

SOMERSET MINERALS PLAN

Development Plan Document up to 2030



Adopted February 2015

Foreword

The Somerset Minerals Plan sets out the County Council's approach to planning for sustainable mineral development in Somerset until the year 2030. Somerset is a nationally important supplier of crushed rock, and its geology also provides a fascinating variety of building stone types. The quarrying sector makes a significant contribution to the Somerset economy and maintaining minerals supply is crucial to underpin development priorities and support economic growth.

The demand for Somerset's mineral resource must be balanced against other community interests and the need to protect the county's wealth of natural and historic assets.

Work has recently been completed to map the county's ecological networks, reflecting the diverse nature of local species and habitats. Our knowledge of the county's historic assets also continues to expand, catalogued via the Somerset Historic Environmental Record. The Plan makes full use of these and other tools, which inform local decision-making and help to recognise the importance of the Somerset environment to its residents, businesses and as a tourist destination (with about 2.5 million visitors staying each year).

Somerset contains many European, nationally and locally designated sites of nature conservation interest. This document seeks to protect these unique features, whilst helping the county to meet its economic aspirations and mineral development priorities.

The need to promote biodiversity is a key factor throughout the Plan, in particular in the Plan's peat policy. Furthermore, the Plan considers the local significance of growing national interest in unconventional oil and gas development, including "fracking". Any development proposal must be carefully considered with reference to relevant planning policies and the Council must assume that other regulatory bodies operate as intended.

I'd like to thank the many people, businesses, mineral operators, organisations and communities who responded to relevant consultations, and met with officers from the Council to provide information and clarify issues. The result is a clear plan to guide sustainable mineral development in Somerset to help contribute towards a steady and adequate supply of minerals into the future.

Taking all of these factors into account, I am happy to endorse the Somerset Mineral Plan. I believe it will help residents to access the planning system and influence it to a greater degree, while helping Somerset to harness and protect the rich mineral variety in the county.



Councillor David Hall
Cabinet Member for Business, Inward Investment and Policy
Somerset County Council

Contents

Foreword	i
1. Description of Somerset	1
2. Fundamentals of the Somerset Minerals Plan	5
Minerals planning policy in Somerset	5
Informing the Minerals Plan	5
What does the Somerset Minerals Plan cover?	6
What is the legal status of the Plan?	7
3. Key Issues	9
Aggregates	9
Building stone	9
Peat	10
Energy minerals	11
Reclamation	11
Safeguarding	11
4. Vision and plan objectives	13
The vision	13
Plan objectives	13
5. General Sustainability Principles	17
Presumption in favour of sustainable development	17
Strategic policies	20
6. Aggregates	21
Recycled and secondary aggregate production	22
Crushed rock supply	24
Landbank	25
Aggregate quarries in Somerset	27
Benefits of aggregate extraction	28
Dormant sites	30
Sand and gravel	32
7. Building Stone	35
Somerset: a rich resource	35
Building stone extraction	38
Stone processing	39
Recycling and re-use of building stone	42
8. Peat	45
The Somerset Levels and Moors	45
National policy direction	46
Implementing national policy	49

Contents

Permissions within Special Protection Areas / Ramsar sites	51
Transport and factory site impacts	53
9. Energy Minerals	55
Obtaining an exclusive licence for oil and gas development	56
The phases of unconventional oil and gas development	56
Extraction of coal-bed methane (CBM)	57
Shale gas extraction	57
What impacts need to be considered by Somerset County Council?	58
Reviewing the potential impacts: a precautionary approach	59
Coal extraction	62
10. Site Reclamation	63
Aggregates	64
Building stone	65
Peat	65
Energy minerals	66
11. Safeguarding	67
Safeguarding in Somerset	67
Determining Mineral Safeguarding Areas in Somerset	68
Minerals facilities	71
Exemptions	72
12. Other Minerals	75
Development Management policies	76
13. Landscape and visual amenity	77
14. Biodiversity and geodiversity	81
15. Historic environment	85
16. Water resources and flood risk	87
17. Public rights of way	91
18. Restoration and aftercare	93
19. Protecting local amenity	99
20. Minerals transportation	105
21. Land stability	107
22. Management of solid mineral wastes	109
23. Production limits and cumulative impacts	111
24. Borrow pits	113

Contents

Implementation and Monitoring 114

25. Implementation and monitoring	115
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Appendices 124

Appendix A: Glossary	125
Appendix B: Maps	141
Appendix C: Site profiles	157
Appendix D: Revoked/cancelled policies	205

Where can I find out more?

More information supporting the Somerset Minerals Plan and steps taken to monitor policy usage can be found at www.somerset.gov.uk/mineralsandwaste
Internet access is available in all Somerset libraries during normal opening hours.

List of policies

List of policies in the Somerset Minerals Plan

Policy	Page number
SD1: Presumption in favour of sustainable development	19
SMP1: Provision of recycled and secondary aggregates	23
SMP2: Crushed rock supply and landbank	27
SMP3: Proposals for the extraction of crushed rock	30
SMP4: Provision of sand and gravel	34
SMP5: Proposals for the extraction of building stone	39
SMP6: Peat	50
SMP7: Oil and gas development	62
SMP8: Site reclamation	66
SMP9: Safeguarding	73
DM1: Landscape and visual amenity	79
DM2: Biodiversity and geodiversity	84
DM3: Historic environment:	86
DM4: Water resources and flood risk	88
DM5: Mineral extraction below the water table	90
DM6: Public rights of way	92
DM7: Restoration and aftercare	95
DM8: Mineral operations and the protection of local amenity	103
DM9: Minerals transportation	106
DM10: Land stability	108
DM11: Management of solid mineral wastes	109
DM12: Production limits and cumulative impacts	111
DM13: Borrow pits	113

1. Description of Somerset

- 1.1 Somerset lies at the heart of the South West, covering an area of 3,450 km² divided into five Districts: Mendip, Sedgemoor, South Somerset, West Somerset and the Borough of Taunton Deane.
- 1.2 This Somerset Minerals Plan applies to all of the administrative area of Somerset. While Exmoor National Park is a Mineral Planning Authority in its own right, there are no active quarries in the National Park. Somerset County Council has co-operated with Exmoor National Park Authority in preparing the Somerset Minerals Plan, in particular with regard to the Local Aggregate Assessment for Somerset.
- 1.3 Somerset is predominantly a rural county with a dispersed settlement pattern. Taunton (population: 58,427), Yeovil (population: 40,390) and Bridgwater (population: 37,968) are identified as key business centres, whilst the networks of market and coastal towns and deeply rural communities have their own distinct characteristics and needs.¹

Population

- 1.4 Somerset has an estimated population of 530,200 (2010 figure).² The largest district is South Somerset (160,833) and the smallest is West Somerset (35,712). Somerset's rural nature is reflected in its low average population density of 1.52 people per hectare.
- 1.5 Mendip, the district of Somerset where most mineral extraction is located, covers approximately 74,000 hectares and has a population of approximately 112,000. Mendip has a population density of 1.5 people per hectare, reflecting the rural nature of this district.³
- 1.6 Somerset has a smaller share of working age residents than the national average but a larger share of residents aged over 65. West Somerset has the second highest proportion of residents aged 65 and over in its population of all the local authority districts in England.²

¹ Somerset County Council, State of the Somerset Economy 2013

² 2010 estimated populations based on ONS and Somerset PCT data

³ Somerset Intelligence Network, Mendip District Council: Community Profile, June 2010

1. Description of Somerset

Industry/Employment

- 1.7 Somerset's economy is supported by its people, culture and environment. Its popularity as a tourism destination is demonstrated by world-renowned cultural events and local attractions such as Glastonbury Festival and the Royal Bath and West Show. Glastonbury Festival is the largest greenfield music and performing arts festival in the world (estimated to generate about £35 million for Mendip's local economy and attended by 177,500 people).⁴
- 1.8 There are more than 11.7 million visitor trips each year to Somerset, with visitors spending over £800 million annually. Somerset is also home to major businesses (such as AgustaWestland, Clarks International and Yeo Valley) as well as a wide range of small and medium sized enterprises that play a significant role in the local economy.
- 1.9 The manufacturing sector is the largest single sector in the Somerset economy, generating more than £1.5 billion in 2011 with significant contributions specifically from aerospace and advanced manufacturing. Other large sectors include wholesale and retail (£1 billion), human health and social work (almost £0.9 billion), construction (£0.8 billion) and real estate activities (almost £0.7 billion).⁵
- 1.10 Three-quarters of jobs in Somerset are concentrated in the service sector with marketed services accounting for half and public services accounting for one-quarter of employment. The largest sectors in terms of their contribution to employment are: manufacturing (especially, aerospace and other advanced manufacturing, food, drink and tobacco and other manufacturing); human health and social work activities; retail trade; construction; and education.
- 1.11 Somerset is part of the 'Heart of the South West' Local Economic Partnership (LEP); which also includes Devon, Plymouth, and Torbay. It was formed under the leadership of the private sector, and is supported by the associated local authorities to promote business growth and employment in this area.⁶
- 1.12 The minerals industry is of considerable economic importance in Somerset, directly employing over 1000 Full Time Equivalent (FTE) and a minimum of 280 indirect FTE employees across the four sectors of aggregates, quarry products, building stones and stonemasons. Overall annual turnover across these four sectors was approximately £209.2 million in 2013 (£145 million of which came from the aggregates sector).⁷

⁴ Somerset Intelligence Network, Somerset: Our County 2012

⁵ Somerset County Council, State of the Somerset Economy 2013

⁶ <http://www.heartofswlep.co.uk/about-us>

⁷ Geckoella / RPA, The Benefits of Quarrying and Related Activities to the Somerset Economy – Executive Summary, July 2014

1. Description of Somerset

Natural Environment

- 1.13 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.⁸
- 1.14 Somerset includes a wealth of environmental areas designated for nature and landscape conservation. The majority of Exmoor National Park is in Somerset. Large parts of the Quantock Hills, the Mendip Hills and the Blackdown Hills are designated as Areas of Outstanding Natural Beauty (AONB). A section of Cranborne Chase and West Wiltshire Downs AONB and small sections of the Dorset AONB also lie within the county.
- 1.15 Somerset contains many European, nationally and locally designated sites of nature conservation interest, including: 2 Ramsar Convention/Special Protection Areas, 10 Special Areas of Conservation, 127 Sites of Special Scientific Interest, 12 National Nature Reserves, 33 Local Nature Reserves, 2093 Local Wildlife Sites and 218 Local Geological Sites.^{9,10}
- 1.16 Somerset's Local Nature Partnership brings together local authority, statutory agency and wider community representatives to address strategic issues facing Somerset's natural environment.

Historic environment

- 1.17 Somerset has 464 Scheduled Ancient Monuments, 11,108 Listed Buildings, 198 designated conservation areas, and 17,867 sites or features recorded on the Historic Environment Record as being of archaeological interest and/or importance.

Transport

- 1.18 There are 6,604 kilometres (4104 miles) of roads in the county.¹¹ Somerset's largest urban centres – Taunton, Yeovil and Bridgwater – are well connected by road and have good accessibility. However, the dispersed geography of the county means that accessibility is a key issue in rural areas due to a relatively limited local road network – the Mendip Hills, central moors and uplands of western Somerset are particularly constrained.
- 1.19 The M5 motorway creates a major transport corridor running north to south through Somerset and the A303 provides eastward connectivity towards London. Somerset also has mainline rail connections from Taunton to London, Bristol, the Midlands and the North and to the south west peninsular. Services from Yeovil also connect to London, South Wales, the south coast and Exeter.

⁸ Somerset Biodiversity Partnership. Wild Somerset: The Somerset Biodiversity Strategy 2008-2018. May 2008

⁹ SERC, Somerset Local Wildlife Sites & Geological Sites Manual: Policies and Procedures for the Identification and Designation of Wildlife Sites, Version 6 (Jan 2010)

¹⁰ http://jncc.defra.gov.uk/ProtectedSites/SACselection/SAC_list.asp?Country=E

¹¹ Somerset Intelligence Network. Our County 2012 facts & figures

1. Description of Somerset

1.20 Somerset is served by port facilities around Bridgwater at two key wharves: Dunball and Combswich, both of which are in commercial operation. Dunball has better road access being located off junction 23 of the M5 whereas Combswich wharf, located in the village of Combswich, is accessible along B and C classified roads.

Flood risk

1.21 Much of Somerset is low-lying, with around 15% of Somerset at or a few metres above sea-level. Extensive coastal areas are at risk from marine inundation. There are also many areas alongside or near rivers and streams, including some in urban areas, which are at risk from flooding after extreme and/or prolonged periods of rain. Changes in flood risk may have implications for mineral development; and mineral development has the potential to impact on flood risk.



2. Fundamentals of the Somerset Minerals Plan

Minerals planning policy in Somerset

- 2.1 Somerset County Council is the Mineral and Waste Planning Authority for the county of Somerset, excluding Exmoor National Park (see paragraph 1.2).
- 2.2 The County Council has a statutory responsibility to plan for providing future minerals supply and, as a separate function, to determine mineral-related planning applications.
- 2.3 The County Council has produced this Minerals Plan to set out the vision, objectives and planning policy framework for mineral development in Somerset until the year 2030.
- 2.4 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. As a result the Plan will give greater certainty to local communities about mineral development in their area, in terms of where activity occurs now and is likely to occur over the coming years.
- 2.5 Policy also sets out what limits and controls should be placed on minerals activity to ensure any adverse impacts on the local community and environment are mitigated as far as possible and are at an acceptable level.

Informing the Minerals Plan

- 2.6 The Somerset Minerals Plan is informed by consultation feedback over a multi-stage process, with due regard to national policy and guidance.
- 2.7 Somerset County Council consulted on issues papers during 2009 and 2010; undertook a Minerals Options consultation from late 2011 to early 2012; and consulted on the Preferred Options from late 2012 to early 2013.
- 2.8 There have been significant changes to national planning policy during the latter stages of this preparation period. A key document in national planning policy is the National Planning Policy Framework (NPPF), published in March 2012. A central theme of the NPPF is presumption in favour of sustainable development, and more can be read about this in chapter 5.
- 2.9 In line with government requirements, the Plan has been subject to Sustainability Appraisal (by an independent body) to evaluate the impact of its policies and help the County Council to determine the most appropriate strategy when compared against potential alternatives.

2. Fundamentals of the Somerset Minerals Plan

- 2.10 The Plan is supported by an extensive evidence base. Forming a central spine in the evidence base are topic papers which summarize the reasoning, justification and supporting information for the choices made for Somerset's mineral planning policy framework.
- 2.11 The topic papers are as follows and are all available on the Council's website: www.somerset.gov.uk/mineralsandwaste
- Topic paper 1: Aggregates
 - Topic paper 2: Building Stone
 - Topic paper 3: Peat Reserves and Supply
 - Topic paper 4: Energy Minerals
 - Topic paper 5: Reclamation
 - Topic paper 6: Mineral Safeguarding Areas
- 2.12 Important supporting information is also provided in the form of a Habitat Regulations Assessment, a Sustainability Appraisal and a Strategic Flood Risk Assessment (amongst others). All supporting documents are available to read as part of the County Council's evidence base.

What does the Somerset Minerals Plan cover?

- 2.13 Somerset is a county with a rich mineral variety; and mineral development is different from other types of development as minerals can only be worked where they occur.
- 2.14 The key minerals worked in Somerset are crushed rock, sand and gravel, building stone, and peat. There is also the potential for energy minerals (such as coal-bed methane or shale gas) to be extracted in Somerset.
- 2.15 Mineral extraction, winning or workings generally refer to quarrying of minerals and associated development such as weighbridges and processing equipment.
- 2.16 There is more general development which covers storage, transport, onward processing of extracted minerals, along with facilities for aggregate recycling, wharves, and allied facilities.
- 2.17 This Plan is applicable to **all mineral types and extraction activities in Somerset**. More information on the key issues linked with minerals extraction and development are covered in the next chapter of the Minerals Plan.

2. Fundamentals of the Somerset Minerals Plan

Marine Aggregates

- 2.18 This Plan focuses on land-based minerals. Any marine areas are administered separately by legislation contained in the Maritime and Coastal Access Act 2009 and the corresponding UK Marine Policy Statement (2011). Dredging proposals and licensing in marine area, such as the Bristol Channel are handled jointly by the Marine Management Organisation and the Crown Estate. The National Planning Policy Framework does not contain any policy relating to marine dredged sand and gravel as it is beyond the control of the landbased planning system. (The UK Marine Policy Statement states that Marine Plans should make provision for a level of sand and gravel that ensures that marine aggregates contribute to securing an adequate and continuing supply of aggregates to the UK market, subject to a range of sustainability considerations.)
- 2.19 Nonetheless, marine-dredged sand and gravel is considered as a source of aggregates in the Somerset Local Aggregate Assessment and related content of the Minerals Plan.
- 2.20 Furthermore, the County Council has responsibilities to safeguard minerals development and this includes the marine wharf at Dunball. There is more information about safeguarding in chapter 11.

Waste

- 2.21 Waste is not dealt with in this document unless there is a direct link (for example, in aggregate recycling). Waste policy planning issues are covered in the Waste Core Strategy, which was adopted by Somerset County Council in February 2013.

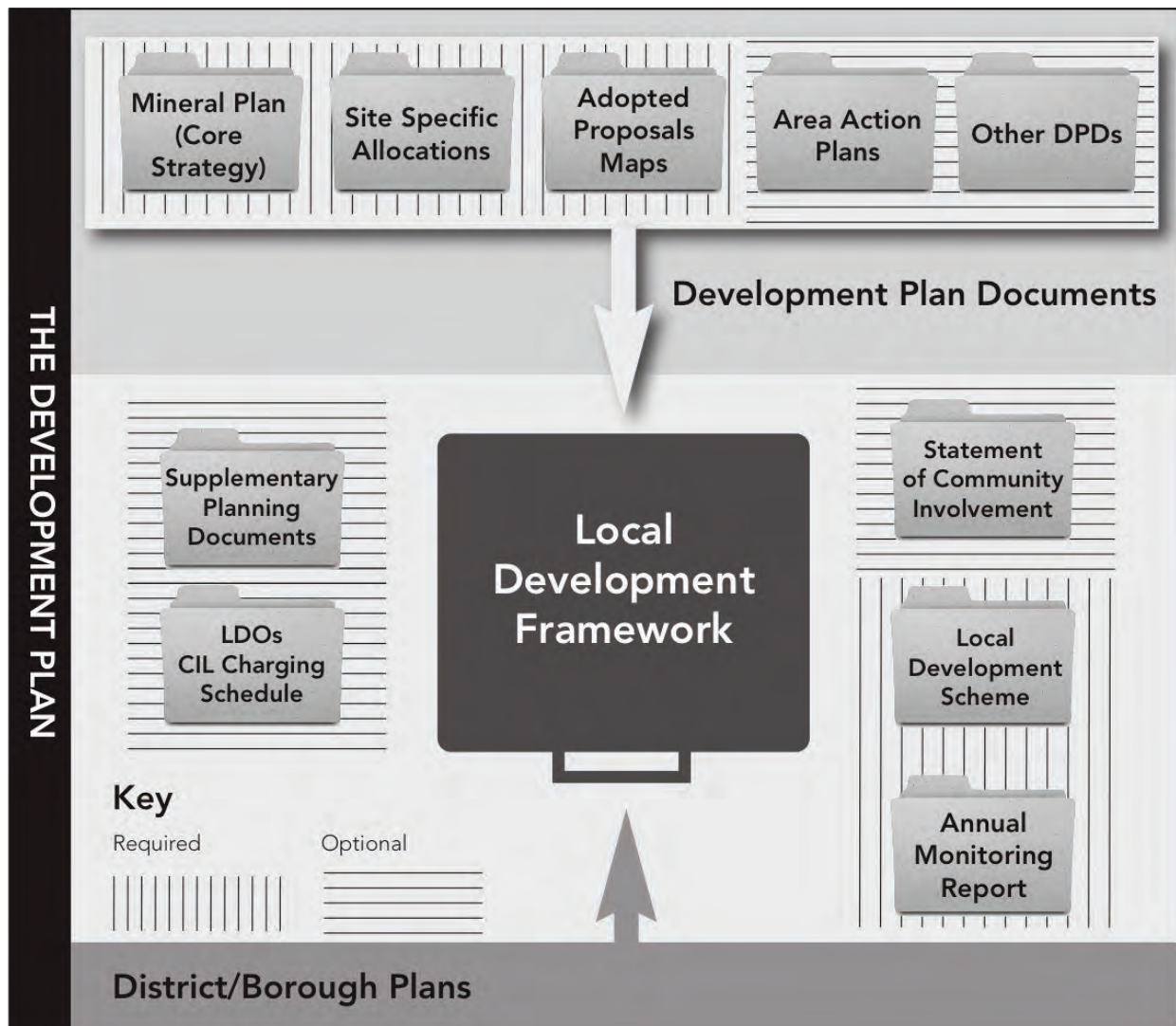
What is the legal status of the Plan?

- 2.22 This Plan will replace the Minerals Local Plan (adopted 2004), which is now out of date - see Appendix D for more information.
- 2.23 This Plan has been prepared by Somerset County Council, acting as Mineral Planning Authority to comply a range of legal requirements including:
- the Planning & Compulsory Purchase Act 2004;
 - the Town and Country Planning (Local Planning) (England) Regulations 2012;
 - the Localism Act 2011;
 - the Planning Act 2008;
 - the National Planning Policy Framework (2012).

2. Fundamentals of the Somerset Minerals Plan

2.24 This Plan is part of the wider Development Plan for Somerset, which consists of the Minerals and Waste Local Development Framework (LDF), made up of a folder of documents which will guide minerals and waste development in Somerset. The Development Plan should be read as a whole, including all relevant plans and policies of the four Districts and one Borough Council of Somerset, and Exmoor National Park Authority, as seen in Figure 1 below.

Figure 1: The Development Plan



3. Key issues

- 3.1 This chapter outlines key issues facing the delivery of the Somerset Minerals Plan for Somerset, setting the need for minerals supply in a local context.

Aggregates

- 3.2 Somerset is the largest producer of crushed-rock aggregate in the south of England with an average of over 10 million tonnes per year 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. Two of the east Mendip quarries, Torr Works and Whatley, have their own railheads which connect to the main rail line.
- 3.3 National policy requires Minerals Planning Authorities to plan for a steady and adequate supply of aggregates, amongst other things, by preparing an annual Local Aggregate Assessment (see Glossary and chapter 6 for more information).
- 3.4 Complying with such technical requirements is only a small part of the picture. Minerals policy must provide sufficient reassurance and support to the minerals industry, encouraging further investment and helping to identify, monitor and mitigate related impacts.
- 3.5 There are various ways to mitigate adverse impacts via the planning process, as well as consider the benefits of a proposal, and the Somerset Minerals Plan embeds these via its aggregates strategy and Development Management policies.
- 3.6 In addition to maintaining crushed rock supply, Somerset County Council must also work with its neighbours – in particular Devon County Council – to ensure adequate and steady supply of sand and gravel.

