips and the rural location, together with the presence of a European nature designated site (Asham Wood) and AONB in close proximity, indicate that this area in particular could benefit from a biodiversity-focussed landscape-scale reclamation strategy. Such a strategy could span the entire period of future quarrying activity in the area and incorporate land beyond the boundaries of quarrying to enhance the biodiversity and landscape during the period of quarrying, as well as once quarrying has ceased.
- 5.71 It will be important to maintain some flexibility within any individual site restoration plan or landscape-scale strategy to ensure that future generations have the opportunity to influence final land-use based on their priorities.

**Question 11:** Which of the option do you support for Issue A5?

**Question 12:** What land uses do you think are particularly suitable for quarry after use?

## **Transport**

- 5.72 The potential for adverse impact on local communities caused by quarrying traffic has long been recognised, particularly where quarries are sited in rural areas away from strategic highways. MPS1 encourages the establishment of mineral site transport plans in consultation with the local community, dealing with matters including routing, off-site parking, considerate driving and complaints procedures.
- 5.73 In addition MPS1 encourages the movement of minerals by rail, sea or inland waterways to reduce the environmental impact. Therefore alternative transport options to road should be considered wherever possible.
- 5.74 Aggregate transport will continue to be dealt with in line with national guidance (e.g. as in MPS1, PPS13<sup>31</sup>) and in accordance with the Development Control policies.
- 5.75 Opportunities will be sought to maximise the use of the existing rail links within Somerset. Safeguarding transport links is discussed in Chapter 9: Mineral Safeguarding Areas under Wharves and railheads on page 55.

## **Managing energy impacts**

- 5.76 The UK Renewable Energy Strategy<sup>32</sup> sets out the government's commitment to supplying 15% of the UK's energy requirements from renewable sources by 2020. The Somerset Renewable Energy Strategy supports this commitment.
- 5.77 Renewable energy is unlikely to meet the entire energy requirements of quarrying operations however it would be able to provide some of the energy needs or feed electricity into the national grid.
- 5.78 Aggregate quarrying is energy intensive and consequently reducing energy consumption and the industry's overall carbon footprint are important matters. Quarry operations should aim to be as energy efficient as possible and implement measures to offset or reduce the size of their carbon footprint. Quarries can calculate their carbon output per tonne of product. However, it would be very difficult for the Mineral Planning Authority to take carbon footprint into account when determining an application since there is limited data to date. It would also be difficult to monitor and enforce energy efficiency measures.
- 5.79 Following a review of options relating to carbon footprint it was concluded that the Mineral Planning Authority could require a carbon action plan to be submitted with an application showing how the applicant has considered energy efficiency measures. Conditions could be attached to a permission to require the operator to implement efficiency measures, but only where enforceable. It is recognised that it is in an operator's interest to reduce energy use and therefore energy bills.

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<sup>31</sup> Department for Communities and Local Government. Planning Policy Guidance 13: Transport. Published March 2001, update January 2011.

<sup>32</sup> The UK Renewable Energy Strategy, Cm 7686, July 2009.

**Issue A6: Renewable energy**

**Option a:** Renewable energy schemes should be encouraged where in conjunction with minerals operations to support carbon reduction.

**Option b:** Renewable energy schemes should be considered separately from a mineral application.

**Question 13:** Which option do you support for Issue A6?

**Question 14:** Are there any forms of renewable energy generation that you do not think should be supported?

**Question 15:** Are there any forms of renewable energy generation that are particularly suited to minerals working areas that should be supported?

## **6 Chapter 6: Peat**

### **What is peat?**

- 6.1 Peat is an organic material formed from the remains of vegetation growing in wet conditions. Deposits of lowland peat have gradually built up to depths of several metres in the Somerset Levels and Moors, representing thousands of years at a rate of accumulation of around 0.45mm/year. Within the existing extraction areas peat is typically 2 to 3m thick, and exceptionally 4m thick.
- 6.2 The majority of Somerset peat is a sedge peat which is relatively dense and holds more moisture than other lighter peats. It is ideal for mixing with lighter imported peats or “light alternatives” such as coir (a coconut derivative), wood shavings or wood fibre. Some green-waste compost can be combined with sedge peat as long as it is of good quality, not too dense and is combined with other lighter materials. Following extraction and processing, peat is used primarily as a growing medium in horticulture and amateur gardening.
- 6.3 The peat industry in Somerset has historically been based in the central Brue valley to the west of Glastonbury. This area has significant ecological value and contains a variety of environmental designations ranging from local, national to even international importance. The area is also of substantial archaeological importance.
- 6.4 Peat extraction has been carried out in Somerset since Roman times. Since the late nineteenth century commercial peat extraction has been undertaken and operations were mechanised in the 1950s. The annual amount of peat extracted in Somerset grew dramatically and reached a peak of over 400,000m<sup>3</sup> a year in 1985. Since then extraction has reduced substantially largely due to environmental constraints.

### **National supply and demand for peat**

- 6.5 Peat demand was consistently around 3.4million cubic metres per year from the late 1990s until 2007. In 2007 there was a slight reduction in demand to 3.0 million cubic metres. Of this 43% was extracted in the UK and 57% imported from Eire and northern Europe.
- 6.6 Peat is predominantly used in growing media in two main markets; amateur gardeners and professional growers. Peat made up approximately 73% of growing media products sold in 2007. The remaining 27% was made up of alternatives to peat, including bark, composted green-waste, coir, wood waste and paper, and are being used increasingly.
- 6.7 The government and various environmental organisations have been encouraging the development of reduced-peat and peat-free products and providing information to the growing media users on the damaging effects of peat extraction, with the aim of achieving a reduction on a voluntary rather than legislative basis.

### Somerset supply

- 6.8 In order to establish trends in Somerset, detailed figures of past peat output and current output levels are required. We have requested these from the industry but to date they have not been forthcoming.
- 6.9 Output figures are available from the Office for National Statistics in the "Minerals Extracted in Great Britain, Business Monitor PA 1007" which is published annually. These figures are based on the Annual Minerals Raised Inquiry replies from operators.

YEAR	Office for National Statistics – Somerset output figures in m <sup>3</sup>
1998	(176,000)
1999	*
2000	102,000
2001	144,000
2002	111,000
2003	106,000
2004	96,000
2005	85,000
2006	87,000**
2007	83,000
2008	77,000**
2009	56,000
TOTAL	946,000

(176,000) Figure from Minerals Local Plan.

\* Figure not released due to confidentiality issues.

\*\* These figures are maximums as they include a very small amount from other regions (circa 1,000 to 3,000 m<sup>3</sup>).

Table 4: Somerset extracted peat sales figures.

- 6.10 To check the reliability of these figures data were sought from the Mineral Valuation Office using annual production information supplied by operators. We cannot report annual figures due to confidentiality but they were broadly similar showing a decline in Somerset peat sales through the decade and total sales for 1999 to 2009, which were around 1Mm<sup>3</sup>. Whilst some inaccuracies may arise due to differing conversion factors from tonnes to cubic metres the figures are considered to be reasonably accurate to provide a picture of the sales trend in Somerset.
- 6.11 The number of peat producers in Somerset reduced substantially from over 30 producers 20 years ago to the majority of peat extraction being carried out by four companies today. The most up to date employment figures for the Somerset peat industry show a total of 40 direct

employees<sup>33</sup>. We have asked the industry to provide employment figures to ensure we have the most up to date information.

### UK peat demand and Somerset's contribution

6.12 The Minerals Local Plan envisaged a gradual increase in demand to 2011 as predicted in Minerals Policy Guidance 13 (MPG13)<sup>34</sup>. In reality the rise in peat demand has been even greater than envisaged, but the increase has been met by increased imports. During this time UK extraction has fallen. Somerset and UK extracted peat sales figures are shown in Table 5 below.