See Minerals Topic Paper 1 for more information on aggregates, available from www.somerset.gov.uk/mineralsandwaste

Building stone

- 3.7 Building stone is an important resource and a key part of the minerals sector in Somerset. Its use is integral to the distinctive character and historic environment of the county.
- 3.8 Building stone is used for the repair, refurbishment, and extension of existing buildings; the conservation and restoration of historic and heritage buildings; and the construction of new buildings using traditional vernacular materials and styles. So it is important to ensure that a sufficient supply of local building stone is available for both conservation and new building works.

3. Key issues

- 3.9 Whilst most of the crushed rock resource in Somerset lies in the Mendip Hills, different types of building stone are found across much of the county. Building stone extraction can occur on a scale that is relatively small compared with quarrying for aggregates. Minerals policy must support local building stone extraction to support local demand, whilst recognising markets also exist further afield.
- 3.10 The County Council has undertaken research on Somerset's building stone types (and sub-varieties). The lack of planning applications associated with particular building stone types, combined with industry feedback, suggests that the Somerset Minerals Local Plan (adopted 2004) does not provide sufficient support for such development; therefore the new Somerset Minerals Plan should seek to take a new approach.

See Minerals Topic Paper 2 for more information on building stone, available from www.somerset.gov.uk/mineralsandwaste

Peat

- 3.11 Central government has given a clear national steer, via the NPPF, that planning permission for peat extraction should not be granted from new or extended sites; and in preparing local plans Mineral Planning Authorities should not identify new sites or extensions to existing sites for peat extraction.
- 3.12 Somerset has considerable peat reserves, some of which have been worked for a number of years. Publication of the NPPF does not mean that existing planning permissions are revoked. Going forward, through an increasing focus on reclamation, these sites offer a significant opportunity to enhance nature conservation, biodiversity, carbon storage and water management.
- 3.13 The County Council has limited scope to influence decisions on the transport of peat. However, assuming there is still a demand for peat and the phase out of peat extraction locally takes place as guided by the NPPF, it must be mindful of the impact of increased transport movements on the strategic and local road networks and the 'export' of impacts of peat extraction elsewhere.

See Minerals Topic Paper 3 for more information on peat, available from www.somerset.gov.uk/mineralsandwaste

3. Key issues

Energy minerals

- 3.14 Most governments across the globe are looking for greater energy security. This has a local impact, as industry seek to discover and exploit accessible reserves of energy minerals (such as oil, gas and coal) without causing unacceptable environmental impacts.
- 3.15 Somerset has extracted coal in the past; however, further coal mining in Somerset is unlikely. The county potentially has oil and gas reserves; for example within coal beds or possibly within its shale resource. Minerals policy needs to ensure there is a robust local policy on this issue, providing clarity to industry and also to local communities who might be concerned about what any proposals for exploration, appraisal and/or production might mean.

See Minerals Topic Paper 4 for more information on energy minerals, available from www.somerset.gov.uk/mineralsandwaste

Reclamation

- 3.16 The importance of adequate site restoration cannot be over-stated. If minerals are extracted from the land, it is vital that a suitable scheme is agreed at the outset of that development to secure benefits for the site in the long-term. More than ever before, minerals policy has a clear and powerful remit to support site restoration to high environmental standards – considering in sufficient detail how the landscape will change as a result of the minerals development and what might be the best outcome for the site in the long-term.

See Minerals Topic Paper 5 for more information on reclamation, available from www.somerset.gov.uk/mineralsandwaste

Safeguarding

- 3.17 The importance of the county's minerals resource necessitates a robust approach to safeguarding. Resources, sites and associated infrastructure that can supply needed minerals must be protected from other forms of development that might compromise or prevent future operations.

See Minerals Topic Paper 6 for more information on safeguarding, available from www.somerset.gov.uk/mineralsandwaste

4. Vision and Plan Objectives

The vision

- 4.1 The Somerset Minerals Plan is an essential tool for local decision-making on minerals development, underpinned by robust evidence and shaped to support sustainable development in Somerset.
- 4.2 The vision for the Somerset Minerals Plan helps to crystallise the Council's approach into a concise message for minerals development for the Plan Period until the year 2030.

The vision for the Somerset Minerals Plan

To ensure the steady and adequate supply of minerals to meet society's needs and strengthen the economic well-being of Somerset:

- making best use of the county's mineral resources; whilst
- protecting the quality of life for local communities in Somerset; and
- protecting and enhancing the county's distinctive natural and historic environments.

Plan Objectives

- 4.3 The Plan Objectives provide a bridge between high level vision and more focused planning policy. They are arranged into a sequence that begins first with those targeting the geology and geography of the county (i.e. the spatial implications of provision and operation), followed by those focused mainly on the impacts of mineral development.

4. Vision and Plan Objectives

Objective A

To ensure that Somerset is able to provide an adequate and steady supply of minerals, contributing to national, regional and local requirements without compromising the natural and historic environment, supporting in particular:

- the county's nationally important role in crushed rock supply;
- the production of recycled and secondary aggregates;
- the supply of local building stone to maintain and enhance the county's historic environment; and
- co-operation with Devon County Council in sand and gravel supply.

Objective B

To protect local communities in Somerset from unacceptable adverse impacts of minerals extraction and transportation, whilst recognising the employment opportunities linked with minerals extraction and the positive economic impacts that the minerals industry can have in Somerset.

Objective C

To avoid the unnecessary sterilisation of valuable mineral resources by other types of development, recognising that there may be competing development uses in some locations.

Objective D

To ensure that operational mineral sites are restored to high environmental standards at the earliest possible opportunity, thereby achieving environmental, social and economic gains from mineral development and strengthening local ecological networks.

Objective E

To protect the environment and local communities in Somerset from unacceptable adverse impacts of any proposal for oil and gas development, whilst recognising the national commitment to maintain and enhance energy security in the UK.

Objective F

To protect the county's water resources from unacceptable adverse impacts associated with mineral development.

Objective G

To minimise the adverse impacts from minerals transportation on the road network and maximise opportunities for the movement of minerals by rail or water.

Objective H

To protect the natural and historic environment of Somerset from unacceptable adverse impacts associated with minerals extraction and transportation, and reduce the impacts of mineral development on climate change.

4. Vision and Plan Objectives

Table 1: Linking the vision, Plan objectives and minerals planning policies

Elements of the vision	Steady and adequate supply of minerals to meet society's needs and strengthen economic well-being	Making best use of the county's mineral resources	Protecting the quality of life for local communities in Somerset	Protecting and enhancing the county's distinctive natural and historic environments
Plan objectives	A, B & C	A, C, D & E	B, D, E, F, G & H	D, F & H
Planning policy				
SD1: Presumption in favour of sustainable development	✓	✓	✓	✓
Aggregates				
SMP1: Provision of recycled and secondary aggregates	✓	✓		
SMP2: Crushed rock supply and landbank	✓			
SMP3: Proposals for the extraction of crushed rock	✓	✓	✓	✓
SMP4: Provision of sand and gravel	✓	✓		
Building Stone				
SMP5: Proposals for the extraction of building stone	✓	✓	✓	✓
Peat				
SMP6: Peat production		✓	✓	✓

4. Vision and Plan Objectives

Table 1: Linking the vision, Plan objectives and minerals planning policies (continued)

Elements of the vision	Steady and adequate supply of minerals to meet society's needs and strengthen economic well-being	Making best use of the county's mineral resources	Protecting the quality of life for local communities in Somerset	Protecting and enhancing the county's distinctive natural and historic environments
Plan objectives	A, B & C	A, C, D & E	B, D, E, F, G & H	D, F & H
Energy Minerals				
SMP7: Oil and gas development	✓	✓	✓	✓
Site reclamation				
SMP8: Site reclamation			✓	✓
Safeguarding				
SMP9: Safeguarding	✓	✓		
Development Management Policies				
DM1: Landscape and visual amenity			✓	✓
DM2: Biodiversity and geodiversity			✓	✓
DM3: Historic environment			✓	✓
DM4: Water resources and flood risk			✓	✓
DM5: Mineral extraction below the water table			✓	✓
DM6: Public rights of way			✓	✓
DM7: Restoration and aftercare			✓	✓
DM8: Mineral operations and the protection of local amenity			✓	✓
DM9: Minerals transport			✓	✓
DM10: Land stability			✓	✓
DM11: Management of mineral wastes		✓	✓	✓
DM12: Production limits			✓	✓
DM13: Borrow pits			✓	✓

5. General Sustainability Principles

Presumption in favour of sustainable development

- 5.1 National planning policy is founded on a presumption in favour of sustainable development. The National Planning Policy Framework (NPPF) sets out the Government's view on what this means for the planning system, inter-linking economic, social and environmental perspectives.¹²
- 5.2. The Somerset Minerals Local Plan (adopted 2004) defined sustainable mineral development as follows:
- primary mineral extraction taking place only when there is no practical substitute material which can be provided at less environmental cost;
 - taking steps to minimise the production of waste, encourage the efficient use of materials, and ensure that the best use is made of minerals by supplying them for a use appropriate to their quality;
 - the extraction of minerals from nationally designated landscape, archaeological or nature conservation areas only taking place in exceptional circumstances;
 - the employment of sensitive working practices which ensure that the impacts of the development are kept to acceptable levels; and
 - leaving sites which have been the subject of mineral extraction in a condition which maintains or enhances their value to the immediate environment, local communities and the surrounding area.
- 5.3 Whilst retaining the basic elements of this definition, an updated approach to sustainable mineral development brings together a range of factors to consider during the planning process. For example, how can site reclamation strengthen the resilience of ecological networks? What operational measures can help to mitigate and adapt to climate change? ¹³ How could the development proposal lower its carbon footprint? ¹⁴
- 5.4 Energy use is one of the major costs in quarrying. Gas/fuel oil makes up almost three quarters of the energy consumption from crushed rock sites.¹⁵
- 5.5 It is expected that minerals planning applications will normally include consideration of the energy and/or carbon impacts of the proposal. This will include (but not be limited to) an assessment of how the development will mitigate climate change and/or adapts to its effects.

¹² National Planning Policy Framework (paragraph 7)

¹³ National Planning Policy Framework (paragraph 94)

¹⁴ According to the Minerals Production Association report "Accelerating progress... meeting the challenges, Summary Sustainable Development Report 2011" carbon dioxide emissions from crushed rock workings increased between 2009 and 2010 (from 5.27 to 5.5 kg/tonne)

¹⁵ Carbon Trust, Aggregate Energy Consumption Guide, June 2011

5. General Sustainability Principles

- 5.6 In most cases the Planning Authority for renewable energy development at mineral sites in Somerset will be the relevant District Council. Applicants are encouraged to assess options for renewable energy schemes in accordance with the Development Plan.
- 5.7 The use of rail to transport minerals can lower carbon emissions as well as decrease impacts on the strategic road network. Demand for minerals can change depending on a range of factors and it is appropriate to constrain transport movements to acceptable levels, again in accordance with the Development Plan.
- 5.8 It is important not to consider a minerals site in isolation from its environment. This includes both environmental and social factors, recognising the impact of development proposals on the local community and local ecosystem.
- 5.9 Long-term planning for sustainable development ensures that net gains can be achieved, such as increasing biodiversity as part of a phased programme of restoration throughout the lifetime of the site. Chapters 10 and 18 include more information on site restoration and after-use.
- 5.10 When considering proposals for minerals development in Somerset, the County Council will take a positive approach that reflects the presumption in favour of sustainable development introduced via the NPPF. This presumption will be embedded in the Somerset Minerals Plan via policy SD1. It sets an ethos which underlies all policies in the Somerset Minerals Plan and the minerals planning decisions taken by Somerset County Council.



5. General Sustainability Principles

POLICY

Policy SD1: Presumption in favour of sustainable development

When considering mineral development proposals the Council will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework. It will always work proactively with applicants and local communities to find solutions which mean that proposals can be approved wherever possible, and to secure development that improves the economic, social and environmental conditions in the area.

Planning applications that accord with the policies in this Local Plan (and, where relevant, with policies in neighbourhood plans) will be approved without delay, unless material considerations indicate otherwise.

Where there are no policies relevant to the application or relevant policies are out of date at the time of making the decision then the Council will grant permission unless material considerations indicate otherwise – taking into account whether:

- Any adverse impacts of granting permission would significantly and demonstrably outweigh the benefits, when assessed against the policies in the National Planning Policy Framework taken as a whole; or
- Specific policies in that Framework indicate that development should be restricted.

Strategic Policies



6. Aggregates

- 6.1 Aggregates represent an essential part of the economy. They are used extensively in construction, and are critical for the maintenance of existing infrastructure and new development such as roads, housing, schools and flood defences. Carboniferous Limestone is used to produce quality aggregate and high purity mineral powders for use in the livestock feedstuffs industry.
- 6.2 As with all minerals, aggregates are a natural resource and can only be worked where they occur. As a result there is an imbalance between where minerals are worked and where they are most in demand, and so the impacts of mineral extraction are unevenly distributed.
- 6.3 The Carboniferous limestone deposit in the Mendip Hills is a nationally and locally important aggregate resource (see map 2)¹⁶. The locations of quarries in Somerset are shown in map 4.
- 6.4 Quarrying has taken place in the Mendip Hills for many years, with two large rail-linked quarries, Whatley and Torr Works, exporting significant quantities of aggregate by rail since the 1970s. Four other active quarries also have a permitted output in excess 1 million tonnes per year.
- 6.5 A single quarry, Moons Hill Quarry complex, works an igneous rock resource which produces road surfacing aggregates and general construction aggregate.
- 6.6 Crushed rock aggregates are also produced at Cannington, near Bridgwater on the west side of the M5.
- 6.7 It is important to minimise adverse impacts and maximise the benefits of aggregates extraction (quarrying). Benefits can include the provision of local jobs, habitat and amenity creation through phased restoration ¹⁷, and support for quarry-related local projects within and beyond site boundaries. More information on benefits is included later in this chapter of the Minerals Plan.

¹⁶ British Geological Survey mineral resource information in support of national regional and local planning: Somerset, 2005

¹⁷ Phased restoration entails restoring part of a site after it has been worked, rather than waiting until the entire site has been worked. In this way the site is progressively restored.

6. Aggregates

Recycled and secondary aggregate production

- 6.8 Recycled aggregates can be produced by the processing of inert construction, demolition and excavation (C, D & E) waste i.e. waste arising from the construction, repair, maintenance and demolition of buildings and structures, and waste from excavation processes.
- 6.9 The Somerset Waste Core Strategy (adopted 2013) outlines the role of waste as a resource and embeds the 'waste hierarchy' in local planning policy.
- 6.10 The waste hierarchy (see Figure 3 in chapter 22) is made up of steps that include prevention at the top followed by preparing for re-use, recycling, other recovery and disposal at the base. The Waste Core Strategy promotes waste management up the hierarchy and encourages re-use and recycling of C, D & E waste.
- 6.11 The use of recycled aggregates (for example, for construction fill or railway ballast) reduces the amount of materials discarded into landfill. Higher quality recycled aggregates can also help to reduce the amount of primary material required.
- 6.12 Secondary aggregates are usually obtained as a by-product of quarrying or mining operations generating material such as china clay waste or slate waste, or as a by-product of industrial processes generating material such as blast furnace /steel slag and coal ash.¹⁸
- 6.13 There are a number of permitted recycling aggregate facilities in Somerset located in former quarries or waste transfer stations. In addition active quarries also generate recycled aggregates, and inert waste is treated on-site (for example as part of major new development schemes) via mobile crushers.
- 6.14 Current estimates indicate that the potential capacity of existing facilities for recycled and secondary aggregates in Somerset is over 160,000 tonnes per year.¹⁹ However, this figure is thought to be an under-estimate and does not fully represent the full potential supply of secondary and recycled aggregate.
- 6.15 Somerset County Council will continue to collate and improve its data on secondary and recycled aggregate sales to gather a true reflection of the recycled and secondary aggregates market and its impact on primary extraction.

¹⁸ The term can also be used to refer to mineral that is produced as an ancillary activity to the primary product. However, it is noted that differences in where the line is drawn between primary and secondary aggregate can make data collection and analysis more difficult.

¹⁹ Somerset Local Aggregate Assessment 2013

6. Aggregates

Supporting future supply of recycled and secondary aggregates

- 6.16 Somerset County Council supports the supply of recycled and secondary aggregate through its planning policies.
- 6.17 The Somerset Mineral Plan supports the production of recycled and secondary aggregates throughout the plan period and will seek to ensure there is the capacity to maximise the reuse and recycling of C, D & E waste generated in the county. The Council supports the increased use of aggregate from stockpiles of waste material, without undermining agreed plans for site restoration (see paragraph 6.20 below).
- 6.18 The Council will favour locations for recycled aggregate production that make best use of existing infrastructure and operations, mindful of the need to avoid unacceptable cumulative impacts and the importance of minimising the impact on the transport network i.e. preferably close to the sources of raw materials and close to the markets the facilities serve. An awareness of the need for such material includes taking account of major new development (such as proposals for Hinkley Point C and major urban extensions).
- 6.19 Where proposals for aggregates recycling facilities potentially affects an international or a European site for nature conservation a test of likely significance under the provisions of the Habitats Regulations will need to be carried out as described in policy DM2.
- 6.20 Inert waste is an important material in quarry restoration. Whilst the Council provides clear support for this use (also see policy WCS2 in the Waste Core Strategy) it is important also to recognise the breadth of other potential uses for recycled aggregates. A balance needs to be struck to ensure that effective and full quarry site restoration takes place, whilst still recognising the potential uses for high quality recycled aggregates and promoting the supply of recycled and/or secondary aggregates for other uses.

POLICY

Policy SMP1: Provision of recycled and secondary aggregates

The Mineral Planning Authority will support:

- a) the supply of recycled and secondary aggregates including (but not limited to) high quality recycled aggregates; and
- b) the development of aggregate recycling facilities in appropriate locations.

6. Aggregates

Crushed rock supply

- 6.21 Historically, aggregates supply has been managed by a centrally-led process, in which government predicted the national need for aggregate which was then apportioned by region and subsequently by each Mineral Planning Authority area.
- 6.22 The South West regional “apportionment” for 2005 to 2020 was 412.73 million tonnes for crushed rock and 85 million tonnes for sand and gravel.²⁰ The South West Regional Aggregate Working Party (SW RAWP) recommended to government a local apportionment based on averaged historic proportional contributions over the period 2004 to 2008:
- Somerset’s recommended crushed rock apportionment for 2005 to 2020 was 214.65 million tonnes which equates to a provision of 13.41 million tonnes each year.
 - Somerset’s sand and gravel apportionment was included with Devon and Cornwall. Together the counties have an apportionment for sand and gravel of 14.91 million tonnes which equates to an annual apportionment of approximately 0.93 million tonnes.
- 6.23 The NPPF and revised guidance on the Managed Aggregates Supply System (MASS) have been published since those apportionments were agreed.
- 6.24 Whilst the NPPF acknowledges a continued role for National and Sub National Guidelines on future provision,²¹ it introduces a new tool for planning for steady and adequate supply – the Local Aggregate Assessment (LAA).
- 6.25 To comply with new national policy and guidance,²² Minerals Planning Authorities should prepare an LAA annually based on a rolling average of 10 years sales data and other relevant local information, and the LAA should include an assessment of all supply options.
- 6.26 Informed by national policy and guidance, and dialogue with other MPAs and the minerals industry (including via the South West Aggregate Working Party), Somerset County Council has published its first LAA.²³ The County Council obtained all relevant data on aggregates direct from industry, thus ensuring the approach taken is underpinned by robust evidence base.

²⁰ National and Regional Guidelines for Aggregates Provision in England 2005 - 2020

²¹ Refer to paragraph 145 in the NPPF, and Planning Practice Guidance, Paragraph: 065, Reference ID: 27-065-20140306 for more information

²² Planning Practice Guidance, Paragraph: 060, Reference ID: 27-060-20140306

²³ Somerset Local Aggregate Assessment 2013

6. Aggregates

- 6.27 Somerset County Council will seek to maintain an adequate and steady supply of crushed rock throughout the plan period based on the data provided in the LAA, which includes the rolling average 10 years sales data and any relevant local information.
- 6.28 The Somerset LAA 2014 states an average 10 year sales figure of 10.45 million tonnes, which forms the basis for future provision. The level of provision will be reviewed via future LAAs, taking into account any changes in Somerset's permitted reserves, to ensure that a steady and adequate supply of aggregates is maintained.
- 6.29 National demand for primary aggregates has been falling, largely due to the impacts of economic recession on construction, increased use of alternative aggregates and more efficient use of aggregates in construction. Demand for primary aggregates is expected to pick up when the economy improves.

Transport of aggregate

Adequate consideration of minerals transport is a vital factor in sustainable aggregate supply and reducing impacts on local communities. It is important to consider how impacts from minerals development on the strategic road network might be reduced. One way is to promote the transportation of materials via rail or water. More information on the Strategic Road Network is available via the Somerset Future Transport Plan accessible via www.somerset.gov.uk

Where rail or water supply is not possible, optimal use should be made of the vehicle fleet; and with high fuel and labour costs transport managers have for many years been developing ways of improving efficiencies; for example, lorries used to deliver primary aggregates back-hauling waste aggregates for recycling, and vehicle maintenance programmes to ensure fuel efficiency. See chapter 20 for more information on the county's transport policy for mineral development.

Landbank

- 6.30 The landbank is the quantity of mineral with planning permission for extraction. Monitoring of the landbank may show that additional provision needs to be made for aggregate extraction and/or alternative sources of supply identified.
- 6.31 The NPPF requires Mineral Planning Authorities to make provision for a minimum of 10 years worth of supply for crushed rock to ensure on-going supply for the construction industry.

6. Aggregates

- 6.32 Whilst under-provision of permissions is likely to result in a need to identify new reserves, a large landbank does not necessarily mean new reserves should not be permitted. There may be markets which cannot be supplied by the existing permissions due to distance to market or type of aggregate being supplied; or sites may become constrained due to current methods of working or location of processing facilities.
- 6.33 Such market and operational factors need to be considered alongside applications for additional reserves.
- 6.34 Somerset has a landbank for crushed rock of approximately 425 million tonnes (2013 figure).
- 6.35 Somerset's crushed rock landbank is predominantly made up of the Carboniferous Limestone used in construction aggregate, supplemented by higher PSV (polished stone value) Silurian Andesite used for road surfacing. Based on current evidence, approximately 2% of the total crushed rock landbank is Silurian Andesite i.e. approximately 8 million tonnes.
- 6.36 Based on the level of provision proposed in the Somerset LAA 2014 of 10.45 million tonnes per year, Somerset has sufficient crushed rock reserves for the next 40 years. Focusing on Andesite alone, based on current evidence, the Andesite landbank is anticipated to last approximately 22 years. However, it should be noted that the LAA will be updated annually and these figures are likely to change in the future in accordance with market demand and permitted reserves.

Monitoring landbank

- 6.37 Landbank is used principally as an indicator to ensure the continued supply of aggregates.
- 6.38 Somerset County Council will conduct a rolling (annual) review of aggregate supply and publish the results of that review in its LAA.
- 6.39 Should Somerset's permitted reserve of crushed rock (either Carboniferous Limestone or Silurian Andesite) fall below a 15 year supply (identified via the LAA) then Somerset County Council will review its approach and take appropriate steps to support future supply. In the first instance this is likely to focus on a dialogue with existing operators to discuss their longer term plans, before any consideration of site allocations.
- 6.40 It is noted that a 15 year landbank is longer than the 10 year minimum stated in the NPPF. This takes account of Somerset's status as a nationally important supplier of crushed rock.

6. Aggregates

POLICY

Policy SMP2: Crushed rock supply and landbank

The Mineral Planning Authority will make provision for a rolling 15 year landbank of permitted reserves of both Carboniferous Limestone and Silurian Andesite throughout the Plan Period based on the findings of the Local Aggregate Assessment.

6.41 Examples of “other relevant local information” as mentioned in policy SMP2 and national guidance include the National Infrastructure Plan and the average of 3 years sales data.²⁴

Aggregate quarries in Somerset

6.42 There are a total of nine active quarries in Somerset of which five are located in the East Mendips.

6.43 Based on current data, Somerset has enough permitted reserves to last approximately 41 years, well beyond what is required by national policy. Nonetheless, it is important to take a positive approach to future proposals, in line with the presumption in favour of sustainable development and policy SD1 of the Somerset Minerals Plan.

6.44 The NPPF states that local planning authorities should identify and include policies for extraction of mineral resource of local and national importance in their area.²⁵ Furthermore, the Government is clear that every Mineral Planning Authority with minerals resource has a role to play in meeting national and local demand.²⁶

6.45 Three sites have a particularly important role in maintaining steady and adequate supply of crushed rock from Somerset, in line with the aims of the Somerset Minerals Plan: Torr Works, Whatley Quarry and the Moons Hills Quarry complex.²⁷

6.46 Torr Works and Whatley are two of the nine rail-linked quarries currently in England that can supply more than 1 million tonnes per year. They make a sizeable contribution to the needs of London and the South East for crushed rock and are considered nationally important. Almost all of the aggregate supplied from the South West to London and the South East is transported by rail, most of which is derived in Somerset.

²⁴ For more information, refer to the Planning Practice Guidance, Paragraph: 064, Reference ID: 27-064-20140306

²⁵ National Planning Policy Framework (paragraph 143 and its glossary, page 53)

²⁶ Refer to the Planning Practice Guidance, Paragraph: 060 Reference ID: 27-060-20140306

²⁷ Land Use Consultants, Somerset Strategic Sites Assessment, May 2011

6. Aggregates

- 6.47 The Moons Hill Quarry complex includes the only active quarry in Somerset producing skid resistant stone with a relatively high polished stone value (PSV) which makes it suitable for highway surfacing. The next nearest supply of similar material is from South Wales or Cornwall. As a result the quarry supplies aggregate to a large geographical area across Southern England. An absence of supply of this type of stone from the Mendips would result in much higher road miles to distribute this stone type to Somerset's roads and potentially those of the surrounding counties.
- 6.48 Having acknowledged the importance of these three sites, the County Council also acknowledges that limiting development to only a few sites may stifle competition, heighten cumulative impacts at only a few sites and potentially result in the sterilisation of other viable future reserves.
- 6.49 Set in this context, policy SMP3 enables the County Council to review all proposals for crushed rock extraction focusing in particular on the mitigation of adverse impacts and the benefits of the proposal.

Benefits of aggregate extraction

- 6.50 National policy makes it clear that local planning authorities should give 'great weight to the benefits of the mineral extraction, including to the economy'.²⁸
- 6.51 According to the County Council Plan 2013-2017 "our priority is that Somerset is a place where everyone has an equal opportunity to learn, work and enjoy where they live" and "is a thriving local economy, attracting jobs and investment."
- 6.52 Aligning with these drivers, the Council's policy requires the applicant to demonstrate the proposal for aggregate extraction will provide economic and other benefits to the local and/or wider community. The scale of benefits would usually be commensurate with the scale of the proposal.
- 6.53 The economic benefit of the proposal will be an important aspect of the reasoned justification underlying any new proposal. However, it will not be considered acceptable only to state the broad economic impacts without also considering the local setting and local impacts. Economic benefit to the local and/or wider community can include both the primary gains of increased or continued employment, local business rates and financial assistance to local projects (community funding), and secondary benefits including increased trade, supporting local businesses.
- 6.54 "Other" benefits (referred to in policy SMP3) include social and/or environmental benefits, including community benefits. Social benefits at a more local level can be generated by local employment, local community funding, local education (community involvement) and the minimisation of quarrying impact. The minimisation of quarrying impact can be realised by a range of measures, including:

²⁸ National Planning Policy Framework (Paragraph 144)

6. Aggregates

- improvements to access;
- relocation of plant, modernisation, screening or enclosure;
- better control of working methods;
- reduction in road transports; and/or
- an improved reclamation scheme.

- 6.55 Environmental benefits can be realised through biodiversity offsetting, support for the coherence and resilience of ecological networks,²⁹ support for local environmental projects and environmental restoration schemes.
- 6.56 When determining planning applications for new permitted reserves (including extensions to existing quarries) the County Council will consider whether the economic and other benefits outweigh any adverse impacts of the development.
- 6.57 The adequacy of measures to mitigate adverse impacts will be considered with reference to the Development Management policies (beginning on page 76) and relevant national policy and guidance. Planning Authorities should consider whether otherwise unacceptable development could be made acceptable through the use of conditions or planning obligations.³⁰
- 6.58 Where proposals for crushed rock extraction potentially affects an international or a European site for nature conservation a test of likely significance under the provisions of the Habitat Regulations will need to be carried out as described in policy DM2.
- 6.59 The Mineral Planning Authority shall take into account the cumulative effects of multiple impacts from individual sites and/or a number of sites in a locality. This is of particular concern in Somerset because the majority of the aggregate quarries are located in the same area of the East Mendips. When considered in combination with other operations on-site or nearby, it is important that the proposal would not result in unacceptable cumulative impacts. The screening process for Environmental Impact Assessment (EIA) is an invaluable tool for considering cumulative impacts.
- 6.60 Informed by national guidance³¹, the Mineral Planning Authority acknowledges that there is no maximum landbank level and each application for minerals extraction must be considered on its own merits regardless of the length of the landbank; adverse impacts must be considered alongside planning benefits.

²⁹ Coherence in the ecological network relates to connectivity: a coherent ecological network features sufficient habitat linkages to enable different species to move between core areas of habitat, so that they do not become isolated and hence vulnerable to extinction. Resilience concerns the maintenance of these networks into the future

³⁰ See paragraphs 203 and 204 of the NPPF

³¹ Planning Practice Guidance, Paragraph: 084, Reference ID: 27-084-20140306

6. Aggregates

POLICY

Policy SMP3: Proposals for the extraction of crushed rock

Planning permission for the extraction of crushed rock will be granted subject to the application demonstrating that:

- a) the proposal will deliver clear economic and other benefits to the local and/or wider communities; and
- b) the proposal includes measures to mitigate to acceptable levels adverse impacts on the environment and local communities.

Land has been identified as an Area of Search for Silurian Andesite extraction as shown in policies map 1b.

Dormant sites

- 6.61 Dormant sites are technically defined³² 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 22 February 1982 and 06 June 1995.
- 6.62 Dormant sites have planning permission but do not have agreed modern working conditions. A dormant site cannot be worked without the permission holder first agreeing modern conditions with the Mineral Planning Authority.
- 6.63 Dormant sites may be considered problematic if the site has an adverse impact on the local community and/or environment; for example, if there is no restoration scheme in place and reclamation of the site to an acceptable state is constrained and/or if the site is considered unsafe (see text box for more information on health and safety issues).
- 6.64 The Mineral Planning Authority may use various orders under national legislation³³ to address issues arising, such as revocation and modification orders, discontinuance orders, prohibition orders and suspension orders.
- 6.65 Where the relinquishment of a dormant site planning permission is considered necessary or desirable Somerset County Council will seek agreement with the relevant permission holder that the site is unlikely to be worked again and refer to the statutory orders available to support the modification and/or relinquishment of that permission and appropriate reclamation of the site.

³² "Schedule 13: Review of Old Mineral Planning Permissions" in the Environment Act 1995:
<http://www.legislation.gov.uk/ukpga/1995/25/schedule/13>

³³ See in particular the Town and Country Planning Act (TCPA) 1990

6. Aggregates

- 6.66 Such relinquishment may be necessary or desirable in particular if the site cannot comply with the policies of this Plan and/or the permission can be consolidated on the basis of a new application coming forward.
- 6.67 Based on a review of Somerset County Council's records, the following aggregate sites in Somerset are considered to be dormant: Barnclose; Cloford; Cookswood; Emborough; Highcroft; Tadhil; Tor Hill; West Quantoxhead; and Westdown.
- 6.68 At the time of writing this Plan, it is considered unlikely that any of these sites will be worked again during the Plan Period; however, evidence suggests that Westdown and Cloford may be proposed for working at a future date (outside the Plan Period).
- 6.69 Agreements linked with the relinquishment or modification of a planning permission would need to be legally secured. This can be achieved in a number of ways, preferably via voluntary agreement and engagement with the relevant permission holder.

Mines and Quarries legislation: health and safety

Dormant quarries are required under the **Mines and Quarries Act 1954** to provide an efficient and properly maintained barrier so designed and constructed as to prevent a person from accidentally falling into the quarry.

Under the Environmental Protection Act 1990 the Local Authority has the enforcement powers and can declare the unfenced quarry a statutory nuisance and is empowered to take remedial measures themselves and recover the cost from the quarry owner.

The Health and Safety Executive have no enforcement powers over sites where no active working is taking place.

Under Part II of the Mines and Quarries Act (Tips) Act 1969 the Local Authority is given the enforcement power to ensure that disused tips do not, by reason of instability, constitute a danger to members of the public.

If it appears to the Local Authority that the disused tip is unstable and, by reason of that instability, constitutes or is likely to constitute a danger to members of the public, the Local Authority can serve a notice requiring land owners to carry out remedial works. Where a Local Authority feels necessary it may itself carry out remedial operations and any works of reinstatement reasonably necessary and can recover the costs from the land owner.

6. Aggregates

Sand and gravel

- 6.70 Somerset currently has no land-won sand and gravel workings and superficial deposits of sand and gravel in Somerset are generally limited.³⁴
- 6.71 The most significant local resource is the Lower Triassic Budleigh Salterton Pebble Beds which form the bedrock at the south western section of the county (see map 3). This formation is currently worked for sand and gravel at Hanson's Whiteball operation on the Somerset / Devon border.
- 6.72 In recent years, virtually all extraction of sand and gravel for Whiteball has taken place in Devon (most recently from the Town Farm site) for processing by facilities on the Somerset side of the border.
- 6.73 Devon's LAA states a weighted ten year average sales figure for land-won sand and gravel of 610,000 tonnes. The Town Farm site makes a significant contribution to Devon's sand and gravel production and landbank.
- 6.74 The NPPF requires Mineral Planning Authorities to make provision for the maintenance of landbank of permitted reserves for a minimum of seven years' worth of supply for sand and gravel.
- 6.75 Historically, Somerset has shared a joint sand and gravel sub-regional apportionment with Devon and Cornwall.
- 6.76 Due to its historic arrangements and limited sand and gravel resources, Somerset does not currently maintain its own landbank of permitted reserves for sand and gravel and has not extracted sand and gravel during the past 10 years (or at most very minor quantities).
- 6.77 As a result, Somerset does not have a 10 year average that can inform any potential future provision.³⁵ However, through close cooperation with neighbouring Mineral Planning Authorities, the minerals industry and the South West Aggregates Working Party, Somerset County Council can ensure that a steady and adequate supply of sand and gravel is maintained.
- 6.78 Somerset County Council encourages proposals to come forward for sand and gravel extraction that are in accordance with relevant policies in the Development Plan and contribute to sub-regional supply. Informed by updates to the Somerset Local Aggregate Assessment, the need for new sources of sand and gravel is anticipated to become more pressing in the early 2020s, notwithstanding there may be benefits of proposals coming forward more quickly.

³⁴ British Geological Survey, Mineral Resource Information in support of National, Regional and Local Planning: Somerset (2005)

³⁵ One of the requirements of the Local Aggregate Assessment is to forecast an appropriate level of provision for Somerset based on an average 10 years sales and other relevant local information.

6. Aggregates

- 6.79 Somerset County Council plans to maintain provision for future working of sand and gravel from within Somerset to supply the Whiteball operation following the anticipated cessation of the Town Farm site in Devon in the early 2020s. To deliver this Somerset County Council has extended the approach established in the Minerals Plan (adopted 2004) which outlines a Preferred Area and Area of Search adjacent to Gipsy Lane, Greenham (see map 1a), and uses a criteria-based approach to consider proposals elsewhere in Somerset.
- 6.80 As stated for crushed rock, the Mineral Planning Authority shall take into account the cumulative effects of multiple impacts from individual sites and/or a number of sites in a locality. This may need to be considered in the context of development around the Whiteball operations. The screening process for Environmental Impact Assessment (EIA) is an invaluable tool for considering cumulative impacts.
- 6.81 The suitability of any alternative locations will be considered with regard to the net environmental benefits. Applicants for "new" locations must demonstrate the rationale for the proposed alternative location. Site appraisal should establish and demonstrate how the site in question was arrived at and how others (within the Preferred Area and Area of Search) were discounted, thereby demonstrating the benefits of the proposed alternative location. This is independent of any requirement for EIA.
- 6.82 In addition to the Whiteball operation, the Chard Junction site on the Somerset / Dorset border is a large contributor to Dorset's sand and gravel export into Somerset, predominantly serving local markets around the Yeovil, Taunton and Tiverton areas.
- 6.83 More information on the supporting evidence for the County Council's approach is included in Minerals Topic Paper 1 on Aggregates and the Somerset Local Aggregate Assessment.

Alternative sources of sand and gravel

- 6.84 In addition to considering land-won sand and gravel from superficial deposits, it is important also to consider alternative sources of supply.
- 6.85 Limestone sand can be produced from the processing of scalplings at crushed rock quarries. This is an important source of such material in the eastern part of the county.
- 6.86 In addition, marine-dredged sand and gravel also provides an important contribution, originating from the Bristol Channel and landed at Dunball Wharf. Annual quantities landed at the Wharf equate to roughly 5-10% of Somerset's sand and gravel consumption.

6. Aggregates

- 6.87 A comparison of actual and licensed dredging rates suggest there may be scope to increase the level of dredging in the Bristol Channel if necessary; however, there are logistical constraints to consider (in particular linked with use of Dunball Wharf, weather and tides) which affect the potential to increase the county's dependence on marine-dredged aggregates.
- 6.88 Dredging of water courses may help to provide limited quantities of material on a very small scale, in particular linked with identified "pinch points" where the removal of the material would help in local water level management and flood risk mitigation.

POLICY

Policy SMP4: Provision of sand and gravel

Land adjacent to Gipsy Lane, Greenham has been identified as a Preferred Area and an Area of Search as shown in Map 1a to contribute towards sand and gravel supply in conjunction with Devon County Council.

Planning permission for the extraction of sand and/or gravel in Somerset which is outside the Preferred Area and Area of Search will be granted subject to the applicant demonstrating that the proposed site offers net environmental benefits over those within the Preferred Area or Area of Search.



7. Building Stone

- 7.1 The winning, working and processing of building stones make an important contribution to the minerals sector in Somerset. Building stones are used in existing buildings for restoration, conservation and extensions, as well as for new building work. Their use is integral to the distinctive character and historic environment of Somerset.
- 7.2 Use of the term “building stone” in the Somerset Minerals Plan refers to building stones in the widest sense and includes walling stone, dimension stone, ashlar, quoins, lintels, architectural masonry, dressed stone, rubble stone, paving stone, roofing stone and slate which all naturally occur in Somerset.
- 7.3 It is vital to ensure that an adequate supply of building stones is available so that the local character of the county is maintained. The Somerset Minerals Plan provides a positive policy framework to support investment in appropriate sites, facilities and skills.

Somerset: a rich resource

- 7.4 Somerset has a rich resource of building stone, which is reflected in the character of its built development, and also in the wider markets for some of its stone types. For example, White Lias quarried from near Langport is used as far afield as Warwickshire and the English Stone Forum has stated that Ham Stone has demonstrable ‘regional’ significance.
- 7.5 There are currently 11 active building stone quarries in Somerset producing eight different types of stone. The locations of building stone quarries in Somerset are illustrated in map 4.
- 7.6 Historically approximately 40 different building stone types have been used locally, reflecting the diversity of the geological resource and the changes in quarrying activity over time. Many building stones types previously used within the county are no longer quarried.
- 7.7 Active sites in Somerset include four permissions for the extraction of Blue Lias, two permissions for White Lias, one permission for Blue and White Lias, eight permissions for oolitic and similar limestone, and one permission for Permo-Triassic (Capton) sandstone.
- 7.8 As an indicator of the scale of building stone operations across Somerset, theoretically the production limits set via the planning permissions would allow for the total annual production of 15,800 tonnes of Blue Lias; 7,400 tonnes of White Lias; 28,000 tonnes of oolitic and similar limestones (including Ham Stone and Doulling Stone); and 1500 tonnes of Permo-Triassic (Capton) sandstone. These consolidated figures for maximum permitted levels of extraction in Somerset may not be the same as the actual amounts quarried and are not an indication of available reserves.

7. Building Stone

- 7.9 During the plan period operators may propose changes to existing permissions (including site extensions) and/or new sites for the stones currently worked.
- 7.10 Furthermore, proposals may come forward for the extraction of building stones that are not currently worked but which form an integral part of the county's historic environment and may be important for new build.
- 7.11 Minerals Topic Paper 2 outlines the outcomes of research commissioned by Somerset County Council on building stone types (and sub-varieties) including:
- those that are currently worked within the county;
 - those that were historically worked within the county; and
 - those that may be at risk of short supply during the plan period.
- 7.12 Table 2 lists the main building stone types that are either currently worked or were historically worked in Somerset. This list is informed by more detailed analysis in Appendix 1 of Minerals Topic Paper 2.
- 7.13 Categories of different building stone types were proposed in Table 1 of Minerals Topic Paper 2. When considered alongside Appendix 1 of the Topic Paper, this categorisation can provide useful insight for potential applicants and Somerset County Council on the geographical extent of the various stone types and their historic and current use(s).



7. Building Stone

Table 2: Somerset building stone types

Building stone types currently worked in Somerset	
•	Ham Stone
•	Inferior Oolite (including Cary Stone/Hadspen Stone and Doultong Stone)
•	Forest Marble
•	Cornbrash
•	Capton Sandstone
•	Blue Lias (including 'Grey Lias')
•	White Lias (including 'Camel Hill Stone')
Building stones types historically worked in Somerset	
•	Chert / Flint
•	Calcareous Grit
•	Inferior Oolite (Misterton Stone only)
•	Yeovil Stone
•	Marlstone (including Moolham Stone and Petherton Stone)
•	Wedmore Stone
•	North Curry Sandstone
•	Draycott Stone
•	Otter Sandstone (including Lydeard Stone, Nynehead Sandstone)
•	Milverton Stone (Milverton Conglomerate)
•	Wiveliscombe Sandstone
•	Lower Carboniferous Limestone (Vallis Limestone, Chinastones, Cheddar Limestone, Cannington Park Limestone and Cheddar Oolite only)
•	Morte Slates
•	Ilfracombe Slates
•	Hangman Sandstones (including Triscombe Stone, Trentishoe Grits)
•	Devonian Limestones
•	Cockercombe Tuff
•	Hestercombe Diorite
•	Downside Stone

7. Building Stone

Building stone extraction

- 7.14 Building stones are usually extracted in small-scale quarries, producing only a few thousand tonnes per year.
- 7.15 Extraction is done carefully in various ways to avoid damaging the rock. Methods include hammering in wedges; using water pressure to prise apart cracks or joints in the rock; and/or using excavators to lift the stone from a bedding plane surface.³⁶
- 7.16 Blasting tends to be avoided as an extraction technique wherever possible, as this can cause additional stress lines and fractures in the stone. Where it is unavoidable it is used to lift beds of rock relatively gently - on a much smaller scale and intensity than that used at major aggregate quarries.
- 7.17 More modern stone quarries now use chain and wire saws. These operations are relatively quiet and involve least disruption to the stone before extraction and so tend to lead to increased yields.
- 7.18 In this way, 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 Stakeholders have expressed a preference (via consultation feedback) for the development of a larger number of smaller quarries as a source of local building stone (compared with a smaller number of larger quarries).³⁷
- 7.20 Consultation has revealed clear support for linking planning policy on the provision of building stone with the demand for building stone.³⁸ Comments suggest that the importance of local stone has so far been given insufficient recognition in Somerset.
- 7.21 Policy SMP5 supports the provision of Somerset's building stones.
- 7.22 Policy SMP5 is supported by Figure 2 – prepared as a tool for applicants to help them prepare an application for extraction of building stone over during the Plan Period. Figure 2 and its supporting notes should be used in conjunction with the document “County Matter Applications – Mineral Development: Notes for Applicants” (available from the planning department of Somerset County Council), until such time as a Mineral Validation Checklist or separate guidance on building stone extraction is published by the County Council. Figure 2 does not, however, constitute a Mineral Validation Checklist.

³⁶ For more information, see <http://www.englishstone.org.uk/Sustain/sustain.html>

³⁷ Statement of Representations. Somerset Building Stones Paper – Issues Consultation for the Minerals Core Strategy

³⁸ Statement of Representations. Somerset Building Stones Paper – Issues Consultation for the Minerals Core Strategy
Somerset Minerals Plan

7. Building Stone

POLICY

Policy SMP5: Proposals for the extraction of building stone

Planning permission for the extraction of building stone will be granted subject to the application demonstrating that:

- a) the proposal will deliver clear economic and other benefits to the local and/or wider communities; and
- b) there is an identified need for the specified stone; and
- c) the nature, scale and intensity of the operation are appropriate to the character of the local area; and
- d) the proposal includes measures to mitigate to acceptable levels adverse impacts on the environment and local communities.

Land has been identified as an Area of Search for the extraction of building stone as shown in policies map 1c.