	UK extracted peat (Mm <sup>3</sup> )	Somerset extracted (Mm <sup>3</sup> )	Somerset % contribution to UK production
1998*	-	0.176*	9%
2001	1.522	0.144	9%
2005	1.296	0.085	7%
2007	1.308	0.083	6%

\* Figures from 1998 Minerals Local Plan.

Table 5: Somerset peat extraction compared with UK extraction

6.13 The total volume of product supplied by the Somerset growing media industry since 1998 is not known; it may have increased in line with UK demand, or remained the same or fallen – we do not have figures from the industry as yet.

### Reserves

6.14 The Minerals Local Plan states that in October 1999 the peat consents contained 2.15Mm<sup>3</sup> of saleable peat (Minerals Local Plan paragraph 7.3.1). Sales totalled around 1Mm<sup>3</sup> from 2000 to 2009. An additional 0.415Mm<sup>3</sup> recently permitted, and assumed sales of 72,000m<sup>3</sup> during 2010 and 2011, leaves in the region of 1.4Mm<sup>3</sup> of peat reserves at the end of 2011.

	Mm <sup>3</sup>
Reserves at October 1999	2.15
Sales total 2000 to 2009 inclusive	-1.0
Estimated sales 2010 and 2011	-0.144
Additional permitted reserves	0.415
Remaining reserves	1.4

Table 6: Estimated peat reserves end of 2011

6.15 It is desirable to establish an accurate reserves figure for the Core Strategy. The Minerals Planning Authority has requested data on annual sales and reserves from all holders of peat permissions. The data was unavailable at the time of publishing this report.

<sup>33</sup> Office for National Statistics, 2009. 'Minerals Extracted in Great Britain, Business Monitor PA 1007.

<sup>34</sup> Communities and Local Government Minerals Planning Guidance 13: Guidelines for peat provision in England. July 1995.

6.16 In addition to requesting figures from the industry, the Minerals Planning Authority has estimated reserves using geographical and geological data together with assumptions about the way sites are worked. Sites with planning permission have been categorised according to whether they are currently not worked, have been partially worked or almost all worked out. Based on reasonable assumptions there is at least 1Mm<sup>3</sup> of saleable peat. A summary of these calculations is included as Appendix B. Further work will be carried out to establish reserves more accurately.

### **Current Planning Policies**

6.17 Peat is classed as a mineral in MPS1. Peat extraction is managed via minerals planning policy. National policy, Minerals Planning Guidance 13 (MPG13)<sup>35</sup> established the criteria for identifying sites for future peat working:

- Be of little or no conservation or ecological value.
- Contain economically workable deposits.
- Likely to become available to the industry within the Plan period.
- Are not constrained by other land use policies (e.g. high quality agricultural land).

6.18 Peat extraction is concentrated in Somerset within two Peat Production Zones. The concept of Peat Production Zones originated in 1992<sup>36</sup> as a means to increase efficiency, reduce conflict with surrounding land-uses and allow the development of a comprehensive restoration strategy. The Peat Production Zones are shown in Figure 6 in Appendix A.

6.19 In accordance with MPG13 the Somerset Minerals Planning Authority identified sufficient land to supply 90 hectares (9%) of the anticipated national requirement over the plan period. A total of 210 hectares were designated as Areas of Search to be sure that 90 hectares of workable reserves could be found by the industry. This estimated need in no way constituted a target.

6.20 The PPZs, Areas of Search, extent of the peat deposit and environmental designations are shown on Figure 6 in Appendix A.

### **National Policy update**

6.21 The recently published Natural Environment White Paper, “The Natural Choice: Securing the value of nature”<sup>37</sup>, makes a commitment by the government for English gardening to be peat-free by 2020 and professional horticulture to be peat-free by 2030. The targets are to be achieved through voluntary change by the growing-media industry and consumers rather than legislation. The draft National Planning Policy Framework<sup>23</sup>, currently being consulted on, supports this aim by including national policy for no further planning permissions to be

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<sup>35</sup> Department for Communities and Local Government. Minerals Policy Guidance 13: Guidelines for peat provision in England. July 1995.

<sup>36</sup> Somerset County Council. Peat Local Plan. 1992.

<sup>37</sup> HM Government. The Natural Choice: securing the value of nature, June 2011.

granted for peat extraction in England. Together these documents show a clear direction of travel by the government and need to be considered<sup>38</sup> in relation to the options being proposed for the future Minerals Core Strategy. Although policy contained in the draft National Planning Policy Framework is being consulted on and is not adopted policy yet, it is capable of being a material consideration<sup>39</sup>. If the peat policy in the draft National Planning Policy Framework is retained in the final adopted policy document Somerset Minerals Planning Authority will **not** be able to grant permission for peat extraction.

### **Landbank policy**

- 6.22 Appropriate levels of permitted reserves (landbank) should be maintained for non-energy minerals (MPS1, Para. 15 Supply) of which peat is one. Maintaining adequate and steady supply of minerals is important for achieving the national objectives for minerals. Conversely over-supply is recognised as potentially harming to sustainability objectives; in particular prudent use of natural resources and maximising the use of alternatives before considering the extraction of primary materials should be considered. Excessive permissions may also risk legacy sites of unrestored peat workings should the demand for the mineral drop rapidly, a particular risk for peat given the government's peat-free stance.
- 6.23 The average Somerset extracted peat sales for 2007 to 2009 was 72,000 cubic metres. If the sales rate falls steadily to zero by 2030 around 700,000 cubic metres of Somerset peat will be needed. This is an over estimate since amateur gardeners use a larger proportion of peat than the professional horticulturalists. The rate of demand should therefore fall more rapidly to 2020. Given estimated reserves in Somerset are well in excess of 700,000 cubic metres there will be no need for any new reserves to be permitted during this plan period.
- 6.24 However, there are uncertainties regarding progress towards the zero-peat targets. Although it seems unlikely, if demand cannot be met from English peat supplies imported peat could increase which would increase HGV movements on Somerset's roads, increase the total carbon output and export environmental and archaeological damage, perhaps to locations with less control than provided by the English planning system.
- 6.25 To provide flexibility in case of increased imports of foreign peat resulting from a shortfall in Somerset reserves, the Minerals Core Strategy could include a landbank policy to ensure sufficient supply of Somerset peat to meet demand. This is assuming that the ban on granting peat permissions is not retained in the final National Planning Policy Framework – the current draft is very clear that no new permissions will be granted.

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<sup>38</sup> Written Statement by The Minister of State for Decentralisation (Mr. Greg Clark). 23 March 2011.

<sup>39</sup> Advice produced by the Planning Inspectorate for use by its Inspectors, National Planning Policy Framework Consultation Draft, revised September 2011.

- 6.26 There is no guidance on the size a peat landbank should be. MPS1 identified the time and investment needed to progress from identifying a resource to supplying a product into the marketplace as considerations for the size a landbank needs to be. The sand and gravel landbank minimum is set at 7 years in MPS1. It should be a quicker to move from identifying peat resources to reaching the market place since less specialist plant and lower capital investment is required to work peat (an excavator and a water pump).

**Issue P1: Establishing a landbank for peat**

**Option a:** A suitably sized landbank will be maintained to ensure adequate provision of peat whilst avoiding over supply.

**Option b:** No further peat permissions should be granted.

- 6.27 If Option a is selected for Issue P1 (dependant on national policy as well as consultation responses) acceptable applications for peat extraction will only be permitted when the landbank has fallen below the agreed limits which will be based on predicted need, unless a policy for exceptional circumstances is included whereby permission can be granted even when the landbank is “full”. This is discussed further below.
- 6.28 Based on our estimates there are sufficient reserves to meet demand throughout the plan period. However, a landbank policy will provide flexibility to react to changes in the market such as failure to change consumer habits or inability to supply sufficient peat-free alternatives. Under-supply of locally extracted peat could result in potential impacts associated with imported peat. The government cannot impose a ban on importing peat.
- 6.29 Issue P1 Option b does not provide flexibility to grant permission for additional reserves if demand continues, caused by failure to meet national peat-free targets. It does however protect Somerset’s peat and the local carbon store.
- 6.30 An impact assessment produced for a consultation by Defra on moving to peat-free by 2030 highlighted concern that there could be insufficient supply of alternative materials to meet the demand for growing media products. The growing media producers in Somerset have found it difficult to ensure sufficient supply of the right quality of alternatives at the right time to meet demands of a very seasonal market.
- 6.31 Several consultees were sceptical about the ability to achieve the peat-free target through voluntary change only, particularly given the failure to meet a previous target set for 2010. The government has however set up a task group and has buy-in from at least some industry representatives. The government expects the target to be met, that there will be no need for peat extraction for the English market by 2030 and

that there are sufficient reserves to meet demand in the interim<sup>40</sup>. The government has indicated that there may be a move to legislative measures if the target is not met.

**Question 16:** Which option do you support for Issue P1

**Question 17:** If a landbank policy is developed what should we consider in calculating the size of the landbank?

## Monitoring

- 6.32 In order to monitor the landbank and the impact of minerals policy in the peat extraction area information will be required from the industry on growing media sales, Somerset extracted peat sales, imports of alternatives and foreign peat, and reserves data. It is hoped that annual sales and reserves data can be collected with the support of the industry, but should this not be the case the Minerals Planning Authority will use their knowledge of peat working and the Annual Minerals Raised Inquiry data published by the Department of Communities and Local Government<sup>26</sup> to inform the reserves estimate. The Annual Minerals Raised Inquiry data are considered to be reasonably accurate, although different peat producers may apply slightly different conversion rates from tonnages to volume output<sup>41</sup>. This source of uncertainty will still exist if the County Council collects data directly.
- 6.33 Following consultation with peat industry representatives it is understood that there are permitted reserves that may never be worked, which the industry considers should not be included in reserve estimates. Further information is being sought from the industry and holders of extant permissions. Planning permissions are tied to the land and if the site owner chooses to sell the land the permission passes to the new owner. A planning permission can be given up voluntarily but there are legal costs associated with this. Without revocation, reserves contained within a valid workable permission should be included in the reserve calculations.
- 6.34 If the National Planning Policy Framework prevents further peat working it will be important to continue monitoring the peat industry in order to identify negative impacts of the policy if they occur and alert government.

## Peat Production Zones and future workings

- 6.35 Via the peat issues paper we asked whether removing the Peat Production Zones could provide benefits. The consensus was that they

<sup>40</sup> Email correspondence with Judith Stuart, Defra, August 2011 (DM # 481936).

<sup>41</sup> Pers. Com. Andrew Lipinski, Communities and Local Government, 8 March 2011.

have been effective in constraining the impacts of peat extraction both on the environment and local communities and should remain.

- 6.36 Areas of Search are identified in the Minerals Local Plan both within and adjacent to the two Peat Production Zones to provide sufficient land for future peat working. Some respondents to the issues paper suggested it would be simpler to include Areas of Search within the Peat Production Zones to avoid confusion.
- 6.37 Based on available data there are sufficient peat reserves to meet anticipated demand for this plan period (Figure 6 in Appendix A shows the location of permitted, workable peat reserves in Somerset). However, if a landbank policy is included in the Core Strategy it may be appropriate to identify areas for future extraction depending on final reserve calculations. If areas for future extraction are to be identified this will be through consultation with local communities and the peat industry.
- 6.38 Publication of the National Planning Policy Framework is expected before submission of the Core Strategy and will set national policy for minerals. If further peat permissions are prevented at a national level the Core Strategy will also prevent future permissions.

### **Sites with potential to harm European designated wildlife sites**

- 6.39 A screening process has identified 70 sites with permission for peat extraction that may have the potential to negatively impact on the Somerset Levels and Moors Special Protection Area (SPA), a European nature designation. These sites are known as “Regulation 63” sites. The owners/operators of these sites have been contacted to inform them that their permission will have to be reviewed under the Habitats Regulations Assessment legislation. Further work is required to identify which sites of the 70 listed will have a detrimental impact on the SPA if worked. Each site will be reviewed to establish whether complete revocation or modification of the permission is most appropriate. Revocation or modification of a planning permission that results in a loss of asset value requires those losses to be compensated from the public purse.

#### **Issue P2: Sites with potential to impact on the Somerset Levels and Moors Special Protection Area.**

**Option a:** Permissions that will have a detrimental effect on the Somerset Levels and Moors Special Protection Area can be voluntarily revoked and offset by grant of permission at an alternative less sensitive site. The replacement site will still have to be acceptable in planning terms.

**Option b:** Peat permissions that will have a detrimental effect on the Somerset Levels and Moors Special Protection Areas should be reviewed and permissions modified or revoked as appropriate. Loss of asset will have to be compensated from the public purse.

- 6.40 If national policy continues to provide an option for new peat permissions, local policy could be developed that would enable the industry to give up, or assist other parties to give up, permissions in sensitive areas in return for planning permission elsewhere in a less sensitive location. Note that Option P2a for issues P2 cannot be implemented if the National Planning Policy Framework is adopted with a ban on all new peat permissions.
- 6.41 Both options protect the Somerset Levels and Moors Special Protection Area.
- 6.42 Option a for Issue P2 provides a mechanism to reduce the financial impact of revoking permissions on public finances, and therefore tax payers. Option P2a also delivers an environmental benefit in terms of reducing the pressures on the Somerset Levels and Moors Special Protection Area. In order for the option to be financially viable there may be pressure to grant permission for a larger reserve than that being revoked which will result in a higher carbon loss and therefore increased impact on climate change. However, replacement of reserves within Somerset could result in reduced carbon output compared with supplies of peat provided from carbon sequestering peat-bog requiring greater transport to processing and market.
- 6.43 Option b for Issue P2 is the default position since it is the Council's responsibility to review and where necessary to protect the Somerset Levels and Moors Special Protection Area, revoke or modify the minerals permission and compensate the permission holder accordingly for loss of asset. This option protects the local habitat. It also reduces carbon loss and transport impacts as long as there is no need to replace reserves from local sources at a later date thereby negating the carbon saving. However, Option P2b results in significant public costs at a time of financial constraint. There are indications that the majority of costs associated with revocation and modification will be met by Defra.

**Question 18: Which option do you support for Issue P2?**

## **Transport**

- 6.44 Peat is transported from extraction areas to factory sites where it is processed, blended and usually bagged ready for sale. Transport from extraction areas to factory sites is normally carried out by agricultural tractor and trailer units. Finished peat products are transported from factory sites by heavy goods vehicles. Further heavy goods vehicle movements occur when alternative materials and imported peat are brought into the factories and subsequently dispatched for sale.
- 6.45 Factory sites are almost all located within the Peat Production Zones but tend not to be located on designated freight routes. The locations of peat factories are shown on Figure 7 in Appendix A.

- 6.46 A report was produced by Somerset County Council in 2007 on lorry movements in the area (Somerset Levels HGV Management Study). The report found there were relatively low numbers of heavy goods vehicles in the area and that the peat industry did not contribute a significant proportion to overall vehicle movement, however the perceived impact is a genuine concern due to the size of the vehicles and condition of the roads used.
- 6.47 If the peat-free target is achieved there will be greater need for imported materials to be transported to the growing media factories and increased HGV traffic is therefore anticipated. The peat industry has also indicated that a response to government targets towards zero-peat could mean a rapid rise in the rate of peat extraction<sup>42</sup>. Management of HGV traffic is therefore important for highway safety and to maintain the tranquil nature of the Levels and Moors.
- 6.48 To reduce impacts a transport plan will be required to accompany any planning applications which will identify vehicle routes, the frequency of vehicle movements, vehicle types and also demonstrate how any harmful effects will be avoided on the local highway network. Transport impacts will also be considered through a process of review of old minerals permissions which brings working practices up to modern standards and takes place every 15-years. Planning conditions or planning obligations will be used where possible to control escalation of impacts that could arise from increased extraction rates of Somerset dug peat.