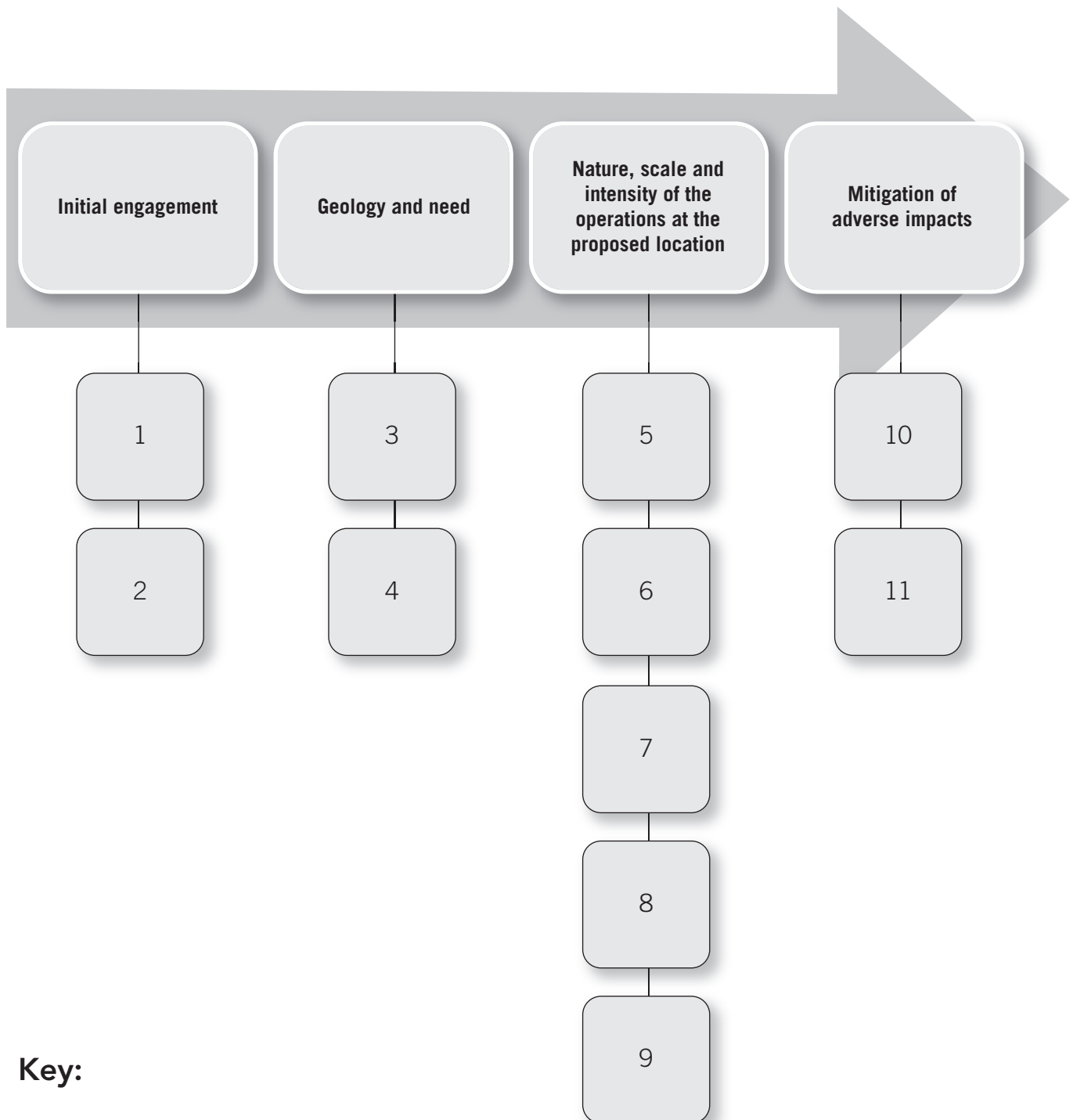
- 7.23 Areas of Search for building stone extraction (which coincide with the Plan's spatial approach to building stone safeguarding) have been identified for a range of building stone types as shown in policies map 1c.
- 7.24 The use of appropriate locally sourced building stone is essential to maintain the distinctive character of buildings, structures and settlements in Somerset. The use of reconstituted or imported stone can produce different aesthetic or physical characteristics to local stone. It is therefore important to ensure that a sufficient supply of local building stone is available for both conservation and new building works.

Stone processing

- 7.25 The winning, working and processing of building stone in Somerset has a long history and the skills and experience of those employed in this sector are widely recognised. High-end processing already occurs in Somerset. Traditional methods of hand working, carving and masonry are now complemented by the use of computer aided design and highly technical cutting equipment. The County Council acknowledges that local operators are at the forefront of this developing sector and encourages related investment to maintain this strong position, promote sustainable growth and capitalise on the county's natural assets, skills and knowledge base.
- 7.26 Proposals for the importation and processing of specific stone types that do not occur in Somerset will be considered by the Mineral Planning Authority on a case-by-case basis with due regard to policies in the Development Plan.

7. Building Stone

Figure 2: a tool to help applicants to prepare a planning application for extraction of building stone



Key:

Initial engagement

1. Applicants are strongly advised to discuss their proposals with the County Council's planning officers, taking advantage of the Pre-Application Enquiry service before making an application.
2. Applicants are referred to the document "*County Matter Applications – Mineral Development: Notes for Applicants*", which helps to ensure that sufficient information is submitted to enable a full and considered judgement of the application.

7. Building Stone

Geology and need

3. What is the evidence of the geology and presence of the specified building stone type at the proposal site (including demonstration of proven adequate reserves)? A suitable method for this would be a brief geological report, including recent trial pits / exposures along with relevant stratigraphic logs and supporting photographs. The availability of rock samples for inspection would also be beneficial.
4. Need may be demonstrated by evidence of the current and future market for the stone, taking into account:
 - the extent of the historical use of the stone (for example in buildings, settlements, Conservation Areas or heritage conservation uses); and/or
 - projected use of the stone for new build purposes, including buildings, extensions, walling, paving and other uses.

See Mineral Topic Paper 2 for more information on building stone types in Somerset (in particular Appendix 1) and Mineral Topic Paper 6 and Chapter 11 about the county's Mineral Safeguarding Areas.

Nature, scale and intensity of the operations at the proposed location

5. Is the proposal a new site, an extension to an existing site or the re-opening of an old site? National policy highlights the potential role of small-scale extraction of building stone at, or close to, relic quarries. Each case will be considered on its own merits.
6. Is the same building stone available at other locations, and what are the benefits delivered through its provision at the proposed location? For example, benefits may be linked with the transport of materials.
7. What will be the scale of the operations? According to the English Stone Forum, small-scale operations do not normally exceed approximately 2000m³ per annum. Each case will be considered on its own merits.
8. Is the proposal near to existing settlements and is access to the site adequate and fit for purpose? What are the impacts on local amenity? See Chapter 19 for more information on protecting local amenity and Chapter 20 for more information on mineral transportation.
9. What are the longer term plans for the site? See Chapters 10 and 18 for more information on site reclamation, including restoration and afteruse. Wherever practical, any afteruse scheme at the site should include features that benefit geological and wildlife conservation e.g. retaining quarry faces for geological / educational value.

Mitigation of adverse impacts

10. Will working of the proposal site generate impacts on the natural or historic environment? See Chapter 13 for more information on landscape and visual amenity, Chapter 14 for more information on biodiversity and geodiversity and Chapter 15 for more information on the historic environment.
11. What are the impacts of the proposal on hydrology? See Chapter 16 for more information on water resources and flood risk.

7. Building Stone

- 7.27 A case for the importation and processing of natural stone into permitted mineral sites is likely to be based on factors such as the economic viability of operations, the range of products an operator can provide to the market, the impact of the proposed stone working on local jobs and the retention of skills in Somerset. In such cases, key considerations for the County Council will include:
- alignment with the vision and objectives of the Somerset Minerals Plan;
 - economic and other benefits to the local and/or wider communities;
 - cumulative impacts (alongside other activities at the site and/or adjacent sites) on the natural and historic environment, or local amenity (for example, arising from the transport of materials);
 - how the wastes arising from the working of such imported material will be managed; and
 - impacts on the use of appropriate, Somerset-sourced building stone.
- 7.28 The term “natural stone” tends to be used mainly by the industry and in addition to covering building stones (as defined above) it also includes types of stone such as granites, marbles and quartzites which do not occur in Somerset and are typically used as facing or decorative stones or polished products such as floor tiles.
- 7.29 Stone may be processed on- or off-site and the relative merits (of using or developing on- or off-site facilities) would be assessed on a case by case basis, taking into account factors such as:
- the benefits of reduced impacts for a specified site and its surroundings;
 - the economic impacts (for example, taking into account economies of scale and employment opportunities); and
 - transport impacts.

Recycling and re-use of building stone

- 7.30 The Council favours the reclamation of stone where it can be demonstrated that it does not damage existing heritage assets above the establishment of new quarries; and vice versa, it favours the establishment of new quarries above reclamation if there is a demonstrable need for the mineral (in accordance with proposed policy) and where a reclamation-led approach would be likely to damage heritage assets.
- 7.31 With reference to the use of crushing stone waste and offcuts, particularly in pathway construction and specialist mortars, the Council supports implementation of the waste hierarchy³⁹ and seeks to ensure that the disposal of materials – where they are discarded because they are considered a waste material – is minimised.
- 7.32 It is noted that a balance needs to be struck between such the supply of by-products from building stone extraction and the retention of spoil and top soil from the site for adequate and complete restoration purposes.

³⁹ Refer to the Waste Core Strategy (adopted 2013) for more information, in particular policy WCS2

7. Building Stone

- 7.33 The retention of some spoil has potential value for biodiversity gains, specialist flora and invertebrates, and facilitates geological specimen collection avoiding the need to hammer remaining conservation faces etc. However, particularly for small scale building quarries, it is noted that space on site can be at a premium; and, assuming sufficient provision is made for restoration (in accordance with policy DM7 and demonstrated by the applicant), the Council supports the beneficial use of such material off-site – in particular the supply of agricultural stone for farm tracks.
- 7.34 Conditions may be imposed to monitor the amount of material held on-site in stockpiles or bunds to ensure adequate restoration of the quarry.

8. Peat

- 8.1 Peat is a nutrient rich organic material formed from the remains of vegetation growing in wet conditions gradually built up over thousands of years. Peatlands are important stores of carbon.⁴⁰
- 8.2 Peat is primarily used as a “growing medium” in horticulture and amateur gardening. In Somerset, the peat industry is based in the Levels and Moors in the central Brue valley to the west of Glastonbury (see map 5).
- 8.3 The Somerset Levels and Moors comprise mainly of a sedge peat and within the existing extraction areas peat is typically between 2m and 4m thick.
- 8.4 Due to the density of sedge peat in Somerset, it is often mixed before sale 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.

The Somerset Levels and Moors

- 8.5 The Somerset Levels and Moors is one of the largest and most biodiverse areas of traditionally managed wet grassland and fen habitats in lowland UK, attracting important numbers of water birds in winter. The area is designated a Special Protection Area (SPA) at a European level, for its internationally important populations of birds, and is also a Ramsar site designated under the Ramsar Convention on Wetlands⁴¹, for its rare ditch invertebrates, both of which carry a high degree of protection with them. These sites are also designated as SSSIs at a national level, and may include features not listed under the European designation. Other areas in which peat has been extracted are designated at a county level as Local Wildlife Sites for their wetland interest.
- 8.6 It is important to note that wintering and migratory bird species cited on the SPA / Ramsar designations also make use of areas outside the designated site boundaries. These areas ecologically support the integrity of the SPA / Ramsar. Surveys for outside the SPA / Ramsar indicate the use is made by wintering birds, particularly lapwing and wigeon, of all peat areas.⁴² Similarly surveys have shown that aquatic invertebrates cited on the Ramsar designation make use of Godney Moor, Glastonbury Heath and Common Moor.⁴³ The location of these areas based on criteria set out in the Habitats Regulations Assessment is shown in Map 5 in Appendix B.

⁴⁰ According to the Government Response to the Sustainable Growing Media Task Force (Defra, 2013) “Peat is an important carbon store and active bogs sequester carbon (providing a carbon sink)”

⁴¹ Further information can be accessed via the following link: http://www.ramsar.org/cda/en/ramsar-european-rs-homeindex/main/ramsar/1%5E26097_4000_0__

⁴² Survey of Waterfowl in Potential Peat Producing Areas on the Somerset Levels and Moors, July 2010

⁴³ Somerset Peat Moors Invertebrate Report, April 2011

8. Peat

- 8.7 The area also has substantial archaeological importance, where waterlogged peat has preserved organic materials, such as wood, for thousands of years. In the Avalon Marshes, which form part of the wetland modified by peat extraction, numerous prehistoric wooden trackways, canoes and wetland villages and Roman salt mounds have been found, most often during peat extraction when these artefacts are damaged. The peat itself is also an irreplaceable record of 7,000 years of past landscape, climate and sea level change.

National policy direction

- 8.8 Central 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, in particular on carbon storage and biodiversity.
- 8.9 Government's Natural Environment White Paper ⁴⁴ makes a commitment for English amateur gardening to be peat-free by 2020 and professional horticulture to be peat-free by 2030, by introducing voluntary phase-out targets.
- 8.10 The White Paper also announced the creation of a task force, with an initial remit to explore how to overcome barriers to further reducing peat use in horticulture. Since then the Task Force has broadened its remit to reflect its long-term goals and adopted a new title: the Sustainable Growing Media Task Force.
- 8.11 The Sustainable Growing Media Task Force Report published in mid 2012 discussed whether peat can be responsibly sourced, concluding that: *"there are some sources of peat that a pragmatist would say are not caught up in the initial problem (of depleting biodiversity) and deserve bespoke attention and narrative."* This was named the "Somerset question" and questions whether "extraction of peat that converts farmland into biodiverse wetlands and other habitats should be exempt from the pressure to avoid all peat?"⁴⁵
- 8.12 Publication of the Task Force Report came after publication of the NPPF, which states that new applications for peat extraction should not be granted and in preparing local plans Mineral Planning Authorities should not identify new sites or extensions to new sites for peat extraction.⁴⁶

⁴⁴ Defra, The Natural Choice: Securing the value of nature, June 2011

⁴⁵ Knight, A. (June 2013). Sustainable Growing Media Task Force: Towards Sustainable Growing Media: Chairman's' Report and Roadmap, p6

⁴⁶ National Planning Policy Framework, (paragraphs 143-144)

8. Peat

- 8.13 The Task Force Report notes the mixed reaction of members of the Task Force to the approach taken on peat in the NPPF. A criticism of some in the Task Force was that the NPPF was inconsistent with the direction of travel implied by some of the Task Force discussions. The Task Force Report states that this should be an area revisited in the 2015 peat policy review, to which the Government has stated a commitment.⁴⁷
- 8.14 The Government's response to the Task Force Report (published in 2012) did not specifically address the "Somerset question".



8. Peat

The Chat Moss precedent

The NPPF's approach to peat recently came under scrutiny linked with an appeal for a planning application to extend the period of peat extraction for land at Chat Moss Peat Works, Greater Manchester. In response to the appeal, the Secretary of State agreed with the Inspector's conclusions that the Government has made it clear that the use of peat in horticulture is unsustainable. Whilst the NPPF requires the economic benefits of mineral extraction to be given significant weight, like the Inspector, the Secretary of State considered that this had to be set in the context of the Government's position on peat and considered against the consequences of peat extraction on climate change and biodiversity.

The Secretary of State concluded that there was no national planning policy imperative for new sources of peat supply to be brought forward, and that the release of peat resources in Chat Moss would frustrate the move from peat to non-peat growing media.

Furthermore, the Secretary of State recognised that while a dismissal of the appeal would result in a number of local jobs being lost, investment in the manufacture of non-peat substitutes would, in the longer term, create employment. The Secretary of State did not agree with the idea that refusal of these appeals would inevitably lead to peat extraction elsewhere that would generate higher levels of emissions; this argument paid insufficient account of non-peat media coming forward in the period that peat extraction would be proposed.

The Secretary of State considered that continued extraction of peat from the site would result in substantial emissions of CO₂ this impacting on climate change and contrary to the NPPF. The proposals would also delay the restoration of the site to lowland raised bog by many years, and this delay would be contrary to the NPPF which sought restoration at the earliest opportunity to high environmental standards.

The NPPF does not prevent continued peat extraction on sites that have already been granted planning permission. However, the Secretary of State considered that this does not mean new proposals on existing sites should automatically be approved. Careful consideration needs to be given to each case, looking in particular at any arguments as to the need for peat and having regard to the impact on climate change and biodiversity from continued extraction.

Further information is available at: https://assets.digital.cabinet-office.gov.uk/government/uploads/system/uploads/attachment_data/file/14967/Chat_Moss.pdf

8. Peat

Implementing national policy

- 8.15 Somerset County Council supports the direction of national policy as stated in the NPPF.
- 8.16 The NPPF does not explicitly cover the issue of time extensions to existing peat sites, and so the Council takes direction from the recent appeal against the planning application to extend the period of peat extraction at Chat Moss Peat Works (see text box), where the Inspector stated that: *"Each case needs to be considered on its merits taking account to any arguments as to need for the peat and having regard to the impact on climate change and biodiversity from continued extraction."*⁴⁷
- 8.17 The Inspector clarifies this further in paragraphs 929 – 930⁴⁸, stating that: *"the common sense interpretation of the Framework must be that it relates to physically new sites or to physical extensions of existing sites. It is quiet on whether any new planning permissions can be granted for peat extraction."*
- 8.18 Following the Inspector's methodology for the Chat Moss Appeal, applications for the extension of time to work on peat sites in Somerset should first be considered in the context of whether there is sufficient local supply to meet residual demand.
- 8.19 Minerals Topic Paper 3 sets out to calculate the reserves and supply of peat in Somerset, to address the question of whether there are sufficient reserves to meet predicted demand. Whilst the industry has been as yet unable to supply useable data, figures from the Office of National Statistics and Mineral Valuation Office show a broadly similar decline in total sales for the period 1999 to 2011.
- 8.20 Assuming a decline in sales in line with government targets to zero sales in 2030, around 700,000m³ of peat will be required for the plan period. Notwithstanding the direction set by the NPPF, information held by the Mineral Planning Authority indicates that current peat permissions already exceed the requirement for predicted demand for the plan period.⁴⁹ Current evidence suggests permitted reserves should be sufficient to meet anticipated residual demand.
- 8.21 A history of peat working in Somerset has left some sites in need of reclamation i.e. restoring land to the agreed after-use and standard. Effective restoration of peat sites takes into account the site's wider environmental context (see point 4 in the Reclamation checklist, Table 7, on page 96).

⁴⁷ Defra (January 2013). Government Response to the Sustainable Growing Media Task Force, p 16.

⁴⁸ Report to the Secretary of State for Communities and Local Government regarding Chat Moss Peat Works (18 June 2012), paragraphs 929-930 p167

⁴⁹ Report to the Secretary of State for Communities and Local Government regarding Chat Moss Peat Works (18 June 2012), paragraphs 123-124, p 22

8. Peat

- 8.22 Peat sites play a significant role in supporting: biodiversity; the coherence and resilience of ecological networks; water management; and flood resilience. Where restoration is incomplete or inadequate, reworking the site may be required to reduce flood risk, or maintain the integrity of the land drainage network, and/or enhance biodiversity and local ecological networks. In acknowledging this role, there may be exceptional circumstances in which the Council may be justified in granting planning permission for peat extraction on an existing site, to facilitate a significant net environmental benefit through enhanced scope for restoration and after-use. The criteria for considering these circumstances are listed in policy SMP6.
- 8.23 Granting such a modification may warrant a small additional area of working being permitted, only within an existing peat planning permission site, or a limited time extension to an existing permission. Most likely this would entail a limited increase in the duration of a permission outside a designated SPA/Ramsar site in exchange for a significant decrease in the duration of a permission within or adjoining the SPA/Ramsar site, to reduce the risk of harm to qualifying features of the designated site. If such an exchange is agreed, then in practice there should be no significant net gain in the quantity of peat extracted. A small additional area of working may be permitted within an existing permitted peat site if it is demonstrated that it can deliver significant net environmental benefits. Any such proposal must be evaluated on its merits. In line with the NPPF no physical extensions to the site will be permitted.

POLICY

Policy SMP6: Peat

Planning permission for peat extraction will only be granted to facilitate reclamation of previously worked sites, in which a significant net environmental benefit can be demonstrated. Such proposals must:

- a) maintain and where practicable enhance biodiversity and local ecological networks; and
- b) only remove peat that is physically required to implement that reclamation.

In exceptional circumstances, proposals focused on flood risk and water level management may be considered. Such applications must not conflict with the Plan's approach to biodiversity and local ecological networks.

- 8.24 In common with all types of mineral development, the Mineral Planning Authority will refer to the Development Plan as a whole when considering any application. For example, peat areas are usually exceptionally quiet and noise impacts may be significant when assessed against background noise (see chapter 19). Similarly transport impacts must be carefully considered (see chapter 20).

8. Peat

- 8.25 As part of demonstrating net environmental benefits, the impact on carbon emissions from any proposal for peat extraction shall be considered with reference to the latest national policy and guidance on this issue and/or the most recent research available. Research commissioned by Somerset County Council estimates that current rates of extraction in Somerset represent a loss in the carbon store of around 1450tC/year.⁵⁰ In order to recapture this carbon, a minimum of 70 hectares of grassland or open water would need to be converted to commercial reed beds, a much larger area than that worked for peat. Other land use changes could require much larger areas of conversion.
- 8.26 Policy SMP6 will be implemented in response to site monitoring and the future periodic review of existing planning permissions, called the Review of Old Planning Permissions (ROMP) process, when opportune. A separate process will continue to apply for sites identified under the Conservation of Species and Habitats Regulations 2010, often referred to as “Reg 63” sites (see below), where the Council will determine whether they can be worked in accordance with their existing permissions or need modification or revocation.
- 8.27 In spatial terms, the Somerset Minerals Local Plan (adopted 2004) identified Peat Production Zones as a way to encourage more efficient use of peat resources. A zoning approach is no longer viewed as appropriate as it is seen to promote peat extraction, which is contrary to government policy.
- 8.28 If the Government’s stated commitment to review peat policy in 2015 results in a significant change in national policy approach or direction for peat production, Somerset County Council will undertake an early focused review of its Minerals Plan. This will follow relevant guidance from the Planning Inspectorate.⁵¹

Permissions within Special Protection Areas / Ramsar sites

- 8.29 The approach to peat extraction nationally and locally has changed substantially over the years. Historic decisions mean that there are existing peat sites located in and within close proximity to the Somerset Levels and Moors Special Protection Area (SPA) and Ramsar designations (see map 5).
- 8.30 Under Regulation 63 of the Conservation Habitats and Species Regulations 2010 the County Minerals Planning authority is obliged to review all consents it has granted for developments that are likely to have a significant effect on any European Sites, if permission was given before the European Site was designated.