### **Factory Sites**

- 6.49 Several of the peat factory sites have a planning status that allows them to operate independently of any peat extraction permission. The future use of these factory sites is unlikely to be under the control of Somerset County Council, unless it relates to a minerals or waste activity. Planning control for development other than minerals extraction or waste management and associated buildings and plant is a district council issue and is dealt with by Mendip and Sedgemoor district councils.
- 6.50 After any peat use has finished, those factory sites that are Class B2 use can be used for general industrial activities although this may not be desirable due to the location of the sites. Somerset County Council will liaise with the district councils over the potential after-use of factory sites and work towards a beneficial use where it can provide positive enhancement to the local area and will not create unacceptable environmental impacts if possible.
- 6.51 Growing media processing sites will be encouraged to relocate to more suitable locations closer to good transport links.

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<sup>42</sup> Defra. Summary of responses to the consultation on reducing the horticultural use of peat in England. June 2011.

## Reclamation

- 6.52 The reclamation of former peat extraction sites is a concern due to relatively little restoration having been carried out historically. Improvements have been achieved through modern working conditions that have been attached to old planning permissions via planning legislation brought in through the 1980s and 1990s<sup>43, 44</sup>.
- 6.53 The draft National Planning Policy Framework<sup>45</sup> requires local planning policies that plan for biodiversity at a landscape-scale to promote the preservation, restoration and re-creation of priority species populations linked to national and local targets such as those identified by local biodiversity partnerships.
- 6.54 Extensive reclamation to nature conservation is possible and has occurred in areas of former peat extraction. The majority of these areas were restored by nature conservation organisations following the withdrawal of a major peat producer from Somerset. Unlike many of the peat extraction sites, these sites were only partially worked and therefore benefited from peat remaining within the excavations. Most extraction sites in Somerset remove all the peat, leaving relatively deep water overlying a clay base which limits restoration opportunities.
- 6.55 Three potential options for site restoration and afteruse following peat extraction are provided in the Minerals Local Plan, these options are:
- Activities that promote nature conservation and enhance wildlife conservation.
  - Agriculture or forestry use that does not conflict with the maintenance and promotion of the wildlife interest.
  - Areas for land and water based activities which do not conflict with the wildlife interest and quiet nature of the area.
- 6.56 These restoration options were included in a framework map within the Minerals Local Plan that identified broad areas where restoration types would be most suitable. By locating similar restoration types in particular areas it was thought that a greater potential benefit could be achieved and impacts controlled. Some responses to the issues paper on peat highlighted that there is some mismatch between adjacent land uses following restoration despite the restoration framework. The framework map of restoration options is shown on Figure 8 in Appendix A.
- 6.57 Water management in terms of flood protection, water storage and water quality improvement are issues that have increased in importance in recent years. There may be forms of restoration which could be effective in addressing some of these aims. These activities support the aims of the Water Framework Directive<sup>46</sup> and may be able to attract funding.

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<sup>43</sup> Planning and Compensation Act 1991: Interim Development Order Permissions

<sup>44</sup> Environment Act 1995: Review of Mineral Planning Permissions.

<sup>45</sup> Communities and Local Government. Draft National Planning Policy Framework. July 2011.

<sup>46</sup> EU Water Framework Directive 2000/60/EC

- 6.58 It is important that end-uses do not result in inappropriate quantities or types of traffic on unsuitable roads. Peat sites are located in an area recognised for tranquillity and land-use proposals will need to take this into account.

**Issue P3: Reclamation Framework**

**Option a:** The framework for reclamation included in the Minerals Local Plan is still relevant and should continue to guide the type of restoration and after-use of sites

**Option b:** A framework for reclamation allows the industry and community to work towards a positive landscape and range of after-uses in the area, but the Framework in the Local Plan needs to be revised to reflect changes in the industry and opportunities such as biodiversity ambitions of the Natural Environment White Paper

**Option c:** Restoration options should not be prescriptive and should allow for a variety of beneficial land uses. It should be the responsibility of the developer to demonstrate the benefits of the restoration and after-use scheme.

**Question 19:** Which option do you support for Issue P3?

**Question 20:** Which after uses should be included within a restoration framework and why?

- 6.59 If a new reclamation framework is to be produced this would be the subject of local consultation with the peat extraction industry, landowners and the local population.

**Carbon**

- 6.60 Peatlands cover a small proportion of the Earth's surface but they comprise a large accumulation of organic matter and are important carbon stores. Carbon is released from peatlands by a variety of mechanisms including erosion, drainage and peat extraction. The protection and preservation of peatlands reduces potential carbon loss and helps mitigate against the effects of climate change.
- 6.61 Work carried out in 2009 (Carbon Storage and Sequestration in the Somerset Levels, UK. A G Brown) suggests that soil wastage due to agricultural practices is the largest source of carbon loss from the Somerset Levels and is greater than the loss from peat extraction. However, peat extraction does contribute to the loss of carbon.

- 6.62 The peat industry also produces carbon emissions through other activities including energy and fuel used in peat extraction, processing and transportation. Measures to reduce carbon emissions include transport improvements and reduction in energy consumption.
- 6.63 Certain types of site restoration, such as reed beds depending on their end use, have the potential to provide new carbon storage and could lessen the industry's carbon footprint. This would be a topic for consultation during the development of a revised framework for reclamation should a revised framework be the preferred option under Issue P3.

## **7 Chapter 7: Building Stone**

- 7.1 The use of the term building stone in this paper refers to all natural stone products (as detailed in MPS 1 and the MPS1 practice guide), including products such as architectural masonry (dimension stone), walling stone, roofing stone, paving etc.

### **Why are our building stones important?**

- 7.2 Building stones are a key part of the economic minerals sector in Somerset and their use is integral to the distinctive character and the built heritage of the County.
- 7.3 Building stones are used on existing buildings for restoration, conservation and extensions as well as for new building work. The use of appropriate natural building stone is a material factor in maintaining the local character of buildings in the County and particularly in Somerset's 173 Conservation Areas. It is therefore important to ensure that an adequate supply of building stones is available for conservation and new building work so that the character of the County is maintained.
- 7.4 The use of local stone is generally preferred to the use of reconstituted and/or imported stone which can have differing aesthetic or physical characteristics to local stone, particularly after weathering. Imported building stone, reconstituted stone or the wrong type of local stone may become increasingly used in building works unless there is a suitable source of supply of all in-demand Somerset stone types. Historically many more building stone types have been used in Somerset buildings than are worked at present. Even materials taken from the same geological unit can have distinct differences.
- 7.5 The use of imported or alternative materials also raises issues in relation to transport, carbon footprint and exported environmental and social impacts which do not meet the sustainability aims of national minerals policy.

### **Planning policy for building stone**

- 7.6 Government advice on minerals planning is contained within MPS1: Planning and Minerals and the accompanying Practice Guide. Annex 3 of MPS1: Planning and Minerals deals with natural building and roofing stones and recognises the importance of ensuring an adequate supply of material to maintain the built character of local areas.
- 7.7 Planning Policy Statement 5<sup>47</sup> highlights the importance of recognising the value of the built environment with the following recommendations:
- Recognise that heritage assets are a non-renewable resource and take account of the wider social, cultural, economic and environmental benefits of heritage conservation.

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<sup>47</sup> Communities and Local Government. Planning Policy Statement 5: Planning for the Historic Environment. March 2010

- Ensure that the positive contribution of heritage assets to local character and sense of place is recognised and valued.
- 7.8 There is a clear need to ensure that local distinctiveness remains a strong aspect of the built and historic environment in Somerset. Where possible building stone should be reused to ensure material is not discarded or wasted. A continued supply of local stone will still be required for maintenance and restoration of older buildings, and also to construct extensions and new buildings in keeping with the historic settings, particularly in conservation areas.
- 7.9 District councils' planning documents directly influence the type of materials used in building works through policies to require the use of natural building stone in conservation areas for example. The Minerals Core Strategy must ensure that a suitable policy framework is available to support the continued provision of building stones for the current markets and uses (conservation, restoration and new build) from appropriate quarrying operations.

### **Demand for building stones**

- 7.10 Responses to the building stones issues paper commented on a lack of awareness with regards to the availability of building stone types, i.e. those being worked are not being used as effectively as they might be.
- 7.11 The future level of demand for building stones is difficult to quantify with any certainty due to the small scale and unpredictable nature of individual building projects. It is not even clear whether conservation works or new building works constitute the greatest area of demand.
- 7.12 It is clear that there is an ongoing demand for a wide variety of building stones for conservation and new building works, predominantly made up of a large number of small projects.

### **Supply of building stones**

- 7.13 There was strong support from respondents to the Building Stones Issues consultation for the provision of local stone to meet local demand.
- 7.14 Reclaimed building stone is a sustainable alternative to newly won stone, but care must be taken to avoid the loss of locally distinctive or historic buildings and structures and it cannot wholly replace the need for freshly worked building stone.
- 7.15 There are currently 14 operational building stone quarries in Somerset producing 9 different types of stone. The location of the operational building stone sites and the extent of the different geological resources are illustrated in Figure 9 in Appendix A. Historically around 30 different types of stone have been used in buildings across the county.
- 7.16 Many of the building stone types previously used within the County are no longer quarried, for example Hangman Sandstone and North Curry Sandstone. There may be a need for a supply of these materials in the future for repair and conservation of historic buildings and monuments. Building stone is generally used locally although as the

number of quarries has reduced certain types of stone have become more widely distributed within the County and beyond.

### **Quarrying of building stones**

- 7.17 The Minerals Local Plan supports quarrying of building stones as long as it can be shown that the material is needed to maintain the built heritage and character of Somerset; that no significant harm will result from the proposal and that the nature, scale and duration is appropriate.
- 7.18 Building stones are usually extracted in small scale quarries with outputs amounting to only a few thousand tonnes per year and without the requirement for blasting, unlike crushed rock aggregate production. As such, the associated impacts are more easily managed with appropriate planning conditions. Building stone quarries are often in close proximity to residential property and other sensitive land-uses and so do require careful consideration through the planning process.
- 7.19 Quarrying of building stones can be undertaken as extensions to existing sites, the reopening of old sites or the opening of new sites. The issues paper questioned whether there should be a hierarchy in the Minerals Core Strategy identifying an order of preference for future stone supplies and suggested as a possible order: extensions, reopening old sites, opening greenfield sites. Respondents considered there to be economic and sustainability advantages to lateral extensions and deepening of existing quarries where the geological resource is suitable and environmental impacts are not unacceptable. There was a general view however that a site proposal should be viewed on its merit and assessed against alternatives.
- 7.20 Regarding the opening of new greenfield sites or former workings when extensions to working quarries are not feasible or desirable, there was some expectation that former sites might be less impacting. In addition the certainty of being able to provide a good match for restoration projects was highlighted. There was also recognition that some old quarries have become important wildlife habitats or geodiversity features that require protection.
- 7.21 A further question asked whether there should be more smaller quarries or fewer larger ones. The overwhelming majority considered more smaller ones to be beneficial. Many cited the reduced environmental and local community impacts, particularly through minimising the distance materials are transported and dissipating traffic. In addition it was noted that this pattern of supply could supply the subtly different materials needed for restoration purposes, as natural variation in stone occurs even within the same geological unit over quite short distances.
- 7.22 In order to increase the number of building stone quarries, albeit small ones, new workings must be permitted, either at greenfield sites or at former sites. Economic factors may mean that even with the support of the Core Strategy for new supplies of building stone in areas currently lacking, applications for new sites are not received.

### **Increasing supply of building stone to meet local need**

- 7.23 The cost and time involved in the preparation of a planning application for building stone extraction in comparison to the level of extraction that takes place upon approval can be substantial. Consultation responses to the Building Stone Issues Paper raised this as a factor in the decline in the number of building stone quarries operating within the County.
- 7.24 Guiding applicants with regards to building stone quarry proposals so that they can have confidence to develop proposals and invest time and money in gaining permission may help to increase the diversity of building stone supply. Increasing the range of activities that can take place as part of a building stone operation may tip the balance from an uneconomic operation to a viable one.

#### **Issue BS1: Local stone for local demand**

**Option a:** Affirm the importance of building stone for maintaining local character and develop policy in support of new building stone quarries where a need for the stone can be demonstrated.

**Option b:** Consider activities and new products that could be developed at building stone quarries to enhance economic viability.

- 7.25 Option a for Issue BS1 could be further supported by the provision of clear guidance for applicants on what sort of information should be submitted in support of a building stone application. English Heritage has produced a stone study identifying building stones used in Somerset's historic buildings. Based on this information and consultation responses, a list of building stones that are not worked at present but that may be needed for future projects could be developed and opening of quarries to supply such need encouraged.
- 7.26 Option b for Issue BS1 would allow consideration of additional activities such as small scale aggregate production for ornamental use, supply of surplus waste materials for agricultural tracks, reconstituted stone products, storage and reworking of salvaged natural stone, and products developed for sale beyond the local market, such as kitchen worktops or fireplaces. MPS1 notes that it might be necessary to consider processing waste materials or low level aggregate production to avoid in-site sterilisation of resources and to ensure economic viability (Annex 3, 3.10). Nevertheless, policy must continue to place a high level of protection on the materials that are required to maintain Somerset's local character and ensures high quality materials are reserved for high quality uses. Additional output must not result in poor quality restoration or unacceptable impact on the local community or environment.
- 7.27 It is important to note that activities granted planning permission are monitored by the planning authority to ensure compliance.

**Question 21:** Which options do you support for Issue BS1?

**Question 22:** Which building stone types are in short supply or unavailable in Somerset? Please provide specific examples, if known, of inappropriate stone use in sensitive locations.

**Question 23:** What additional activity do you think could provide additional revenue and could be compatible with a building stone quarry?

**Question 24:** Which factors should be considered by the Minerals Planning Authority in determining whether additional activities are appropriate?

## **8 Chapter 8: Energy Minerals**

### **Coal**

- 8.1 Somerset's geology includes Coal Measures. In the past coal has been mined in the County. We do not expect to see coal mining or shallow coal workings reactivated in Somerset in the foreseeable future. The draft National Planning Policy Framework includes a presumption against coal working which indicates that the government would prefer to see energy supplied by cleaner alternatives. It is nevertheless important to conserve energy minerals for future generations since energy provision is so important to quality of life. This is covered in the next section on Minerals Safeguarding.