⁵⁰ Further information to support these figures can be found in Minerals Topic Paper 3: Peat Reserves and Supply available at: www.somerset.gov.uk/mineralsandwaste

⁵¹ For example, Guidance for Fast Track Reviews of Specific Policy Issues for a Local Plan, available for download from http://www.planningportal.gov.uk/uploads/pins/local_plans/discrete_policy_review_guidance.pdf

8. Peat

- 8.31 According to the Regulations, in the absence of any imperative reasons of overriding public interest, the Planning Authority shall affirm the permission only after it has ascertained that the development will not affect the integrity of the European Site should the development be allowed to proceed. Where this cannot be ascertained, the Authority should modify or revoke the permission. Defra has provided guidance on the implementation of the Regulations which indicates that Planning Authorities should revoke or modify consents only as a last resort and, before this, they ought to consider the feasibility of protecting European Sites by other means including agreeing a different area for which planning permission could be given (subject to the normal planning processes and considerations) which would not be damaging to that or any other nature conservation site.
- 8.32 A screening process undertaken by Somerset County Council initially identified 75 sites with permission for peat extraction that may have the potential to negatively impact on the Somerset Levels and Moors SPA / Ramsar and merited further review.
- 8.33 Further screening has now reduced this number and these sites are referred to by the Council as "Regulation 63" sites. It is the Council's responsibility to review these permissions under the Conservation of Species and Habitats Regulations 2010 and determine whether they can be worked in accordance with their existing permissions or they need modification or revocation.
- 8.34 The Options consultation ⁵² on the Somerset Minerals Plan sought opinion on options to manage peat sites with the potential to impact on the Somerset Levels and Moors SPA. The feedback highlighted that there was considerable support for the modification or revocation of peat permissions to be compensated from the public purse. Defra has since indicated that they will consider reimbursing the planning authority in cases where the working rights are reduced as a result of a Regulation 63 review under the Conservation of Habitats and Species Regulations 2010, where costs are high and where the action taken is no more than necessary to remove the risk. This means exploring alternative means of avoiding harm to the SPA before a decision is made to modify or revoke the permission, to provide evidence to Defra that all other options have been exhausted.
- 8.35 In light of this and the Options consultation responses, work is being undertaken to review the Regulation 63 sites with any compensation claims being payable from the public purse in accordance with legislation.⁵³
- 8.36 Where proposals for peat extraction potentially affect an international or a European site for nature conservation, either within the designated site or in areas that ecologically support its integrity, a test of likely significance under the provisions of the Habitat Regulations will need to be carried out as described in policy DM2.

⁵² March, 2009, Brown, A G. Carbon storage and sequestration in the Somerset Levels, UK: desk-based assessment and report

⁵³ The Peat Issues Paper can be found via the following link: www.somerset.gov.uk/mineralsandwaste

8. Peat

Transport and factory site impacts

- 8.37 The County Council is mindful of the potential implications of preserving and protecting the county's peatlands. If peat demand continues while Somerset's reserves dwindle in line with national policy, peat imports from Ireland and Baltic nations could increase to replace local peat, thereby exporting environmental and archaeological damage and potentially increasing vehicle movements in Somerset. The Mineral Planning Authority has no direct control over this issue.
- 8.38 Peat reserves and imports can only be monitored accurately with the support of the industry. Peat imports nationally have made up around 68%⁵⁴ of peat used in England/UK according to the most recently available statistics.
- 8.39 As previously mentioned a light moss peat is imported to Somerset, mostly from Ireland, which mixes well with the denser local sedge peat to produce a well balanced growing medium. There are also non-peat lighteners used, but they can be more variable in quality and potentially harder to source than moss peat. All imports, peat and non-peat, will result in increased transport impacts on local communities. Imported peat will also increase the carbon footprint of the county.
- 8.40 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 sites will not be under the control of the 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 for the areas concerned.
- 8.41 The majority of the factories processing growing media products have Class B2 land use allowing the factories, after peat use has finished, to be used for general industrial activities, including some waste activities such as wood chipping. These permissions are not connected to a minerals permission, are not time limited, and do not have restrictions on stockpiling or lorry movements for example. Ideally a growing media industry based on imported materials would move to more suitably located sites with better road connections. The economic reality is that this is unlikely to happen in the near future. However, some former processing sites have closed and been redeveloped for uses more in keeping with the quiet nature of the area.
- 8.42 In discussion with the relevant District Councils, Somerset County Council will promote and support potential after-uses of factory sites that provide positive enhancement to the local area and will not create unacceptable environmental impacts if possible. Growing media processing sites will be encouraged, where possible, to relocate to more suitable locations closer to good transport links.

⁵⁴ DEFRA (May 2011). *Impact Assessment: Reducing and phasing out the horticultural use of peat in England*

8. Peat

8.43 Whilst there are limited opportunities to reduce transport impacts at factory sites unassociated with minerals permissions, transport impacts can be reviewed and conditions reconsidered linked to minerals permissions at their periodic reviews, which occur every 15 years or as/when required. Concerns have been raised that in light of the government's aim for all horticulture to be peat-free by 2030, the rate of peat extraction in the UK could increase to ensure all existing reserves are extracted before this date. Policy DM9 helps to control this issue.

9. Energy Minerals

- 9.1 Energy minerals include coal, oil and gas. These hydrocarbon resources underpin key aspects of modern society, supplying energy to power industry and heat homes, fuel for transport to carry goods and people all over the world, and raw materials to produce everyday items.
- 9.2 The importance of energy security increases the significance of energy supply, and the use of domestic (energy mineral) resources. Bigger household gas and electricity bills further heighten public interest in this issue.
- 9.3 Developing domestic supplies of oil and gas is seen as a valuable step in reducing our reliance on imports. Reflecting this, there is an increasing interest from industry and central government in developing onshore supplies that would contribute toward the country's energy security.
- 9.4 Onshore oil and gas supplies can be accessed via the sinking of boreholes. This has taken place in the UK and worldwide for many years (see the Glossary in Appendix A for a definition of conventional hydrocarbons).
- 9.5 As more accessible resources are depleted, so attention turns to sources that have (so far) been less accessible. This can be termed "unconventional" development, which describes the source of oil or gas (see Glossary for a definition of unconventional hydrocarbons). Extraction takes place from unconventional sources using technology not used in conventional oil and gas extraction.
- 9.6 Acknowledging that unconventional oil and gas development would constitute a new type of development for Somerset, if proposed, the Somerset Minerals Plan must be:
 - a) sufficiently robust to enable the County Council to consider in detail any proposals submitted for unconventional oil and gas development and reach a well-informed decision based on the evidence available; and
 - b) sufficiently flexible, noting the range of potential approaches to such extraction, the duration of the plan period and the fast-moving nature of this field.
- 9.7 Any proposal must be considered within current National, European and International legislation, in light of the latest scientific information, government advice and best practice guidance at the time of proposal application. Minerals Topic Paper 4 provides a snapshot of the issues involved at the time of writing the Somerset Minerals Plan.

9. Energy minerals

Obtaining an exclusive licence for oil and gas development

- 9.8 The Department of Energy and Climate Change (DECC) manages the release of Petroleum Exploration and Development Licences (PEDLs) which give exclusive rights for exploration and extraction of oil and gas resources within a defined area. Obtaining a licence does not convey consent to drill or undertake any other form of operations.
- 9.9 Following changes announced in mid 2014, there is currently one PEDL area in Somerset, which crosses into Bath & North East Somerset (see map 6 for more information). Further changes to the PEDL areas are expected as part of the licensing rounds administered by DECC.
- 9.10 Once an organisation has a PEDL, the first step in taking forward a proposal is to obtain planning permission for exploration from the Mineral Planning Authority. As stated in the text box on page 58 (Regulatory Overview), the MPA must assume that the other regulators operate as intended.

The phases of unconventional oil and gas development

- 9.11 Somerset County Council will require the submission of a new planning application for each key stage of a proposal for oil and gas development. The NPPF outlines three main phases for on-shore oil and gas development, namely: exploration; appraisal; and production.
- 9.12 Based on the information available at the time of writing the Minerals Plan, the Council notes that it is not always possible to distinguish a discrete “appraisal” stage. Nonetheless, mindful of the need to distinguish different phases where possible (in particular separating the production phase from exploration and/or appraisal) the Council will ensure that unconventional oil and gas development is managed carefully in a phased manner.
- 9.13 For example, if the appraisal of targeted areas post-exploration phase requires additional boreholes to be sunk or horizontally drilled, without entering the production phase, this may require different planning conditions and a further review of the risks involved. In such circumstances it is likely that such appraisal will be considered as a distinct phase of the development and will require separate planning permission.
- 9.14 Effective continuous dialogue between operators and the Mineral Planning Authority is vital to ensure each step is carefully considered.

9. Energy minerals

Extraction of Coal-Bed Methane (CBM)

- 9.15 Focusing on coal bed methane (CBM), exploration usually relies on the sinking of boreholes, enabling cores to be extracted from the coal seam for analysis of their methane content. This will then give an indication of the gas content of the coal seam. Exploratory drilling is usually followed by a testing phase to determine the quality and quantity of gas available.⁵⁵
- 9.16 Having established that the seam identified has potential and the site merits further investment, a pump is usually used to aid gas recovery. Gas extraction is promoted by creating a difference in pressure within the rock. This is done by pumping water out of the coal seam, thus allowing the gas to flow out. Hydraulic fracturing (fracking) is not always required to extract CBM.

Shale gas extraction

- 9.17 Focusing on shale gas, fracking can be used to open and/or extend existing narrow fractures or create new ones (fractures are typically hairline in width) in gas-bearing rock, which allows gas to flow into wellbores to be captured.
- 9.18 During fracking, a mixture of water, chemicals and sand is pumped under pressure down a borehole into the rock unit. The sand is used to prop the fractures open to increase gas extraction.
- 9.19 When the high pressure is removed, the fracking fluid returns to the surface for treatment and storage. The flowback water also may contain saline water with dissolved minerals from the shale rock formation. Estimates vary on what percentage of the fracking fluid returns to the surface: from 25-75%.⁵⁶ This wide range is explained by differences in the properties of the shale and the approach to the fracking.
- 9.20 Only substances that have been assessed as being non-hazardous pollutants under the Groundwater Directive (see glossary) may be used in hydraulic fracturing fluids. The Environment Agency has powers to require full disclosure of chemicals used. Information on the chemicals used by an operator in hydraulic fracturing fluid will normally be made available to the public. Whilst the content of fracking fluids remains principally a permitting matter, the County Council will encourage transparency on this issue in the planning process (acknowledging the relative proportions of the chemicals used may remain commercially confidential).

⁵⁵ British Geological Survey, Alternative Fossil Fuels, Mineral Planning Factsheet, October 2011

⁵⁶ The Royal Society & The Royal Academy of Engineering, Shale Gas Extraction in the UK: a review of hydraulic fracturing, June 2012

9. Energy minerals

Regulation overview

After securing a Petroleum Exploration and Development Licences (PEDL) from the Department of Energy and Climate Change (DECC), an operator must obtain planning permission from the Mineral Planning Authority (MPA).

Before final consent to drill is granted (by DECC) the operator will also need to obtain appropriate permit(s) from the Environment Agency, inform the Health and Safety Executive of their plans and inform British Geological Survey of the intention to drill. Furthermore, DECC will require an outline hydraulic fracturing plan and information on monitoring induced seismicity to be submitted by the operator if fracking is proposed. The MPA must assume that the other regulatory bodies operate as intended.

Consent from the Coal Authority is required before any works take place that intersect coal and/or coal mine workings (whether abandoned or not) vested in the Coal Authority.⁵⁷

What impacts need to be considered by Somerset County Council?

- 9.21 On receipt of a planning application for oil and gas development, the main planning issues that Somerset County Council, as Minerals Planning Authority (MPA), must address (depending on site relevance) are broadly similar to other types of mineral development and thus would be considered with reference to a range of Development Management policies in the second half of the Somerset Minerals Plan. For unconventional oil and gas development potential impacts to consider include, for example, transportation impacts (e.g. the transport of fluids by tanker) and/or noise impacts (from drilling or pumping) – see policies DM9 and DM8, respectively.
- 9.22 Guidance on the planning application process, including a summary of the key regulators for hydrocarbon extraction and issues that mineral planning authorities can leave to other regulatory regimes is provided in the Planning Practice Guidance.
- 9.23 The applicant will be required to provide information on how the site has been selected and the extent of the geographical area of search for the oil or gas. The area of search is defined as the area within which the exploration or appraisal will take place in relation to the wider reservoir (the source of the oil or gas). It should be demonstrated that the site selection process has had regard to designations of local, regional and/or national importance. In addition sites of European importance and areas that ecologically support the integrity of these must be considered. It should also be demonstrated that facilities are located to minimise adverse impacts on landscape and visual amenity and offer the best opportunity for the appropriate and adequate mitigation and/or compensation of any adverse impacts.

⁵⁷ <http://coal.decc.gov.uk/en/coal/cms/publications/mining/seams/seams.aspx>
Somerset Minerals Plan

9. Energy minerals

- 9.24 It is noted that in the areas covered by the current round of PEDL licences there are numerous designations of local, regional and/or national and/or international importance, which will inform considerations on a case by case basis and are protected by policy and legislation. For example, these include (but are not limited to): Mendip Hills AONB, Water Source Protection Zones, City of Bath World Heritage Site (and in particular Bath Hot Springs), Chew Valley Special Protection Area (SPA) and Special Areas of Conservation.
- 9.25 Dialogue between Somerset County Council and Bath & North East Somerset Council highlights in particular the importance of ensuring adequate measures are taken to protect Bath Hot Springs. The protection of water resources is covered further in the Minerals Plan in chapter 16 (see policies DM4 and DM5).
- 9.26 Where proposals for oil and gas development potentially affects an international or a European site for nature conservation a test of likely significance under the provisions of the Habitats Regulations will need to be carried out as described in policy DM2.

Reviewing the potential impacts: a precautionary approach

- 9.27 Given that unconventional development linked with onshore oil and gas extraction is still in its infancy in the UK, it is important that the County Council takes a carefully considered approach, including assessing potential risks in detail at an early stage of project development.



9. Energy minerals

- 9.28 Informing its approach, the County Council has worked work with Bath & North East Somerset Council and North Somerset Council to inform local mineral planning policy in areas covered by PEDLs, noting that currently licensed areas cross the county boundary.
- 9.29 Looking forward, the County Council will:
- continue to co-operate with Bath & North East Somerset Council, North Somerset Council, the Environment Agency and other relevant professional organisations such as DECC and the British Geological Survey to keep the Council's evidence base on potential impacts up-to-date in this fast-moving field; and
 - promote effective, early dialogue between industry and local communities, seeking as much information and clarity on new proposals as possible (see the text box on community engagement).
- 9.30 Somerset County Council's policy on oil and gas is presented in SMP7, which differentiates between the different stages of development. Exploration and appraisal operations should be for an agreed, temporary length of time.
- 9.31 All proposals for oil and gas development must assess environmental risk to establish the nature and extent of any adverse impacts and identify appropriate mitigation measures. To facilitate this it is important to ensure that all environmental assessments submitted at the planning stage are as complete and up-to-date as possible. For shale gas applications that involve fracking this will include reference to an Environmental Risk Assessment (ERA) completed as best practice under guidance from DECC.
- 9.32 Noting the geological complexity of some areas of Somerset, the application must demonstrate that drilling at the proposed location will not generate unacceptable adverse impacts on the integrity of the underlying geological structure. As necessary, Somerset County Council will seek expert advice (for example, from British Geological Survey (BGS)) to verify that all geological data bearing on the application has been considered and that sufficient data are available to make an informed decision. Advice will also be sought from Natural England with regard to ecological data relating to geological features. The consideration of technical matters such as these would be covered within any proposed Planning Performance Agreement (see text box overleaf).
- 9.33 It is noted that the complex geology of the Mendip Hills potentially makes it more technically challenging to assess some of the impacts. In particular, folds in the rock strata make it harder to interpret 2D seismic survey data.
- 9.34 Underground caves and passages have a crucial role in the movement of water through the hills, an important consideration when seeking to protect groundwater resources. Furthermore, some local sites are protected as SSSIs, and others have provided important archaeological information and some are destinations for cavers and tourists. The Mendip Cave Registry and Archive (www.mcra.org.uk) provides an important source of local information on this subject.

9. Energy minerals

- 9.35 Chapter 16 covers the protection of water resources and flood risk in more detail.
- 9.36 In common with all types of mineral development, the Mineral Planning Authority will refer to the Development Plan as a whole when considering any application.
- 9.37 All of the criteria in policy SMP7 applicable to the exploration and appraisal stages will also be applicable to production.
- 9.38 When preparing a proposal for production, as well as covering criteria a-d in as much detail as possible (i.e. revisiting and expanding information submitted during the exploration stages), operators would also be asked to provide information on the outcomes of the appraisal stage (showing that production will be viable), a development framework for the site, and detailed consideration of the economic impacts of the proposal.
- 9.39 All applications will be considered against Environmental Impact Assessment Regulations (2011) (or subsequent regulations). Consideration of cumulative impacts will form an important part of this process.
- 9.40 Appropriate planning obligations and conditions will be sought to ensure that the proposal adheres to the Development Plan.

Community engagement

Community engagement is a crucial issue regarding oil and gas extraction. Policy DM8 on protecting local amenity states that the applicant must outline how it intends to engage with the local community during the operational life of the site. Early engagement is particularly encouraged for any proposal linked with fracking for shale gas or coal bed methane extraction. The County Council will seek to sign a Planning Performance Agreement (PPA) with the applicant, recognising that the project will give rise to complex planning issues and helping to promote local engagement.

In January 2014 the Government announced that Councils will be eligible for 100% of business rates collected from shale gas sites, and that financial benefits to local communities will also be strengthened. In 2013, the industry announced that local communities would receive £100,000 when a test well is fracked and a further 1 per cent of revenues if shale gas is discovered. This could be worth £5 to £10 million for a typical producing site over its lifetime. The County Council will maintain a watching brief on central government proposals and engage fully as/when appropriate.

9. Energy minerals

POLICY

Policy SMP7: Conventional and unconventional oil and gas development

Planning permission for the exploration and/or appraisal of oil and gas resources in Somerset will be granted subject to the application demonstrating that:

- a) well sites and associated facilities are sited in the least sensitive location from which the target reservoir can be accessed;
- b) the proposed development will not generate unacceptable adverse impacts on the environment and local communities;
- c) drilling at the proposed location will not generate unacceptable adverse impacts on the integrity of the underlying geological structure; and
- d) measures will be taken to mitigate to acceptable levels adverse impacts on the environment and local communities.

Planning permission for production of oil and gas in Somerset will be granted if the proposal:

- e) adheres to criteria a-d above;
- f) includes a full appraisal programme for the oil and/or gas resource, completed to the satisfaction of the Mineral Planning Authority; and
- g) includes a development framework for the site, incorporating or supplemented by justification for the number and extent of the proposed production facilities and an assessment of the proposal's economic impacts.

Coal extraction

- 9.41 In the past, many minerals have been extracted in Somerset, including conventional extraction of coal and oil. Such extraction has ceased. The Mineral Planning Authority is not aware of any plans to recommence working and there is little evidence at this time to indicate there remain good prospects for extraction of conventional hydrocarbons such as coal in Somerset.
- 9.42 If a proposal is submitted for such working, the Mineral Planning Authority will determine that proposal against the policies in the Development Plan. Ultimately such proposals will be determined on their individual merits having regard to national planning policy in the NPPF.

10. Site Reclamation

- 10.1 Somerset has a diverse and widespread minerals resource. Rocks suitable for aggregate production are concentrated in the Mendips, peat in the Somerset Levels and Moors, and different types of building stone are distributed across much of the county. Many of these resources overlap with areas of the county that are protected by designations that reflect their natural and historic environment importance.
- 10.2 Site reclamation – covering restoration and aftercare⁵⁸ – is essential to provide net gains for the environment and secure a legacy that is acceptable to the local community.
- 10.3 When developing a site reclamation scheme, factors to consider include:
- the site's characteristics and land use; for example, whether the land has an agricultural classification;
 - the characteristics of the surrounding area – in terms of land use context and features that need to be protected, including ecological networks, biodiversity, landscape and visual amenity; and
 - any specific local requirements, such as the preferred outcome(s) from the local community's perspective, future access considerations (for transport and public rights of way), the position of the water table, and any aspirations linked with biodiversity and geodiversity.
- 10.4 Depending on the type of mineral site involved and its setting, appropriate after-uses could include agriculture (safeguarding the long term potential of the best and most versatile agricultural land), biodiversity conservation, geodiversity, the historic environment, native woodland, recreation, tourism and industrial uses.
- 10.5 Applicants shall be required to demonstrate how proposals will deliver appropriate environmental standards via the provision of sufficient detail on plans for site restoration and aftercare, including adequate consideration of the long-term impact on the landscape.⁵⁹
- 10.6 When preparing a planning application for mineral development, applicants should consider the strategic aims for site reclamation set out in this section of the Minerals Plan, coupled with the more detailed Development Management considerations set out in chapter 18.
- 10.7 The headline vision that guides the County Council's approach to restoration and after-use of all mineral sites is established in policy SMP8. It is linked to a number of criteria, listed in policy DM7, which help the industry to demonstrate how they comply with this vision.

⁵⁸ See Chapter 18 and the Minerals Plan Glossary for a definition of both of these terms.

⁵⁹ Planning Practice Guidance includes more information on the restoration and aftercare of minerals sites, including aftercare conditions and landscape strategy.

10. Site Reclamation

Nature after Minerals

There is significant potential for the minerals industry to leave a lasting legacy for people and wildlife, enhancing and improving Somerset's environment. The *Nature after Minerals* programme emphasises this importance and the role that minerals sites can play in creating wildlife habitats.

This project is a partnership between Natural England and the RSPB, with support from the Mineral Products Association (formerly the Quarry Products Association) and the British Aggregates Association. These organisations are working with mineral planners and industry to help nature after minerals production has ceased.

Aggregates

- 10.8 Aggregate quarries are concentrated in the Mendip Hills, particularly the East Mendips. This offers scope for taking a landscape scale approach to restoration and improving the coherence and resilience of ecological networks. The delivery of planning policy on restoration regarding aggregate quarries should be informed by Maps 7a and 7b, which have been created by Somerset Wildlife Trust's Living Landscape team in conjunction with Somerset County Council.
- 10.9 Maps 7a and 7b depict the ecological networks in the Mendip Hills, identifying a basic framework of essential existing infrastructure, and new areas of strategic opportunity for the restoration of ecological function.
- 10.10 Dormant aggregate sites are live habitats and need to be handled sensitively when it comes to reclamation. Any activity or decision linked with restoration and aftercare of a dormant site must be considered very carefully, also with regard to the local ecological networks. Information available from Somerset County Council, Natural England, the Somerset Environmental Records Centre (SERC) and the Somerset Wildlife Trust can inform the consideration of any broader implications. A summary of the powers available to the County Council in regard to dormant sites is included in Chapter 6.