### **Oil and gas**

- 8.2 Off-shore oil and gas production is expected to decline significantly over the next few years and so there has been a greater emphasis on developing on-land supplies, in addition to encouraging non-fossil fuel based energy technologies.
- 8.3 The Department for Energy and Climate Change (DECC) manages the release of licences which give exclusive rights for exploration and extraction of oil and gas resources within a defined area. The licence does not provide an exemption from other legal/regulatory requirements, such as any need to gain access rights from landowners, health and safety regulations, or planning permission from relevant local authorities. A total of three licences have been issued which are located entirely or partially in Somerset.
- 8.4 There are three distinct phases of development: exploration; appraisal and production. Communication with the Minerals Planning Authority will be encouraged at all stages, including when activities that don't need planning permission<sup>48</sup> are to be carried out.
- 8.5 Exploration: In the first instance this may mean seismic surveys. These surveys are generally very limited in their environmental effects and short in duration. As such seismic surveys may not need planning permission, subject to certain conditions. All borehole drilling associated with exploration for petroleum must have planning permission. Liaison with the Environment Agency will also be required to agree methods to protect water supplies from pollution and to ensure safe disposal of drilling mud and cuttings.
- 8.6 Appraisal: If exploration indicates there are resources present, further testing is carried out to establish their extent and viability of exploitation. At this stage proposals for wells will be considered for their long-term suitability and potential environmental effects since these wells may be used for production.

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<sup>48</sup> The Town and Country Planning (General Permitted Development) Order 1995

- 8.7 Production: Development of gathering stations where petroleum products are separated, purified and treated, and any pipelines, will need careful planning to minimise impacts on communities and the environment.
- 8.8 The Core Strategy will include policies that distinguish between these three phases of development. Environmental and other constraints on production and processing sites within areas licensed for oil and gas exploration and production will be identified. Policies will identify the range of impacts that could result from oil and gas exploration and production, such as noise, traffic, timing and method of flaring of gas, and will highlight the need for conditions to be imposed on planning permissions to manage such impacts.

## 9 Chapter 9: Mineral Safeguarding Areas

### What is Safeguarding?

- 9.1 Mineral resources are finite and can only be worked where they naturally occur. Sustainable minerals policy requires that we manage these natural resources carefully to ensure there are sufficient supplies for future generations. Unlike minerals activity which is a temporary land use (even though some minerals operations may be active for many decades) we know that construction of housing or offices will be permanent and any mineral resources located underneath, or close to that development, will become inaccessible or “sterilised”.
- 9.2 One of the purposes of the planning system is to balance the various competing demands on land use. Safeguarding mineral resources simply means that the presence of mineral resources is flagged up for consideration alongside all the other issues that are taken into account when deciding whether to grant a planning permission. It may be that the non-mineral development can be located in an alternative more sustainable location, or that the minerals can be removed prior to the development being constructed (known as prior-extraction), or, on balance, the overriding need for the development is greater than the need for the mineral.
- 9.3 Government advice on minerals safeguarding is contained within MPS1, the accompanying Practice Guide and “Mineral safeguarding in England”<sup>49</sup>. These documents require mineral planning authorities to define Mineral Safeguarding Areas in local development documents. The Mineral Safeguarding Areas should contain resources that are of sufficient economic or conservation value to warrant protection for future generations.
- 9.4 It is very important to note there is no presumption that resources defined in Mineral Safeguarding Areas will be worked. It may be that there are no environmentally acceptable areas for minerals working within the context of current planning policies within a Mineral Safeguarding Area.
- 9.5 Where a greater level of likelihood with regards to a resource being worked exists, in addition to being within a Mineral Safeguarding Area, a further designation in order of increasing certainty: Area of Search, Preferred Area or Specific Site will be applied. To be defined as an Area of Search, Preferred Area or Specific Site we will need to: have more information about the quality and quantity of mineral present; be more certain that the area could be worked in a way that would meet the requirements of local and national policy; know that the minerals industry and landowners are interested in working in the area; recognise a need for the mineral within the lifetime of the plan, or foreseeable future thereafter.

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<sup>49</sup> British Geological Survey, 2011. Open Report OR/11/046. Mineral safeguarding in England: good practice advice.

- 9.6 MPS1 also requires the safeguarding of existing and potential sites for mineral transport and storage such as wharves and railheads and for production facilities for concrete, asphalt and for alternative materials.

### **Defining the Mineral Safeguarding Areas:**

#### **Which minerals are to be safeguarded?**

- 9.7 Consideration needs to be given to which mineral resources may be of economic importance in the future. As highlighted in the introduction, a variety of minerals have been extracted in Somerset in the past. A relatively limited range is currently worked. It is proposed that for the purposes of safeguarding all minerals currently worked should be safeguarded for the future:
- Carboniferous limestone (consider separately aggregate and industrial-grade resources);
  - Silurian andesite;
  - Blue Lias;
  - White Lias;
  - Budleigh Salterton Pebble Beds
  - Inferior Oolite
  - Forest Marble
  - Cornbrash
  - Ham Hill Stone
  - Sand and gravel (recent and Permo-Triassic)
  - Peat.
- 9.8 In addition minerals that have not been worked for a while, but that may become economic again are:
- Brick clay: proximity of source to use from the perspective of both sustainability and transport cost. Shallow working – could be suitable for prior extraction where a sufficiently large construction area is planned.
  - Shallow coal: national energy minerals increasingly given consideration given our dependence on energy minerals from other parts of the world, including politically unstable areas. Could be suitable for prior extraction where sufficiently large construction area is planned.
  - Building stones identified in historic buildings but not currently being worked will be required for maintenance at some point in the future.
  - Devonian Sandstone with high polished stone value – comparable with the Silurian andesite with regards to end use as roadstone. Entirely located within the Quantocks AONB and recently worked sites are sited on small country roads which are not suitable for quarry working. There are no proposals to reopen historic sites. However, these materials are

important for maintaining safe road surfaces and may become important in the long term as more environmentally acceptable sites are worked out.

**Question 25:** Do you agree with the mineral types listed for safeguarding? Are there any others you would include?

## **Defining the boundary for each mineral to be safeguarded**

### **Stage 1: Geological resource**

- 9.9 A good starting point is the British Geological Survey resource map for Somerset. The Mineral Safeguarding Areas should be refined where better geological data are available. As part of a review of stability of tips associated with old minerals workings carried out on behalf of Somerset County Council<sup>50</sup> an extensive list of mineral workings across the county was produced, identifying some 1300 old workings. The location of these sites will also provide some indication of where economic mineral reserves may be found in the future. The minerals industry will also be consulted independently of this consultation paper to work on the final resource boundaries for safeguarding.

### **Stage 2: Extent of the resource to be safeguarded**

- 9.10 The process of consultation that is required to safeguard minerals in a two-tier authority such as Somerset County Council, takes up staff time. It is important to identify a way to maximise the protection of important mineral resources whilst minimising the time required to consider planning applications that are unlikely to have an effect on future working of minerals eg. an extension to an existing residence, or an agricultural shed. Unnecessary consultation can be managed through an exceptions list via a development control policy and through communication with and training of district colleagues, as necessary.
- 9.11 Further aspects to be considered are whether to include or exclude urban areas and areas with designations that are not generally compatible with mineral working, such as conservation or landscape designations. Guidance indicates that these areas should only be removed from Mineral Safeguarding Areas if justifiable, for example there is a very large reserve and/or the mineral extraction method would be incompatible with working in a built up area, such as blasting required for hard-rock extraction.
- 9.12 Mitigation measures required to protect sensitive neighbouring property from impacts associated with quarrying activity, for example noise and vibration limits, can result in sterilising mineral resources. It may therefore necessary to add a buffer to a Minerals Safeguarding Area to protect both mineral resources from such sterilisation and future residents from unwanted impacts. The buffer will depend on the mineral

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<sup>50</sup> GWP consultants. March 2007. Identification of disused tips and assessment of their danger to the Public for Somerset County Council.

type and therefore extraction method, eg. hard rock requiring blasting will need a larger buffer than say machine-dug sand and gravel resources. Current policy in the Minerals Local Plan has allowed a minimum buffer around existing minerals workings as shown in Table 7 below.

<b>Mineral Working</b>	<b>Minimum Buffer</b>
Peat sites and building stone quarries	100m
Low-output aggregate quarries (<250,000 tonnes/year)	200m
Higher-output aggregate quarries	400m

Table 7: Buffer zone for minerals extraction sites

**Question 26:** Are the buffers listed above appropriate? If not what buffer would you propose and why?

### **How does safeguarding work?**

- 9.13 In two tier planning authority areas mineral safeguarding is achieved by county councils and district councils cooperating in the safeguarding process. Mineral Consultation Areas based upon the Mineral Safeguarding Areas must be identified and included within the Minerals Core Strategy and district councils' development frameworks, together with at least one appropriate policy in the Minerals Core Strategy. For robust safeguarding and to allow for adequate consultation to be carried out between the County Council and district planning authorities, the whole of the extent of the Mineral Safeguarding Areas will be covered by a Mineral Consultation Area.
- 9.14 In addition Mineral Consultation Areas are also to be used to protect non-mineral activities such as wharves, railheads and production facilities.
- 9.15 When a district planner receives a planning application they will check which designations apply within the location of that application. Mineral Consultation Areas will be incorporated in their development plans and the district planner will therefore know to notify the Minerals Planning Authority (the County Council) about the proposal. This will allow the Minerals Planning Authority time to comment on the significance of that proposal on the winning and working of minerals before the district determines the planning application for the non-mineral development. If the district permits the application despite an objection from the Minerals Planning Authority, the Minerals Planning Authority is notified and given the opportunity to request that the application is called in by the Secretary of State.

### **Wharves and railheads**

- 9.16 MPS1 encourages the safeguarding of existing and potential future railheads and marine wharfs. The transportation of minerals by rail and sea avoids the use of road transport.

- 9.17 The safeguarding of existing facilities and the identification of future sites including wharves, ports and depots is important to promote movement of material by rail and by sea.
- 9.18 Within Somerset there are currently two railheads, one at Torr Works and one at Whatley Quarry in the Mendips where substantial amounts of crushed rock aggregates are despatched by rail. In addition Dunball Wharf, north of Bridgwater, is used to land marine sand for construction uses and imported peat. Dunball Wharf is safeguarded in the existing Minerals Local Plan.
- 9.19 It is proposed to safeguard the two railheads and the wharf in the Minerals Core Strategy. Proposals for additional wharves or railheads that come to light via this options consultation will also be considered for protection.

### **Production facilities and alternative materials**

- 9.20 MPS1 also refers to the safeguarding of existing facilities and potential future sites for producing concrete and asphalt materials and for the production of alternative aggregate materials. There are a number of existing production facilities in Somerset in a variety of locations including in quarries, waste management sites and at industrial premises.
- 9.21 The existing Minerals Local Plan supports the use of facilities at quarry sites. Facilities located at quarry sites are normally linked to the life of the quarry operation and would be removed at the end of the quarry operations as part of reclamation. Such facilities will be protected from sterilisation by other development by safeguarding the minerals activity as a whole. Therefore it is not felt necessary to safeguard existing facilities and potential future sites for concrete and asphalt manufacture or for the production of alternative primary aggregate materials located at working quarries.
- 9.22 Production sites outside of quarrying areas will be considered for safeguarding.

### **Final considerations in refining boundaries**

- 9.23 It is likely that more detailed reasoning that will define the final boundaries of the safeguarding areas will be adjusted for each mineral type eg. the Carboniferous Limestone is very extensive and it may therefore be justified to safeguard only a part of the resource; the Silurian andesite is limited in extent and is a strategic source of road surfacing material and therefore should be safeguarded in its entirety; historic building stones no longer worked may only require small areas to be safeguarded because of the very limited need anticipated for the future.

**Issue MSA1: Safeguarding minerals for future use**

Previous consultation on safeguarding via the Aggregates Issues consultation paper highlighted a lack of understanding regarding the issue. It is hoped that the information provided above helps to clarify the purpose and process for safeguarding minerals and associated facilities.

Given the technical nature of safeguarding minerals and associated facilities, the Minerals Planning Authority will define the mineral safeguarding areas and mineral consultation areas based on the requirements of MPS1, the accompanying guide and best practice (BGS, 2007) and discussions with the minerals industry. Areas identified for safeguarding will be included in the pre-submission Core Strategy and will be consulted on in detail at that stage.

**Question 27:** Do you have concerns about the Minerals Planning Authority identifying areas for safeguarding?

## **10 Chapter 10 – Development Control Policies**

10.1 The Minerals Core Strategy should not repeat national policy and should be locally distinctive. The recent draft National Planning Policy Framework proposes to replace a raft of national planning policy with a very brief document. The draft supports sustainable development and continues to highlight key aspects of minerals policy set out in MPS1 presently. However, more detailed policy will be required at a local level to assist planning officers in determining planning applications and what is sustainable following the removal of the existing detailed national policy.

10.2 The following list outlines the topics that Somerset County Council feel requires local policy guidance for minerals in Somerset in light of the draft National Planning Policy Framework:

- Minerals operations and potential impacts located in or neighbouring to AONBs.
- Minerals operations affecting Sites of Special Scientific Interest or National Nature Reserves.
- Mineral operations in local designations for example: County Wildlife Sites, Regionally Important Geological or Geomorphological Sites.
- Mineral operations and potential impacts and benefits to biodiversity/geodiversity.
- Minerals operations and potential impacts in areas of important landscape character, namely areas outside of World, European and National designations.
- Protecting the Historic Environment including Listed Buildings, areas of known and proven archaeology, Conservation Areas, Historic Parks, Gardens and Battlefields, and Scheduled Ancient Monuments.
- Mineral operations in areas of best and most versatile agricultural land.
- Protection of Public Rights of Way.
- Restoration and after use of minerals sites.
- Borrow pits.
- Mineral operations and traffic.
- Minerals operations and dust, lighting, vibration and noise.
- Minerals operations and alternative energy production.
- Mineral operations and effects on the stability of neighbouring land and properties.
- Protection of water resources.
- Sites for the disposal of minerals wastes.

- Cumulative impact of mineral operations.

**Question 28:** Do you agree or disagree with the above list? Please state why?

## Glossary

**Abstraction:** The removal of water from a surface water source or from groundwater, usually for some use such as dust suppression or from an area of mineral extraction as part of the process of quarry dewatering.

**Active (status of quarry):** currently operational.

**Aftercare:** The cultivation, treatment and management of land, following completion of mineral working, creation of the final restoration landform and replacement of soils, to bring land to the required standard for use for agriculture, forestry or amenity.

**After-use:** The use of land after restoration for such activities as agriculture, forestry, nature conservation, public open space, recreation or other development.

**Alternative aggregates:** Waste materials from industrial or non-aggregate mineral extraction, eg. china clay or slate, which is suitable for use in construction work.

**Aggregate:** Crushed hard rock, such as limestone, or land-won or marine-dredged sand and gravel extracted and processed for use in construction.

**Annual Monitoring Report:** A report which monitors and reviews the delivery of the local development documents and identifies trends in minerals and waste and the usage of minerals and waste policies.

**Area of Outstanding Natural Beauty (AONB):** A national designation for the purpose of conserving and enhancing areas of high landscape value. Somerset contains the entirety of the Quantocks Hills Area of Outstanding Natural Beauty and parts of three others, the Blackdown Hills, the Mendip Hills and Cranborne Chase and West Wiltshire Downs.

**Apportionment:** The subdivision of the Government guidelines for the supply of aggregates between regions in England. Sub-regional apportionment is the split of regional guidelines between individual Mineral Planning Authorities.