10. Site Reclamation

Building stone

- 10.11 As mentioned in chapter 7, building stone extraction usually occurs in small-scale quarries and blasting tends to be avoided.
- 10.12 Phased restoration commenced at the earliest opportunity will be required wherever is practicable and schemes should recognise the value of retaining un-restored quarry faces which would contribute to the interpretation of the geology of Somerset.
- 10.13 After-use potential with regard to built development and industry may be limited due to small-scale nature and basic characteristics of building stone quarry sites.

Peat

- 10.14 Peat habitats have significant ecological value and the areas where it has been worked in Somerset contain a variety of environmental designations ranging from local to national and even international importance. The area also has substantial archaeological importance.
- 10.15 The reclamation of former peat extraction sites has been 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.^{60,61}
- 10.16 Extensive reclamation to nature conservation is possible and has occurred in areas of former peat extraction. However, restoration opportunities may be limited in cases where all the peat has been extracted, leaving relatively deep water overlying a clay base. The scope for achieving a better restoration outcome from peat working is highlighted in Chapter 8.
- 10.17 Due to the sensitive nature of peat sites and their surrounding environment, the main after-use for those sites will be to enhance biodiversity and local ecological networks. Other after-uses, for example those that facilitate water level management and flood risk management, must demonstrate that they do not conflict with this approach. Approval for proposals for the restoration, aftercare and after-use of former peat workings will be given to those schemes which will deliver a significant net environmental benefit.

⁶⁰ Planning and Compensation Act 1991: Interim Development Order Permissions.

⁶¹ Environment Act 1995: Review of Mineral Planning Permissions.

10. Site Reclamation

Energy minerals

- 10.18 The restoration of oil and gas development sites begins with decommissioning, meaning that facilities on the site need to be dismantled and removed first. The impacts of decommissioning the site will need to be considered at the time of applying for planning permission, and will vary depending on the size and complexity of the site. This process should take into account the development management principles set out in chapters 18 (Restoration and Aftercare), 19 (Amenity) and 20 (Transportation) in particular.
- 10.19 Individual site wells should be removed and restored to high environmental standards as soon as practicable, where they are no longer required.

POLICY

Policy SMP8: Site Reclamation

Mineral sites should be restored to high environmental standards as soon as practicable, where possible through phased restoration whilst other parts of the site are still being worked.

The restoration, aftercare and after-use of former mineral working sites will be determined in relation to:

- a) the characteristics and land use of the site;
- b) the surrounding environmental character and land use(s); and
- c) any specific local requirements.

Proposals for restoration and aftercare must demonstrate how they meet the criteria set out in policy DM7.

11. Safeguarding

- 11.1 Noting that minerals can only be worked where they occur, it is important that Somerset's diverse minerals resources are given appropriate protection via minerals planning policy to ensure there are sufficient supplies of needed minerals for future generations.
- 11.2 If non-mineral development such as the construction of housing takes place above or close to a mineral resource, it is likely that the resource will be sterilised, meaning that extraction of the mineral is no longer possible.
- 11.3 In accordance with government policy, local planning authorities should identify known locations of specific minerals resources for safeguarding. The process of minerals safeguarding helps to ensure that such resources are not sterilised by non-mineral planning decisions.
- 11.4 By referring to identified Mineral Safeguarding Areas (MSAs), the presence of mineral resources is flagged up for consideration alongside all other issues that are taken into account when deciding whether to grant a planning permission.
- 11.5 It may be that the non-mineral development can be located in an alternative more sustainable location; or the mineral can be removed prior to the development being constructed (known as prior-extraction). Alternatively, on balance, the overriding need for the development may be greater than the need for the mineral.
- 11.6 There is no presumption that mineral resources identified in Mineral Safeguarding Areas will be worked, nor is the aim of a Mineral Safeguarding Area to wholly prevent other development from occurring.

Safeguarding in Somerset

- 11.7 Two separate designations are used for minerals safeguarding in Somerset:
- Mineral Safeguarding Areas – areas of known specific minerals resources designated by the County Council so they are not needlessly sterilised by non-mineral development.
 - Mineral Consultation Areas – areas in Somerset where the county's District and Borough councils are required to consult the Mineral Planning Authority over proposed non-minerals development.
- 11.8 Implementation of minerals safeguarding in Somerset relies on close co-operation between Somerset County Council (as Mineral Planning Authority) and the Somerset District and Borough Authorities and the inclusion of and reference to identified Mineral Safeguarding Areas in the Development Plan.

11. Safeguarding

- 11.9 For robust safeguarding and to allow for adequate consultation to be carried out between the County Council and District and Borough planning authorities, the whole of the extent of the county's MSAs will be covered by a Mineral Consultation Area.
- 11.10 On receipt of a planning application, a District or Borough planner will check which designations apply within the location proposed for development. As outlined in policy SMP9, if the location is covered wholly or in part by a Mineral Consultation Area the planner will notify the Mineral Planning Authority (the County Council) about the proposal. This will allow the Mineral Planning Authority opportunity to comment on the significance of that proposal on the winning and working of minerals before the District or Borough Council determines the planning application for the non-mineral development.

Determining Mineral Safeguarding Areas in Somerset

Minerals to be safeguarded

- 11.11 The three main mineral types worked in Somerset are:
- aggregates (namely crushed rock and minimal amounts of sand & gravel);
 - building stone (of which there are various types); and
 - peat.
- 11.12 Chapters 6,7 and 8 of this document include more information on these three mineral types.
- 11.13 Table 4 lists the mineral resources identified for safeguarding in the Somerset Minerals Plan.
- 11.14 As stated in chapter 8, national policy states that in preparing Local Plans local planning authorities should not identify new sites or extensions to existing sites for peat extraction. As a result, the County Council is not safeguarding peat resources in Somerset.
- 11.15 Some areas are safeguarded for both their aggregate and building stone resources, as they have been targeted for extraction of both types of rock. Therefore they appear in Table 4 in more than one category.

More information on safeguarding

Further information on the County Council's approach to minerals safeguarding can be found in Minerals Topic Paper 6 supplemented by information in Minerals Topic Paper 2. These Topic Papers include justification for why these resources have been proposed for safeguarding and how their respective geographical areas have been designated as Mineral Safeguarding Areas.

11. Safeguarding

Table 4: Mineral resources to be safeguarded in Somerset

Aggregates	
Carboniferous limestone	Silurian andesite
Superficial sand and gravel (recent and Permo-Triassic)	Budleigh Salterton Pebble Beds
Devonian Sandstones (high polished stone value - namely the Hangman Sandstone Formation)	
Building Stone	
Blue Lias (including 'Grey Lias')	
Forest Marble	Cornbrash
Ham Stone	Inferior Oolite (including Cary Stone/Hadspen Stone and Doulting Stone)
Hangman Sandstones (including Triscombe Stone, Trentishoe Grits)	Ilfracombe Slates
Inferior Oolite (Misterton Stone)	Calcareous Grit (Upper Greensand)
Marlstone (including Moolham Stone and Petherton Stone)	Yeovil Stone
Morte Slates	Lower Carboniferous Limestone (including Vallis Limestone, Cheddar Oolite, Cheddar Limestone, Chinastones, Cannington Park Limestone)
North Curry Sandstone	Wedmore Stone
Otter Sandstone (including Lydeard Stone and Nynhead Sandstone)	Dolomitic Conglomerate (Draycott Stone)
White Lias (including 'Camel Hill Stone')	Chert/Flint
Wiveliscombe Sandstone	Budleigh Salterton Pebble Beds (including Milverton Stone and Capton Sandstone)
Devonian Limestone	Cockercombe Tuff
Hestercombe Diorite	Downside Stone (Chilcote Stone)
Other resources	
Surface coal	

11. Safeguarding

The extent of the resource to be safeguarded

- 11.16 The minerals safeguarding areas for Somerset are shown in map 8 in Appendix B.
- 11.17 Safeguarding does not attempt to predict how much resource will be needed over the plan period but focuses on the viable mineral resource i.e. known locations of specific mineral resources that could be extracted. Economic viability will change over time. Resources currently considered non-viable may potentially become viable for working in the plan period due to demand or changing economic circumstances.
- 11.18 When defining its safeguarding areas, the County Council referred to data and maps prepared by the British Geological Survey (BGS), along with geological memoirs⁶² and the application of local knowledge gathered from consultation. The maps used were the 1:100,000 scale BGS Resource Map for the county, and additional detail was provided by 1:50,000 scale BGS digital geological map data.
- 11.19 Mineral safeguarding is not precluded by the presence of urban areas and environmental designations as sterilising development takes place in these areas. Additionally defining MSAs in urban areas avoids disputes over the definition of what constitutes an urban area and the need to amend MSAs to reflect urban expansion. Guidance indicates that these areas should only be removed from MSAs in exceptional circumstances;⁶³ for example, where the mineral extraction method would be incompatible with working in a built up area, such as blasting required for hard-rock extraction. The exclusion of any areas from MSAs is justified in Minerals Topic Papers 6 and 2.
- 11.20 BGS guidance on safeguarding recommends⁶⁴ that a mineral safeguarding area should extend beyond the known resource boundary, creating a buffer to reduce the risk of incompatible development occurring close to a viable resource. The extent of these boundaries will vary between minerals and their methods of extraction.
- 11.21 For crushed rock, the County Council has used buffers around known resource locations (specifically active, inactive and dormant quarry sites) and has tested its proposals for extending the safeguarding boundary through consultation. Buffers for aggregate quarries are shown in Table 5 and have been included in the relevant crushed rock MSAs illustrated in map 8 in Appendix B.

Table 5: Buffer widths

Mineral working	Minimum buffer
Low output aggregate quarries (<250,000 tonnes/year)	200m
Higher output aggregate quarries	400m

⁶² Geological memoirs contain detailed geological information on the map sheet of the area.

⁶³ BGS, Mineral Safeguarding in England: a good practice guide 2011

⁶⁴ BGS, Mineral Safeguarding in England: a good practice guide 2011

11. Safeguarding

- 11.22 The whole of the andesite resource is safeguarded, plus a surrounding buffer.
- 11.23 MSAs cover the whole of the building stone resource for each listed building stone type in Table 4, except for Blue and White Lias, Inferior Oolite limestones and Lower Carboniferous limestones – see Topic Paper 2 for the detailed rationale and approach.

Minerals facilities

- 11.24 The NPPF requires mineral planning authorities to safeguard selected mineral related infrastructure and facilities to support the continued extraction and operation of economically viable mineral resources; this could include existing rail heads, rail links to quarries, wharfage and associated storage, handling and processing facilities.
- 11.25 Set in this context, the Somerset Minerals Plan safeguards the current railheads at Torr Works and Whatley Quarry in the Mendips and Dunball wharf, north of Bridgwater, which is used to land marine sand for construction uses and imported peat (see maps 9 – 11 in Appendix B).
- 11.26 It is anticipated that Combswich wharf will be used for the movement of a range of raw materials (including aggregates) by EDF Energy linked with the construction of Hinkley Point C Nuclear Power Station. It is not considered that Combswich wharf needs to be safeguarded linked with minerals development, as this facility has existing strong links with EDF Energy's proposals.
- 11.27 Those sites handling, processing and distributing recycled and secondary aggregates will also be safeguarded by Somerset County Council and a list of these facilities will be published in the Council's Local Aggregate Assessment in order for the list to be revised on an annual basis.
- 11.28 The County Council's Local Aggregate Assessment does not currently list associated plant, infrastructure and facilities located within existing mineral sites. Though not explicitly mentioned, it is important that such facilities are safeguarded. Taking the coating plant at Moons Hill Quarry Complex as an example, such facilities often represent the operational hub of the site (operating on a more continuous basis than extraction activities).
- 11.29 Additionally, the NPPF also requires planning authorities to safeguard sites associated with concrete processing; the role of safeguarding these facilities where they are not located in permitted mineral sites lies with the relevant District or Borough council as the determining planning authority. Facilities for concrete batching and/or manufacturing other concrete products within permitted mineral sites are safeguarded via the Minerals Plan safeguarding policy.

11. Safeguarding

Exemptions

11.30 For some types of non-mineral development, the sterilising effect on mineral resources may be negligible. Table 6 (referred to in policy SMP9) specifies the circumstances when this will apply. Sterilisation of the minerals resource does not need to be considered – and the Minerals Planning Authority does not need to be contacted by the relevant District Planning Authority – for development of the type proposed in Table 6.

Table 6: Exemption list

- Applications for householder development within the curtilage of a property.
- Applications for extensions or alterations to existing buildings and for change of use of existing development which do not fundamentally change the scale and character of the building/use.
- Development in accordance with allocations of an adopted or deposited local plan where the plan took account of prevention of unnecessary mineral sterilisation in consultation with the Mineral Planning Authority and industry and determined that prior extraction should not be considered when development applications in a Mineral Safeguarding Area came forward.
- Minor developments such as fences, walls, bus shelters, works to trees.
- Advertisement applications.
- Applications for temporary planning permission where the development can be completed and the site restored to a condition that does not inhibit extraction within the timescale that the mineral is likely to be needed.
- Reserved Matter applications unless the Mineral Planning Authority specifically requested consultation at the outline stage.
- Applications for Listed Building Consent unless specifically requested.
- Prior extraction is not practicable and/or viable and there is a demonstrable over-riding need for the proposed development.

11. Safeguarding

POLICY

Policy SMP9: Safeguarding

The Mineral Planning Authority safeguards the areas shown in Map 8. Within those areas the District and Borough Councils within Somerset should consult the Mineral Planning Authority on any planning applications they receive for non-mineral development.

Planning permission should not be granted for non-mineral development that would lead to the sterilisation of mineral resources within a safeguarded area or prejudice the use of safeguarded operational and/or permitted mineral sites (including quarries, mines, associated plant and infrastructure and facilities) as shown in Maps 8-11 unless:

- a) the development within the Mineral Safeguarding Area is exempt as set out in the exemption list in Table 6; or
- b) it can be demonstrated that the mineral resource, operations or facilities will not be detrimentally affected and the development proposal would not suffer unacceptable adverse impacts as a result of the mineral operations; or
- c) the mineral can be extracted where it would otherwise be sterilised by development providing the prior extraction would not cause unacceptable harm to local communities or the environment and that the primary use has been deemed acceptable by the relevant planning authority; or
- d) the applicant can demonstrate to the satisfaction of the Mineral Planning Authority that the mineral concerned is not of economic value.



12. Other Minerals

- 12.1 In the past, many minerals have been extracted in Somerset, including clay, gypsum, barytes, iron, lead, salt and coal. Extraction of these has ceased in all cases and the MPA is not aware of any plans to recommence working.
- 12.2 In the case of the above minerals or any other type not given a specific mention in the Plan, the MPA will determine applications for permission against the general development management policies set out in this plan so far as they are relevant. Ultimately such proposals will be determined on their individual merits.
- 12.3 If, during the life of the Plan, it becomes apparent that extraction of any minerals which are not covered in detail in this plan becomes a viable option and the applications are forthcoming, the MPA may address the deficiency through a focused review of the Plan depending on the urgency of providing policy.



Development Management Policies



13. Landscape and visual amenity

- 13.1 Somerset has a wide variety of landscape elements, features and characteristics, which individually and in combination create the varied character of the county and help to make the Somerset landscape unique.
- 13.2 It is important to ensure that appropriate provisions are made to protect and/or enhance the quality, character and amenity value of the countryside and landscape including coastal areas in Somerset, assessing site-specific impacts and any cumulative impacts (usually via Environmental Impact Assessment) which may arise as a result of the concentration of development in a particular area.
- 13.3 Parts of the county are designated as Areas of Outstanding Natural Beauty (AONBs) to recognise the high scenic quality of the landscape and conserve its natural beauty. Furthermore, part of Exmoor National Park lies in Somerset. Exmoor National Park Authority is a separate Minerals Planning Authority. Nonetheless Somerset County Council should be mindful of the impacts of a proposal on the distinctive landscape character of the National Park.
- 13.4 There are operational mineral sites in the Mendip Hills AONB and the Minerals Plan needs to ensure these sites can continue being worked without resulting in significant adverse impacts on the landscape character and the visual amenity of the area.
- 13.5 The National Planning Policy Framework (NPPF) addresses the issues that need to be considered if development is proposed within AONBs or National Parks. In summary, such issues focus on the need for the development, the alternatives available and the scope for mitigation of adverse impacts.⁶⁵
- 13.6 As stated in Planning Practice Guidance, where applications represent major development, planning permission for hydrocarbon extraction should be refused in National Parks and Areas of Outstanding Natural Beauty except in exceptional circumstances and where it can be demonstrated they are in the public interest. The assessment that needs to be carried out, including consideration of any detrimental effect on the environment, such as the noise and traffic which may be associated with hydraulic fracturing, is set out in paragraph 116 of the NPPF.
- 13.7 To inform local decision-making, it is essential that the County Council is presented with sufficiently detailed information on the impacts of any proposed development on landscape and visual amenity (also see chapter 19, paragraph 19.7).

⁶⁵ See paragraphs 115 and 116 of the NPPF.

13. Landscape and visual amenity

- 13.8 For proposals within or adjacent to an AONB, this will include (but not be limited to) appropriate reference to the latest relevant AONB Management Plan(s) to ensure any decisions are made with regard to all relevant adopted policies or objectives and to the primary purpose of AONB designation i.e. conservation and enhancement of natural beauty. For reference, “adjacent” has been defined in a study undertaken by the British Geological Survey as being within 1km of the designation boundary.⁶⁶ Natural England’s work to assess the visibility of land from designated landscapes such as AONBs will be used to further inform the position.
- 13.9 Any applicant must consider the characteristics of the area in which development is proposed. This should include (but not be limited to) reference to the appropriate National Character Area profiles⁶⁷ and any relevant local Landscape Character Assessments (LCAs).
- 13.10 Acknowledging this, it is important that the County Council must consider any proposal in the context of the wider Development Plan, also including reference to relevant District planning policies.
- 13.11 Furthermore, the Somerset Minerals Plan recognises that landscape character is made up of more than just the ‘high quality’ landscapes in designated areas.
- 13.12 For example, the Somerset Levels and Moors are identified as a distinctive landscape type in Natural England’s landscape character analysis. This landscape area, which covers a wide area including Nailsea, Langport and Burnham-on-sea has many separate designations including Special Protection Areas, Sites of Special Scientific Interest and National Nature Reserves (such as Ham Wall reserve). At present, there is no one single designation that covers this entire area but the Levels and Moors as a whole are recognised as having unique characteristics which need to be conserved and, where possible, enhanced.
- 13.13 Similarly, the acoustic properties of an area also help to shape its character. This is reflected in National Character Area profiles and in guidance on character assessments.⁶⁸ The impact of noise from mineral development, covered within policy DM8, may merit special consideration if the proposal is within an area identified for its tranquillity.

⁶⁶ BGS, An evaluation of decisions for aggregates working in designated areas since the introduction of MPS1, 2010

⁶⁷ For more information on NCAs, refer to <http://www.naturalengland.org.uk>

⁶⁸ For example: The Countryside Agency and Scottish Natural Heritage, *Landscape Character Assessment – Guidance for England and Scotland*, 2002

13. Landscape and visual amenity

POLICY

Policy DM1: Landscape and visual amenity

Planning permission for mineral development will be granted subject to the application demonstrating that:

- a) the proposed development will not generate unacceptable adverse impacts on landscape and visual amenity; and
- b) measures will be taken to mitigate to acceptable levels adverse impacts on landscape and visual amenity.

All mineral development proposals must be informed by and refer to the latest, relevant character assessments, nationally and locally.

National Parks and Areas of Outstanding Natural Beauty have the highest status of protection in relation to landscape and scenic beauty. Proposals for mineral development within or adjacent to an Area of Outstanding Natural Beauty will need to take full account of the relevant AONB Management Plan; and proposals within or adjacent to Exmoor National Park will need to take full account of the Exmoor National Park Local Plan.



14. Biodiversity and Geodiversity

- 14.1 Somerset is rich in biodiversity, with a range of species and habitats that are of international and national importance, and have been identified as a priority for conservation action under section 41 of the NERC Act.
- 14.2 European legislation, transposed into national policy and guidance, the NPPF and other statutory requirements ensure that European and National designations give appropriate protection to these areas.⁶⁹
- 14.3 A 'test of likely significance' (as defined by the Habitats Regulations 2010) is required for development proposals which directly affect European and internationally designated sites and in areas that ecologically support the integrity of these sites. The applicant shall be required to provide all necessary data to do this test.
- 14.4 The 'test of likely significance' would be carried out by Somerset County Council as the 'competent authority' under the Habitats Regulations. All data and information necessary to carry out these assessments should be provided by the developer with the planning application. This process supports the implementation of the Habitats Regulation Assessments, a statutory part of the planning process.

Securing net gains in the local ecological network

- 14.5 Somerset County Council has taken a species-led, landscape-scale approach to planning for biodiversity conservation. Further information on this can be found in Minerals Topic Paper 5 and its Annex, which can be downloaded from www.somerset.gov.uk/mineralsandwaste
- 14.6 Gains in biodiversity are sought via the planning process, and achievable both on- and off-site through a combination of measures that recognise how local ecological networks work.
- 14.7 Ecological networks are systems of interconnected habitats that enable essential dispersal, migration and movement across a landscape by different species. Somerset's Ecological Networks show how local ecological networks have been modelled and mapped (www.somerset.gov.uk/ecologicalnetworks). They comprise the following components:
- **Core Areas:** large areas of locally important or conservation priority habitat of sufficient size to support viable populations of protected or priority species.
 - **Stepping Stones:** small areas of locally important or conservation priority habitat of insufficient size to support viable populations of species, but that nonetheless play a pivotal function in providing shelter and food for species as they move through the landscape.
 - **Matrix areas:** expanses of habitat that connect core areas and stepping stones together for less mobile species enabling essential movement.

⁶⁹ In particular see paragraphs 118 and 119 of the NPPF.

14. Biodiversity and Geodiversity

- **Sustainable Use Areas:** Defra defines these as areas within the wider landscape focussed on the sustainable use of natural resources and appropriate economic activities, together with the maintenance of ecosystem services. Set up appropriately, they help to make the landscape outside the network more permeable and less hostile to wildlife.

14.8 Areas of restoration in the ecological networks will be identified by local wildlife partnerships as part of an on-going process. Ecological networks will be updated regularly in response to habitat changes resulting from restoration and further data being gathered.

Evaluating impacts on biodiversity

- 14.9 The County Council supports the use of its species led Habitat Evaluation Procedure which is set out in its Biodiversity Offsetting Methodology ([www.somerset.gov.uk / biodiversityoffsetting](http://www.somerset.gov.uk/biodiversityoffsetting)). The method calculates the value of habitat lost to a species population affected by development and is used rather than the current subjective approach to mitigation. It means that habitat lost to development that supports valued wildlife species will be replaced so that the resource available to a population will ensure its continuance and viability into the future. This can be achieved by enhancement and restoration of existing habitats within the population's home range.
- 14.10 The value of habitat loss to species populations will be calculated using the Habitat Evaluation Procedure ensuring the Government's target of no net loss, and gain where possible. Account is also given spatially to the location of any off site replacement habitat to ensure that the affected populations are maintained, and then preferably in a location that enhances Somerset's ecological networks.
- 14.11 Offsetting is not a means for legitimising all developments. The Somerset methodology includes criteria where development would be unacceptable such as for habitats within European and international sites, ancient woodland and other priority habitats (reference s41 NERC Act) and for habitats that support the maintenance of species populations that cannot be mitigated. Forward planning is considered essential in order that more sensitive areas are avoided in the first instance, and then minimises and mitigates impacts effectively before "offsetting" (or habitat replacement) is even considered. Developers are recommended to seek advice from the County Council at an early stage.

14. Biodiversity and Geodiversity

Minimising other impacts on biodiversity

14.12 In addition to conservation designations, there are other factors linked to biodiversity which need to be considered as part of minerals planning. Mineral workings restored particularly to water uses or wetland habitat may attract large numbers of birds. These may be a safety hazard to aircraft at sites close to airports and aerodromes (including recreational and military flying) because of bird strike. Aerodromes and associated infrastructure are protected by Government safeguarding⁷⁰ and as such the Ministry of Defence (or delegated body such as the Defence Infrastructure Organisation) needs to be consulted in cases of new mineral proposals for this purpose.

Preventing harm to geological conservation interests

14.13 Geodiversity is defined in the NPPF as the range of rocks, minerals, fossils, soils and landforms.

14.14 For mineral sites where impacts on geodiversity cannot be avoided, the County Council will in most cases support the retention of geological exposures (or re-exposure of equivalent geological strata) to help maintain Somerset's geological heritage and enable the use of geological exposures for educational purposes. This is particularly relevant to building stone quarries and is highlighted in the building stone section of the Somerset Minerals Plan (chapter 7).

14.15 Chapter 9 on energy minerals highlights the importance of the county's cave systems, in particular in the Mendip Hills.

14.16 There is a clear link (for both the protection of biodiversity and geodiversity) to site restoration, including the conservation of soil resources and use of appropriate materials during restoration. For more information on site restoration see policies SMP8 and DM7 and refer to Minerals Topic Paper 5.

⁷⁰ DfT/ODPM Circular 1/2003 - advice to local planning authorities on safeguarding aerodromes and military explosive storage areas. <https://www.gov.uk/government/publications/safeguarding-aerodromes-technical-sites-and-military-explosives-storage-areas>

Policy DM2: Biodiversity and geodiversity

Planning permission for mineral development will be granted subject to the application demonstrating that:

- a) the proposed development will not generate unacceptable adverse impacts on biodiversity and geodiversity; and
- b) measures will be taken to mitigate to acceptable levels (or, as a last resort, proportionately compensate for) adverse impacts on biodiversity and geodiversity. Such measures shall ensure a net gain in biodiversity where possible. The Habitat Evaluation Procedure will be used in calculating the value of a site to species affected by the proposal where the conservation value of the habitat is considered to be replaceable and mitigation techniques have been proven.

The weight of protection given to a site will be that afforded by its statutory or non statutory designation, its sensitivity and function in maintaining the biodiversity of the county, and its role in maintaining the connectivity and resilience of the county's ecological networks.

A 'test of likely significance' will be required for mineral development proposed which directly affect European and internationally designated sites and in areas that ecologically support the integrity of these sites.

15. Historic environment

- 15.1 Somerset is rich in sites which are important evidence of cultural heritage. There are currently 464 Scheduled Ancient Monuments in Somerset with a further 17,867 sites or features recorded on the Historic Environment Record as being of archaeological importance.
- 15.2 Heritage assets are irreplaceable. National policy indicates local plans should conserve and enhance such assets in a manner appropriate to their significance. Local building stone has an important role in the conservation of our built heritage (see chapter 7 for more information).
- 15.3 Furthermore, local plans should require applicants to assess the heritage asset, using appropriate expertise where necessary, and as a minimum consult the Historic Environment Record.⁷¹
- 15.4 Building on relevant national policy, the Somerset Minerals Plan policy also acknowledges Areas of High Archaeological Potential (AHAP) as relevant in Somerset, noting that there are currently in excess of 350 AHAPs in Somerset. Due to the density and significance of previous discoveries, all the lowland peat moors are considered to have the potential to include archaeological heritage assets.
- 15.5 A desk-based assessment will be required as a minimum for proposals that impact on the integrity, character and/or setting of a heritage asset, such as designated areas of high archaeological potential or areas with potential archaeological interest. This work must:
- a) include reference to the Somerset Historic Environment Record and records of heritage assets held by English Heritage;⁷²
 - b) include assessment using relevant expertise; and
 - c) be supplemented by relevant field evaluation if appropriate.
- 15.6 Applications for minerals development in Somerset must demonstrate that the proposal will not substantially harm the significance of the integrity, character or setting of a designated heritage assets. Where this cannot be demonstrated, the harm must be outweighed by the substantial public benefits of the proposal.
- 15.7 Proposals that substantially harm the significance of a non-designated heritage asset will be judged on the scale of harm and the significance of the asset.
- 15.8 A vibration or air-overpressure impact assessment may be required if a proposal is close to a historic building.

⁷¹ See NPPF chapter 12 for more information and refer to the Somerset Historic Record: www.somerset.gov.uk/her

⁷² Additional guidance can be obtained from *English Heritage/Minerals and Historic Heritage Forum Mineral Extraction and Archaeology: a Practice Guide* available for download from the English Heritage website

15. Historic Environment

POLICY

Policy DM3: Historic Environment

Planning permission for mineral development will be granted subject to the application demonstrating that:

- a) the proposed development will not generate unacceptable adverse impacts on the historic environment or where an adverse impact or impacts have been identified, these can be adequately mitigated; and
- b) for proposals that impact on the integrity, character or setting of a heritage asset, impacts have been adequately considered by desk-based assessment and field evaluation and with reference to the Somerset Historic Environment Record and the records of designated heritage assets held by English Heritage; and
- c) adequate provision will be made for the preservation in-situ or excavation of the asset as appropriate, in discussion with the county archaeologist, and the recording of relevant information to advance understanding of the asset.

The weight of protection afforded to a heritage asset will reflect the significance of the asset including, but not limited to, its statutory designation(s).

16. Water Resources and Flood Risk

- 16.1 Probably the most important groundwater resource in Somerset is contained within the Carboniferous limestone of the Mendip Hills: a major aquifer and an important source of public water supply for approximately 500,000 people in the surrounding area (extending as far as Bristol). In addition, there are several smaller groundwater supplies and aquifers across the county.
- 16.2 Many of the significant groundwater supplies are protected by source protection zones (SPZs), designated by the Environment Agency.
- 16.3 In addition to groundwater supplies there are 143 surface water bodies in Somerset, which include rivers, lakes and coastal waters.
- 16.4 The Environment Agency is the lead authority for safeguarding the water environment. It is responsible for improving and protecting inland and coastal waters, ensuring sustainable use of natural water resources, creating better water habitats and other factors that help to improve the quality of life.
- 16.5 It is vital that the County Council as Mineral Planning Authority works closely with the Environment Agency on a range of issues. All applicants proposing development that has the potential to affect any water resource should consult with the Environment Agency and ensure that the proposal satisfies current environmental standards and supports the achievement of the Water Framework Directive targets.⁷³
- 16.6 In the context of peat workings, the MPA may apply appropriate water quality monitoring and mitigation related conditions to quantify the extent to which de-watering operations from peat workings contribute to identified problems, and the means by which the issue may be addressed.

Mitigating flood risk

- 16.7 The County Council, in its role as Lead Local Flood Authority, is responsible for managing flood risk from ordinary watercourses (outside of Internal Drainage Board areas), surface water and groundwater. An ordinary watercourse is a watercourse that does not form part of a main river.
- 16.8 All development that affects an ordinary watercourse may require Land Drainage Consent from the County Council, whilst work affecting a main river may require Flood Defence Consent from the Environment Agency.
- 16.9 When Schedule 3 of the Flood and Water Management Act commences (expected to be in 2014), the County Council will become the Drainage Approval Body for all new development that has drainage implications (referring to natural drainage, for example implications may occur when there is a loss to permeable surfaces, through the building of houses and roads etc.).

⁷³ EA Water Framework Directive available at: <http://www.environment-agency.gov.uk/research/planning/125027.aspx>

16. Water Resources and Flood Risk

- 16.10 Within peat production areas, the Internal Drainage Board has powers and responsibilities relating to all ordinary watercourses (including ditches and ponds - refer to the Land Drainage Act 1991 and the Flood and Water Management Act 2010 for more information).
- 16.11 National planning policy states inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk, but where development is necessary, making it safe without increasing flood risk elsewhere. Further guidance on flood risk is available in the Planning Practice Guidance.

POLICY

Policy DM4: Water Resources and Flood Risk

Planning permission for mineral development will be granted subject to the application demonstrating that the proposed development will not have an unacceptable adverse impact on:

- a) the future use of the water resource, including:
 - i. the integrity and function of the land drainage and water level management systems;
 - ii. the quality of any ground or surface water resource, where the risk of pollution and/or adverse impact on the resource would be unacceptable;
- b) the environmental value and visual amenity of the water resource; and
- c) drainage and flood risk to people, property or business.

Mineral extraction below the water table

- 16.12 There is potential for quarrying to impact significantly on groundwater resources and as proposals for quarrying become deeper the risks are increased. The Somerset Minerals Plan will continue to place a very high importance on the protection of the water regime.
- 16.13 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.
- 16.14 Deep quarries and peat workings beneath the water table will have to be pumped to keep them dry and any impacts of such abstraction need to be carefully considered.

16. Water Resources and Flood Risk

- 16.15 The Mendip Hills groundwater system is complex and predicting the impacts of drawdown to access minerals is also complex. The permeability of rock, the proximity of important conduits beneath the water table and the number of quarries within the catchment area of a spring influence the nature of any such impacts.⁷⁴ Conduits include Mendip's underground caves and passages. For more information on the county's cave systems, refer to Mendip Cave Registry and Archive: www.mcra.org.uk
- 16.16 In addition to conventional water supply, it is noted that the Bath Hot Springs World Heritage Site is located within the carboniferous Bath-Bristol Basin, and draws water from the Mendip Hills. Quoting from a report commissioned by Bath & North East Somerset Council:⁷⁵ *"Exploration outside the B&NES area needs to be considered carefully to safeguard the flow to the hot springs"*.
- 16.17 Bath Hot Springs are protected by law.⁷⁶ They represent a vital aspect of the area's heritage and character and make a significant economic contribution to the area.
- 16.18 Policy DM5 takes forward a precautionary approach to mineral extraction below the water table, which was established in the Minerals Local Plan (adopted 2004). Measures for the applicant to demonstrate compliance with policy DM5 and/or address adverse impacts include (amongst others):
- providing satisfactory information on the likely characteristics of the final water body;
 - providing acceptable alternative sources of water;
 - accepting that works under the permission may have to be suspended or cease permanently to protect the water environment or other water interests;
 - securing acceptable compensatory arrangements for all parties who are harmed by any adverse impact on the water environment or other water interests. In most cases, compensatory arrangements refer to measures taken to ensure the permanent supply of water rather than direct payments.

⁷⁴ Somerset County Council, Quarrying in Somerset, Supplement number 1 Hydrology and Rock Stability – Mendip Hills, A Review of Existing Knowledge, 1973

⁷⁵ BGS, Potential problems in the Bath and North East Somerset Council and surrounding area with respect to hydrocarbon and other exploration and production, 2012

⁷⁶ Royal Charter of 1591 and by the 1982 County of Avon Act

16. Water Resources and Flood Risk

POLICY

Policy DM5: Mineral extraction below the water table

Proposals for mineral extraction from below the water table will only be permitted if:

- a) they do not generate unacceptable adverse impacts on the water environment or other water interests;
- b) monitoring will ensure early warning is given of any potentially unacceptable adverse impact and the applicant will be responsible for taking the necessary remedial action before the effects of the adverse impact become irreversible;
- c) water abstraction and mitigation measures do not give rise to unacceptable environmental impacts.

17. Public rights of way

- 17.1 Somerset has over 6,100 km (3790 miles) of public rights of way, which comprises Footpaths, Bridleways, Restricted Byways and Byways Open to All Traffic (BOAT). Somerset County Council (as Highway Authority) has a duty to keep public rights of way open and easy to use although landowners and farmers also have certain responsibilities.
- 17.2 The Somerset County Council Rights of Way Improvement Plan details how the public rights of way in Somerset will be managed and improved. Mineral-related planning applications should have regard to this Improvement Plan.⁷⁷
- 17.3 Wherever possible, public rights of way should remain in their current position on the legal line of path. If this is not possible, then advice should be sought from the County Council's Rights of Way officers regarding temporary or permanent diversions. The process for closure or diversion of a public right of way, either temporarily or permanently, follows a separate application process. Relevant criteria are provided with the County Council's Division Order Policy, to which applications must adhere.
- 17.4 Applicants for proposed minerals development that has the potential to impact on a public right of way will be required to submit details of potential alternative routes and how and when the original right of way will be reinstated. In line with national policy, opportunities will be sought by the County Council to enhance public rights of way and access, and provide better facilities for users of public right of ways.⁷⁸



⁷⁷ For more information on the County Council's work on Public Rights of Way, including the Improvement Plan, visit www.somerset.gov.uk/rightsofway

⁷⁸ National Planning Policy Framework (paragraph 75)

- 17.5 In some situations there may be a risk of mineral operations creating noise or vibration that may startle humans and horses using a bridleway. It may be necessary to assess the impact and provide informative signage to mitigate any risks associated with startle responses.

POLICY

Policy DM6: Public Rights of Way

Proposals for mineral development that have the potential to impact on the rights of way network in Somerset will need to demonstrate how the affected part of the network or any alternative route will be managed and maintained. Where proposals are likely to have an unacceptable adverse impact on the rights of way network, the applicant must provide a satisfactory, authorised replacement route (either temporary or permanent).

Authorised diversion routes must meet the relevant criteria, be fit for purpose and easily accessible, without causing significant disturbance to wildlife. If temporary, the original right of way shall be reinstated as soon as is practicable. If permanent diversion is required this shall seek to improve on and enhance the original public right of way.

18. Restoration and Aftercare

- 18.1 Minerals development is vital to support the contribution which minerals extraction makes to the Somerset economy and the UK demand for minerals. It is also vital that adequate measures are secured to ensure long-term environmental benefits and compensate for adverse impacts that cannot be fully mitigated.
- 18.2 It is vital that developers consider their approach to site restoration and aftercare at the planning stage.
- 18.3 When determining the acceptability of submitted restoration and aftercare schemes, the County Council will in particular refer to the strategic aims outlined in policy SMP8 and the development management criteria in policy DM7.

Defining the terms

The following definitions are used by Somerset County Council:

Reclamation: the process of returning the land to the agreed after-use and standard which includes both the restoration and the aftercare periods (Schedule 5 of the Town and Country Planning Act (1990)).

Restoration: operations associated with the winning and working of minerals and which are designed to return the area to an acceptable environmental condition, whether for the resumption of former land use or a new use (Planning Practice Guidance, Paragraph: 221, Reference ID: 27-221-20140306).

Delivering local objectives

- 18.4 Site reclamation provides an opportunity to deliver longer-term local objectives for a minerals site.
- 18.5 To support this, the County Council has prepared a reclamation checklist that identifies relevant key issues and provides a tool for the Council and the applicant to use when considering restoration and aftercare schemes. This is shown in Table 7.
- 18.6 The checklist takes into account impacts on the local environment and the local community, acknowledging (as stated in Chapter 10) that restoration should seek to provide net gains for the environment and secure a legacy that is acceptable to the local community.
- 18.7 Site specific details will vary and so the planning policy framework offers a degree of flexibility, with the checklist highlighting in particular the cases where certain criteria are of greater importance.

18. Restoration and Aftercare

Making provision for restoration

- 18.8 Effective planning must be deliverable and this includes ensuring that appropriate resources are allocated to deliver the identified objectives and ensure the development leaves behind a legacy that is acceptable. This includes material resources – thereby highlighting the role of site restoration in soil conservation – and financial resources.
- 18.9 Topsoil stripped from a quarry site prior to its working should be re-employed in the restoration scheme at the same site and be appropriate to the character and quality of the local landscape, also using materials that are appropriate for the stated end purpose and restoration objectives.
- 18.10 It is sometimes appropriate to use subsoil rather than topsoil to restore the upper surfaces, for example, if a nutrient poor substrate is desirable on which to establish a species-rich flower meadow and the topsoil is too rich. In certain circumstances soils might be mixed to enhance certain properties.
- 18.11 In addition, the County Council requires applicants to provide information on the likely financial implications of their reclamation scheme and on how they propose to make provision for such work over the life of the site.
- 18.12 Financial bonds or other provisions would only be required under exceptional circumstances. Examples of such circumstances are listed below:
- a) Very long term new projects where progressive reclamation is not practicable, such as super-quarry or some types of industrial / metalliferous mineral sites, where incremental payments into a secure fund may be made as the site develops;
 - b) Where a novel approach or technique is to be used, but the MPA considers it is justifiable to give permission for the development;
 - c) Where there is reliable evidence of the likelihood of either financial or technical failure, but these concerns are not such as to justify refusal of permission.⁷⁹

Ensuring appropriate after-use(s)

- 18.13 The type of after-use will vary according to the site and its surroundings. The following paragraphs give an indication of the range of after-uses that may be appropriate.
- 18.14 For peat sites, in most cases after-use will focus on nature conservation. Other types of after-uses – including leisure activities or certain types of business activities – would only be acceptable if they do not have an intrusive and/or adverse impact on the local environment. The Shapwick Heath National Nature Reserve in the Somerset Levels is one of several notable examples in Somerset where benefits to biodiversity have been secured through effective restoration. The site is important within its wider geographical context, playing a role in enhancing the local ecological network.

⁷⁹ Refer to Planning Practice Guidance, Paragraph: 048, Reference ID: 27-048-20140306

18. Restoration and Aftercare

- 18.15 Quarry sites may provide excellent opportunities to enhance public understanding of and accessibility to geology and geodiversity within Somerset; thus it is desirable that after-uses include, where practicable, provision of and access to features of geodiversity interest. This may include for example the provision of one or more significant geological reference sections, and agreed access arrangements for future study and conservation work. Other types of development that may be appropriate, subject to consideration against policies in the Development Plan, include concrete batching plants and facilities for generating recycled aggregates.
- 18.16 Larger aggregate quarries may provide suitable sites for certain types of other business development. The Somerset Earth Science Centre, a field study centre located at Moons Hill Quarry, is an example of a type of development that is sympathetic to its local environment.
- 18.17 Any proposed after-use for oil and gas development must take account of the landscape character of the wider area, giving particular attention to restoring and re-creating priority habitats, maintaining and enhancing populations of priority species and promoting ecological networks.
- 18.18 The five year aftercare period, outlined in Preferred Policy DM7, takes forward the approach established in the Minerals Local Plan and is considered to be consistent with national policy (including appropriate reference to the Planning Practice Guidance).

POLICY

Policy DM7: Restoration and aftercare

Planning permission for mineral development will be granted subject to the applicant submitting restoration and after-use proposals, which:

- a) clearly state how the criteria in the reclamation checklist (Table 7) have been met; and
- b) include satisfactory information on the financial budget for restoration and after-use, including how provision for this work will be made during the operational life of the site.

Restoration proposals will be subject to a five year period of aftercare. Where proposals require a longer period of management, the proposal will only be permitted if it includes details of how this will be achieved.

18. Restoration and Aftercare

Table 7: Reclamation Checklist

Where relevant, proposals for all minerals sites must:

BIODIVERSITY/ CONSERVATION	0	Promote the preservation, restoration and re-creation of priority habitats, such as calcareous grassland which is included on S41 of the NERC Act ⁸⁰ , and the protection and recovery of priority species populations. Maintain, and contribute to the restoration of, coherent and resilient ecological networks. Be flexible to accommodate ecosystems change. Contribute, where appropriate, to the achievement of habitat and species targets in the Somerset Biodiversity Strategy 2008 to 2018.
	1.	
	2.	Employ the Habitat Evaluation Procedure as a mechanism to determine the ecological value of a site. The Habitat Evaluation Procedure developed by Somerset County Council can be found on the Biodiversity Offsetting webpage (www.somerset.gov.uk/biodiversityoffsetting). Offset habitats should be planned and delivered where appropriate via the ecological networks, using the methodology, model and maps developed by Somerset Wildlife Trust, Forest Research (Forestry Commission) and Somerset County Council. In considering the most appropriate mitigation measures to be implemented, Somerset County Council will take into account the potential time lag between new habitats being created and their coming into maturity. Minerals sites, including restored sites and unworked estate, may provide opportunities to be used as offsets for other developments providing they meet the criteria (as calculated through using the Methodology). www.somerset.gov.uk/ecologicalnetworks www.somerset.gov.uk/biodiversityoffsetting
	3.	Soils must be carefully conserved for use in restoration. Where quarrying operations have been permitted on agricultural land the land should be restored to its former quality wherever technically practicable, using materials native to the site.
	4.	Contribute to landscape-scale restoration, demonstrating a high level of: collaboration between quarry/peat operators and conservation bodies; and consideration of other land uses, management practices and programmes.
	5.	Seek opportunities to enhance drainage systems through: improving habitat and drainage connectivity; and incorporating flood storage. This should include features that help maintain water quality in restored areas as well as the surrounding ditch system.