**Area of Search:** Area where there is some indication that economic mineral resources are present and planning permission for mineral extraction could be granted to meet any shortfall in supply, if suitable applications are made. Also see Preferred Area.

**Back haul/back load:** Where a lorry delivers materials and then returns with an alternative load, for example delivering primary aggregates and returning with waste materials for reprocessing.

**Borrow pit:** A temporary mineral working to supply material for a specific construction project local to the pit.

**Conservation Area:** Area of special architectural or historic interest, the character of appearance of which it is desirable to preserve or enhance.

**Crushed rock:** Naturally occurring rock which is extracted and crushed into a series of required sizes primarily to produce a construction aggregate.

**Development Plan Document (DPD):** Documents which form the statutory development plan and which contain planning policies and proposals.

**Dewatering:** The process of removing water, usually groundwater, from a quarry area to allow for the safe and efficient extraction of the mineral reserve.

**Dormant (status of quarry):** Defined in the Environment Act 1995 as a mineral site where no mineral development has taken place to any substantial extent in, on, or under the site at any time in the period 22nd February 1982 and 6th June 1995. A dormant site cannot be worked without agreeing modern working conditions with the Minerals Planning Authority.

**Environmental Assessment:** The method of determining the environmental impact of a development proposal often accompanying a planning application.

**Habitats Regulation Assessment (HRA):** Under European legislation an assessment is required for local development documents and for particular development projects in order that the integrity of internationally important nature sites is protected.

**Inactive (status of quarry):** Worked in the period 22nd February 1982 and 6th June 1995 and possibly post this period. Is not currently operational but has agreed working conditions and could reopen.

**Inert fill:** Waste material that is chemically and physically stable and innocuous which is sometimes used in the restoration of mineral extraction sites to alter the profile of land.

**Landbank:** A “stock” of mineral reserves within a particular planning authority area. Government guidance is for a landbank of at least ten years to be maintained for crushed rock and seven years for sand and gravel.

**Local Nature Reserves:** Sites with nature conservation value which is significant at the local level. The designation does not carry any statutory protection.

**Marine-dredged aggregates:** Sand and gravel dredged from the seabed and landed at wharves for use as an aggregate.

**Mineral Consultation Area (MCA):** An area considered to contain a mineral resource worthy of safeguarding within which district/borough councils are required to consult Somerset County Council on non-minerals development proposals which could lead to possible sterilisation.

**Mineral Planning Authority (MPA):** The planning authority responsible for managing minerals development eg. Somerset County Council.

**Mineral Planning Guidance Note (MPG):** National policy and advice documents on mineral planning issues gradually being replaced with Minerals Policy Statements (MPS).

**Mineral reserve:** Minerals which have the benefit of valid planning permission for extraction (permitted reserves).

**Mineral resource:** Concentration of useful minerals or rocks which are or could be economically extracted based on geological considerations only. A resource area will be defined without consideration given to planning constraints.

**Mineral Safeguarding Area (MSA):** An area considered to contain an economically exploitable mineral resource which should be protected against sterilisation by other development.

**Minerals:** Naturally occurring materials usually extracted by underground or surface working or by dredging.

**Minerals and Waste Development Scheme:** The timetable for the preparation of mineral and waste development documents.

**Minerals Core Strategy:** A local development document that sets out the planning framework for minerals development.

**Minerals and Waste Development Framework:** A series of documents for delivering the minerals strategy for an area, including the Minerals Core Strategy, Statement of Community Involvement and Annual Monitoring Reports.

**Minerals Local Plan:** A comprehensive set of minerals policies designed to manage mineral development within the planning authority area. The adopted document for Somerset covers the period from 1997 – 2011.

**Minerals Policy Statement (MPS):** National policy guidance for minerals development. They will replace guidance currently found in Minerals Planning Guidance Notes.

**National Nature Reserve:** Area of national and sometimes international importance for wildlife and nature conservation. Many such reserves are also Sites of Special Scientific Interest.

**Overburden:** Material which has to be removed before a mineral can be worked.

**Planning Policy Statement (PPS):** Documents containing national planning policy and supporting material such as good practice guides. They will eventually replace guidance found in Planning Policy Guidance Notes.

**Polished Stone Value (PSV):** A physical property of crushed rock aggregates which is a measurable resistance to polishing. High polished stone value materials offer a high resistance to polishing and are important in road surfacing to improve skid resistance.

**Preferred Area:** Area of known mineral resource where planning permission could be granted for mineral extraction subject to meeting the development control policies and landbank requirements of the development plan.

**Primary aggregates:** Naturally occurring sand, gravel and rock extracted for construction purposes. Also see recycled aggregates and alternative aggregates.

**Ramsar:** Sites identified as being of international importance for wetland habitats.

**Regional Aggregates Working Party (RAWP):** Groups providing technical advice to the Secretary of State in relation to the supply of, and demand for, aggregate minerals within a particular area.

**Recycled aggregates:** Recycled construction materials, produced from crushing and screening inert demolition waste, road planings etc.

**Restoration:** The return of land to its former use or another suitable and beneficial new use, once mineral extraction has been completed.

**Regionally Important Geological Site (RIGS):** Sites identified as being of geological and/or geomorphological interest with educational potential. There is no statutory protection of such areas.

**Review of Mineral Planning Permission (ROMP):** Under the Environment Act 1995, Mineral Planning Authorities are required to undertake a review, every 15 years, of all existing planning permissions for winning and working of minerals. This provides for the updating of planning conditions attached to old planning permissions.

**Reserve:** See mineral reserve.

**Resource:** See mineral resource.

**Safeguarding:** The protection of proven mineral resources, i.e. are or could be of economic importance, against other types of development which would be a serious hindrance to their extraction.

**Scheduled Ancient Monument (SAM):** A site designated as being of national archaeological importance under the Ancient Monuments and Archaeological Act 1979.

**Strategic Environmental Assessment (SEA):** The analysis and evaluation of the environmental effects of a plan or programme as required by the European SEA Directive of 2001.

**Secondary aggregates:** Materials used as a replacement for primary aggregates including mineral by-products such as waste sand from china clay, industrial wastes such as slag and railway ballast, and industrial by-products such as spent foundry sand.

**Sites of Nature Conservation Importance:** Area designated for its locally important wildlife. The designation does not carry any statutory protection.

**Special Areas of Conservation (SAC):** Site of Special Scientific Interest which is of international importance and designated under the European Habitats Directive of 1992.

**Special Protection Areas (SPA):** Site of Special Scientific Interest which is of international importance and protected under the European Birds Directive of 1979, for the conservation of rare and vulnerable birds.

**Specific Site:** Site identified for minerals development within the development plan.

**Statement of Community Involvement:** A document prepared as part of the development framework setting out when and how the community is to be involved in the preparation of the Minerals Development Framework.

**Sterilised:** The prevention of minerals extraction as a consequence of other development being situated on, or in close proximity to, minerals of economic importance.

**Structure Plan:** Part of the development plan which sets the strategic base for land use planning and a realistic and consistent policy framework. The

Somerset and Exmoor National Park Joint Structure Plan Review covers the period to 2011.

**Sustainability Appraisal:** The process of appraising the social, environmental and economic effects of policies so that decisions can be made that accord with the objectives of sustainable development.

**Sustainable development:** The concept of meeting the needs of today without compromising the ability of future generations to meet their needs.

**UK Biodiversity Action Plan (BAP):** A plan which describes the biological resources of the UK, and sets out aims and actions for conservation and enhancement of these resources.

Somerset Issues and Options Paper

**For appendices see separate file**

# Document control record

Name of document:	Minerals planning: Options Paper
Author:	Minerals and waste policy team, Somerset County Council
Description of content:	Consultation document on minerals planning in Somerset
Approved by:	Cabinet Member – Strategic Planning and Economic Development
Date of approval:	25 November 2011

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