⁸⁰ The Natural Environment and Rural Communities Act Section 41 refers to the list of habitats and species of principle importance in England

18. Restoration and Aftercare

Table 7: Reclamation Checklist (continued)

Where relevant, consideration should be given to opportunities to:

IMPACTS	6.	Minimise the overall amenity and visual impacts of mineral development on the surrounding environment and communities.
	7.	Ensure there are no adverse impacts on water quality.
	8.	Adapt to the impacts of climate change (for example, on habitats, species, ecological networks and flooding).
	9.	Demonstrate that the approach to restoration has considered potential impacts on land stability and includes adequate measures to mitigate the risk of land stability failures.
COMMUNITY	10.	Encourage new economic opportunities that are compatible with existing land uses and environmental designations and which allow economic benefit to local communities.
	11.	Provide for potential after uses for the community – e.g. leisure and amenity opportunities that do not conflict with biodiversity and ecological networks.
	12.	Improve public access to the natural environment, making use of existing cultural corridors where they already exist.
	13.	Contribute to the conservation of Somerset's geological heritage and geodiversity, including maintaining geological exposures for educational purposes.



19. Protecting Local Amenity

- 19.1 Minerals can only be worked where they occur, and this can lead to mineral extraction close to other businesses, residential development and/or designated areas.
- 19.2 The Somerset Minerals Plan will aim to ensure that a balance is struck between meeting the need for minerals and protecting the local amenity. This reflects an overarching core land-use planning principle in the NPPF to secure high quality design and a good standard of amenity for all existing and future users and occupants of land and buildings.
- 19.3 Local amenity can be defined in various ways. In principle it encompasses human health, quality design, provision and protection of local services, local economy and the protection of the countryside, historic environment and environmental character. Local amenity also encompasses leisure and sporting areas, such as playing fields and other open spaces used for sport, and it is important that mineral related development does not adversely affect these sites, regardless of ownership. This range of issues is covered by more than one section of the Somerset Minerals Plan.
- 19.4 Mineral development can have significant impacts on local amenity, in particular where mineral resource is in close proximity to settlements, and must therefore be carefully managed. Proposals should first seek to avoid adverse impacts and then, if this is not possible, should identify options for mitigation of the impacts.
- 19.5 The impacts on local amenity from mineral development may be associated with site clearance and development, any exploration stage required to assess the amount of mineral resource available, the extraction and (if required) processing of the mineral and product distribution.
- 19.6 Impacts on amenity may be related to dust, odour, vibration, noise, and lighting pollution. It is important that these impacts are managed and kept to a minimum to protect the well-being of those affected, and the local character of nearby settlements and surrounding areas. Table 8 summarises key considerations linked to these impacts. Table 8 does not include visual impact or air quality linked with mineral transport.
- 19.7 The visual impact from mineral development is covered in detail in the landscape and visual amenity policy DM1. The location and form of mineral development and the design and extent of screening features will be considered from all public and residential viewpoints. Designs should attempt to minimise the visual contrast between new development and the existing landscapes throughout seasonal changes. In accordance with the NPPF, mineral development will require formulation of a landscape strategy that considers issues during operation, restoration and aftercare.

19. Protecting Local Amenity

- 19.8 Air quality linked with impacts from transport movements associated with mineral development is considered further in transport policy DM9.
- 19.9 Planning conditions should secure measures to minimise adverse impacts on local amenity. Examples of such conditions and restrictions include:
- noise and vibration limits and control schemes;
 - dust and odour suppression and control schemes;
 - operational time restriction; and
 - overall production and transportation restrictions.
- 19.10 Planning Practice Guidance and the Noise Policy Statement for England⁸¹ helps planning authorities and developers to set appropriate noise limits and controls on dust emissions.
- 19.11 The Council will encourage potential applicants to engage in pre-application discussions and work with applicants to deliver sustainable development in line with the NPPF, Planning Practice Guidance and policies in the Development Plan.
- 19.12 For applications that will have a lasting and significant impact on the local community, Somerset County Council will expect the operator to establish a community consultation group, exemplified by Quarry Liaison Committee/Groups, which comprise of representatives from the local community, the operating company and various government agencies. The purpose of the consultation group is to build and maintain good relationships between the operator, the local community and the County Council to discuss concerns regarding the development and where possible protectively mitigate these concerns. This is in accordance with the NPPF, which places emphasis on the importance of community involvement in the planning process.
- 19.13 SCC will not expect an operator's ownership of a property to exclude it from either planning consideration, or where necessary, conditions intended to safeguard the amenity of its occupants. The MPA may however have limited scope to consider different planning conditions apply when an operator can provide full justification of an unavoidable need and demonstrate that unacceptable adverse effect will not then arise.

⁸¹ Defra, Noise Policy Statement for England, 2010

19. Protecting Local Amenity

Table 8: Key considerations when preparing impact assessments

Nature of impact	Key considerations when preparing a relevant impact assessment
Vibration	<p>Vibration impacts from mineral development may be caused by mineral extraction and/or transportation (also see chapter 20). Vibration from mineral extraction may arise from the use of heavy machinery, blasting or hydraulic fracturing (or any other form of mineral extraction that entails creating significant pressure differences in the source rock formation).</p> <p>The geology of the rock will need to be considered prior to blasting or hydraulic fracturing to understand the transfer of vibration or the likelihood of significant seismic impacts. (NB: the Department for Energy and Climate Change is responsible for controls, usually through the licence consent regime, to mitigate seismic risks from unconventional oil and gas development.)</p> <p>The most common amenity impact of vibration will arise from surface blasting. Blasting disturbance arises from the impulsive effects of ground vibration and air-overpressure. Vibration effects are generally greatest at closest locations to a blast and the perception and level of vibration will be influenced by many factors.</p> <p>Air-overpressure events may arise after blasting, and greatest effects may not necessarily be at closest locations to a blast. Air-over pressures can cause windows and other fittings within a property to rattle but will rarely cause material damage.</p> <p>The control of blasting impacts is generally achieved by applying a requirement for good practice blast design to not exceed limits of peak particle velocity (ppv) at the foundation of a dwelling. Somerset County Council will usually impose conditions to ensure blast vibration does not exceed a limit of 9mm/s ppv at the foundation of any residential dwelling.</p> <p>In the case of larger quarries this limit may be defined as a requirement to design blasts with a 95% confidence that vibration will not exceed a 9mm/s ppv limit at any dwelling based on ongoing blast vibration measurements.</p> <p>Under some circumstances a lower or higher vibration limit may be appropriate and individual consideration of the affects on dwellings and residents will be guided by advice within BS 6472, BS ISO4866:2010 and further revisions to BS7385 (Part 2).</p>

19. Protecting Local Amenity

Nature of impact	Key considerations when preparing a relevant impact assessment
Dust and odour	<p>Dust and odour from mineral workings can arise from various sources and the severity of these impacts will vary according to the time of year and weather conditions.</p> <p>Best practice will be needed to control dust and odour, referring in particular to Planning Practice Guidance and formal schemes of dust suppression may be required. Assessment studies of these impacts should be undertaken by a competent person/ organisation with acknowledged experience of undertaking this type of work.</p>
Noise	<p>Many dwellings near to mineral reserves in Somerset will be located in exceptionally quiet rural areas and the protection from unreasonable noise impact is an important aspect in mineral development.</p> <p>A detailed noise survey from the applicant will usually be required, which should identify all sources of noise and, for each source, consider the proposed operating locations, procedures, schedules and duration of work for the life of the operation.</p> <p>An assessment of the impact of the proposal on the existing noise sensitive locations shall be provided with details of proposed noise control measures to reduce noise impact.</p> <p>Somerset County Council may impose noise conditions to protect residential amenity or protect areas of tranquillity or preserve wildlife interests or recreational areas.</p>
Lighting	<p>The effect of light pollution on the night-time environment in rural locations can have significant affect on residents and wildlife. Applications for mineral development should ensure that good external lighting design is used and may need to provide a lighting scheme that demonstrates that measures have been taken to minimise required lighting and the effects of glare, sky glow and light spillage on the surroundings.</p> <p>Exmoor National Park gained recognition in 2011 as being the first Dark Sky Reserve in Europe.</p>

19. Protecting Local Amenity

POLICY

Policy DM8: Mineral operations and the protection of local amenity

Planning permission will be granted for mineral development subject to the application demonstrating:

- a) that the proposed development will not generate unacceptable adverse impacts on local amenity;
- b) measures will be taken to mitigate to acceptable levels (and where necessary monitor) adverse impacts on local amenity due to:
 - i) Vibration;
 - ii) Dust and odour;
 - iii) Noise; and
 - iv) Lighting
- c) how the applicant intends to engage with local communities during the operational life of the site.

20. Minerals Transportation

- 20.1 Minerals must be transported from their source to where they are needed. Measures can be taken to minimise the impacts from such transport; however, disturbance from the heavy lorries which serve the mineral sites can be a cause of disruption to local communities, especially if the activities give rise to significant early morning traffic that may cause sleep disturbance and will need to be controlled. A significant proportion of the minerals extracted in Somerset are from the Mendip Hills, in the eastern area of the county where the local road network is particularly constrained when taking all traffic movements into account. The transport of peat or alternative growing media can also have significant impacts on the local road network within the peat resource areas west of Glastonbury (see map 5).
- 20.2 Whilst the M5 motorway creates a major transport corridor running north to south through Somerset and the A303/A358 provides eastward connectivity towards London, the A361 is the main route running through the Mendip Hills and is the main haulage route connecting large quarries to the A39 and M5 and the A36 to Wiltshire and the south.
- 20.3 Somerset also has mainline rail connections from Taunton to London, Bristol, the Midlands and the North and to the South West peninsular. Services from Yeovil also connect to London, South Wales, the south coast and Exeter. The two largest quarries in Somerset, Torr Works and Whatley Quarry, are rail linked directly from within their respective site boundaries. Other extracted mineral resource is transported by road.
- 20.4 Somerset is also served by port facilities around Bridgwater at two key wharves: Dunball and Comwich, both of which are in commercial operation.
- 20.5 Dunball wharf has better road access being located off junction 23 of the M5 whereas Comwich wharf, located in the village of Comwich, is accessible along B and C classified roads. As mentioned in chapter 11, it is anticipated that Comwich wharf will be used for the movement of a range of raw materials (including aggregates) by EDF Energy linked with the construction of Hinkley Point C Nuclear Power Station.
- 20.6 Somerset's Future Transport Plan⁸² seeks to reduce growth in congestion and pollution and improve health by improving the efficiency and effectiveness of the transport network. It seeks to encourage Somerset's economy by reducing congestion and increasing access to jobs and education. Furthermore it helps to secure reductions to carbon emissions from transport, improve air quality and direct heavy goods vehicles onto the recognised freight network.

⁸² Somerset's Future Transport Plan 2011-2026

20. Minerals Transportation

- 20.7 Somerset County Council's Freight Strategy⁸³ acknowledges the impact of the quarrying industry in relation to traffic movements, especially in the Mendips. Routing of these lorries should be directed where possible along the routes identified in the Somerset Freight Map (Appendix One, Freight Strategy⁸⁴).
- 20.8 Transport Assessments and Travel Plans will be needed for developments that generate significant transport movements. The significance of transport movements will be relative to the context and developers should refer to the guidance identified⁸⁵ and consult with the County Council at an early stage.
- 20.9 Proposals for mineral development that will generate significant transport movements must be supported by a Transport Assessment and Travel Plan. (NB: for the sake of clarity, these requirements are applicable at all application stages for unconventional oil and gas development.)

POLICY

Policy DM9: Minerals transportation

Planning permission for mineral development will be granted subject to the application demonstrating that the road network serving the proposed site is suitable or can be upgraded to a suitable standard to sustain the proposed volume and nature of traffic without having an unacceptable adverse impact on distinctive landscape features or the character of the countryside or settlements. Particular regard should be given to:

- a) highway safety;
- b) alignment;
- c) proximity to buildings;
- d) air quality;
- e) the integrity of the road network including construction and any impacts on capacity;
- f) disruption to local communities.

Proposals for mineral development that will generate significant transport movements must be supported by a Transport Assessment and Travel Plan.

The Transport Assessment will need to demonstrate that appropriate consideration has been given to the alternatives to road transport, including rail, as a primary freight transport option. Alternatives to road transport should be pursued if they are demonstrated to be practicable and beneficial.

⁸³ Somerset Freight Strategy, Transport Policies 2011

⁸⁴ <http://www.somerset.gov.uk/irj/go/km/docs/CouncilDocuments/SCC/Documents/Environment/Strategic%20Planning/Freight%20Strategy%20Adopted%20Dec%202011.pdf>

⁸⁵ Transport Assessment guidance is available at: <https://www.gov.uk/government/publications/guidance-on-transport-assessment>

21. Land Stability

- 21.1 National planning policy states that in preparing Local Plans, local planning authorities should set out the environmental criteria against which planning applications can be assessed, listing tip- and quarry-slope stability as one of several issues to consider.⁸⁶
- 21.2 Technical guidance supporting the NPPF⁸⁷ states that appraisal of slope stability issues for new workings should be based on existing information, which aims to:
- identify any potential hazard to people and property and environmental assets and assess its significance; and
 - identify any features which could adversely affect the stability of the working to enable basic quarry design to be undertaken.
- 21.3 The Mines and Quarries Act 1954 deals with various issues linked with quarry workings (not including peat workings) – see also the text box on page 31 for more information. In particular it promotes and requires appropriate consideration of health and safety issues, for example the appropriate use of fencing in a quarry (whether it is being worked out or not).
- 21.4 More recently the Quarries Regulations 1999 place a range of duties on quarry operators including, but not limited to, the design, construction, operation and maintenance of quarries so as to avoid health and safety risks to people as a result of instability or movement. With that provision in place, the scope for coverage of this issue from a planning perspective is limited. It is important that the County Council does not duplicate or infringe on the activities undertaken by other authorities – in particular the Health and Safety Executive (HSE), which is an independent regulator, focused on reducing work-related death and serious injury across the nation's workplaces.
- 21.5 Noting the context outlined above, the Somerset Minerals Plan makes clear what an applicant needs to consider in the context of land stability when applying for planning permission.
- 21.6 In considering tip and quarry slope stability linked with new applications, relevant technical information should be provided by a competent person as part of the planning application. A competent person is one with a recognised relevant qualification, sufficient experience in dealing with land stability and current membership of a relevant professional organisation (see NPPF glossary).

⁸⁶ National Planning Policy Framework (paragraph 143)

⁸⁷ Planning Practice Guidance Paragraph: 033 Reference ID: 27-033-20140306

21. Land Stability

- 21.7 The NPPF states that with respect to site investigation the minimum information to be provided by an applicant are the results of a desk study and site inspection, which must demonstrate that there will be no risk to persons, property or land features (such as watercourse channels or highways adjacent to peat sites) from quarry or tip instability. The level of detail provided should be proportionate to the scale of the development and the risks associated with land instability.
- 21.8 Where an applicant considers that compliance with other existing regulatory controls would ensure that any such risks would not arise, reasoning to support this position should be provided.
- 21.9 Issues of land stability linked with oil and gas exploration, appraisal and/or production are also considered via policy SMP7 on energy minerals and mentioned in the context of vibration impacts in Table 8.
- 21.10 Minor land stability failures at mineral sites can be caused by inadequate restoration. Measures need to mitigate the risk of such failures are material to planning and are considered via the reclamation checklist (Table 7), also referring as needed to the restoration section of the Planning Practice Guidance.

POLICY

Policy DM10: Land stability

Proposals for mineral development will need to demonstrate, via the submission of a stability assessment prepared by a competent person, that:

- a) the proposal will not have an adverse impact on the stability of neighbouring land or properties; and
- b) the proposal will not result in watercourse channel instability either during the working phase of a minerals development or at any time after the cessation of mineral extraction operations.

22. Management of solid mineral wastes

- 22.1 Solid mineral wastes are largely unavoidable by-products from the extraction and/or processing of minerals for which no market exists. In particular, they are generated by crushed rock operations in Somerset.
- 22.2 In some cases, additional processing of the stone can yield more of the useable rock. Where this is not practicable, the material may be used for landscaping and rolling restoration works or, more usually, it is disposed of within the existing void which, subject to certain conditions, is permitted development and does not require separate planning permission.
- 22.3 Where above ground disposal is proposed, the County Council as Mineral Planning Authority will need to be satisfied that the re-use of the material is not practicable, not least to recognise the importance of diverting waste up the waste management hierarchy, as shown in Figure 3.
- 22.4 Disposal of wastes is listed at the base of the hierarchy i.e. the least preferable option for most types of waste. The Mineral Planning Authority promotes and requires the diversion of inert waste up the waste management hierarchy, as detailed in the Waste Core Strategy (in particular Policy WCS2).⁸⁸
- 22.5 Recycling and re-use of inert waste conserves primary mineral resources and also reduces the need for new tipping space, which can be visually intrusive in the landscape.

POLICY

Policy DM11: Management of solid mineral wastes

Planning permission for the disposal of solid mineral wastes will be granted subject to the application demonstrating that:

- a) it is not practicable to re-use the material; and
- b) the proposal will not have significant adverse impact on the distinctive character and features of the Somerset countryside.

⁸⁸ www.somerset.gov.uk/mineralsandwaste

22. Management of solid mineral wastes

Figure 3: the waste management hierarchy



23. Production limits and cumulative impacts

- 23.1 The Somerset Minerals Plan seeks to ensure that the impacts of a new proposal for mineral development are considered in conjunction with the impacts of all permitted development in the area specified; for example, with regard to impacts on the natural and historic environment and human safety. The Mendip Hills, in particular, is home to a large number of quarrying sites, and it is important for the planning process to ensure that adequate controls are in place.⁸⁹
- 23.2 Production limits can be usefully applied to mineral development in Somerset to avoid or mitigate against adverse impacts on local amenity and the natural and historic environment (such as noise, dust and vibration). This should be considered in the context of policy DM8 and Table 8, and for minerals transportation in the context of policy DM9.
- 23.3 Where appropriate and with the co-operation of the operators of the minerals site, production limits will continue to be a feature of any new planning permissions which are granted and older permissions when they are periodically reviewed. Production limits:
- a) allow the level of an adverse impact to be considered, together with any cumulative impacts from other operating sites, when processing the application; and
 - b) prevent uncontrolled intensification of site operations and any consequent escalation of those impacts which cannot otherwise be adequately controlled by planning conditions.

POLICY

Policy DM12: Production limits and cumulative impacts

The Mineral Planning Authority will impose planning conditions to limit production where this is considered necessary and appropriate to prevent any unacceptable adverse impacts from the operation.

⁸⁹ The NPPF states that in preparing Local Plans local planning authorities should take into account the cumulative effects of multiple impacts from individual sites and/or a number of sites in a locality (see paragraph 143)



24. Borrow pits

- 24.1 A 'Borrow Pit' is a temporary mineral working which is used solely for supplying a specific construction project, such as major road construction or similar civil engineering project. Borrow pits are most commonly used for sand and gravel extraction.
- 24.2 Sometimes the use of borrow pits can facilitate construction project, reduce the impacts of heavy goods vehicles on the surrounding road network and the community, compared with transporting minerals from more distant existing sources. It is important to ensure that any such short-term advantages are not outweighed by adverse impacts, in particular longer-term impacts on local communities and the environment.
- 24.3 Applications to the Mineral Planning Authority linked with Borrow Pits are very rare; however, it is considered appropriate for the Somerset Minerals Plan to include a policy on Borrow Pits for use as and when circumstances require.

POLICY

Policy DM13: Borrow pits

Planning permission for mineral development will be granted subject to the applicant demonstrating that the proposed Borrow Pit will:

- a) lie on or in close proximity to the construction project so that material can be conveyed to its point of use with minimal use of public highways;
- b) be limited to the life of the project;
- c) serve only the project; and
- d) be restored to its original levels or an alternative acceptable landform only utilising materials from the construction project.

Implementation and Monitoring



25. Implementation and monitoring of the Plan

25.1 The Somerset Minerals Plan sets out the vision and planning policy framework for mineral development in Somerset. It helps to provide clarity for:

- the minerals industry: to enable informed decisions and investments to be made;
- local communities: to learn about the mineral resource, existing mineral operations and development potential in their area; and
- planning officers and all of those interested in the planning process: setting out what limits and controls should be placed on minerals activity to prevent unacceptable impacts and ensure any adverse environmental and community impacts are mitigated to acceptable levels.

25.2 Development plans should set out how they are going to be delivered and their performance measured. This section outlines proposed mechanisms for delivering the Minerals Plan, collecting data and a framework for monitoring its effectiveness.

25.3 The Somerset Minerals Plan should be read as a whole. Proposals will be judged against all relevant policies in the Development Plan.

Implementation

25.4 A steady and adequate supply of minerals such as crushed rock helps to support continued economic growth and infrastructure development. Such growth should not be constrained by lack of available material.

25.5 Minerals planning plays an important role in maintaining supply and Somerset County Council as the Mineral Planning Authority will take the lead role in implementation of the objectives and the policies of this Mineral Plan. To support the smooth running of the planning process and successful implementation of the Plan, the County Council will:

- work closely with relevant stakeholders to provide appropriate advice and information prior to the submission of any application for mineral development;
- determine planning applications in accordance with the Mineral Plan, government policy and guidance and other material considerations;
- attach conditions to planning permissions;
- seek legal agreements with developers where appropriate;
- enforce breaches of planning control as necessary;
- maintain a dialogue with the minerals industry and local communities;
- co-operate with other stakeholder groups, regulators and organisations, such as Parish Councils, District and Borough Councils, adjoining Mineral Planning Authorities, the Environment Agency, Natural England, English Heritage, the Health and Safety Executive, relevant government departments (Defra, DECC and DCLG), the Highways Agency, and others;

25. Implementation and monitoring of the Plan

- work with the minerals industry and others to identify and develop suitable initiatives and sites; and
- issue advice or supplementary planning documents if appropriate.

Monitoring

Why?

- 25.6 Monitoring of the adopted Minerals Local Plan is needed to check that the Plan is delivering what it set out to deliver, considered against the Plans vision and objectives and ensuring that it follows general sustainability principles.
- 25.7 If the management of Somerset's mineral working is heading in an unsustainable direction, effective monitoring can provide the warning signs so that the Plan can be reviewed and, if appropriate, revised.
- 25.8 Monitoring is important to understand the characteristics of an area, assessing the impact of policies upon this area and consequently whether the strategy is delivering sustainable development. The data collected through monitoring therefore allows for a review, and subsequently a potential modification, of the policies contained within this Plan.
- 25.9 The benefits of monitoring are highlighted as part of implementing the European Strategic Environmental Assessment (SEA) Directive, 2001. It is particularly important to react promptly if adverse impacts are identified. The Sustainability Appraisal of the Minerals Plan includes a chapter on monitoring and proposed indicators, which has helped to inform this section of the Somerset Minerals Plan.

How?

- 25.10 The planned approach is based on the evidence available at the time of plan preparation. However, as the data that has informed plan preparation changes and is updated over time there will be a need to monitor what is happening and respond in the most appropriate way.
- 25.11 The County Council has produced a Monitoring Report since inception of its Mineral and Waste Local Development Framework. The Council is required to produce this to review the progress of Local Development Documents against the objectives set and assess the extent to which the policies in these documents are being achieved. Monitoring will concentrate on key issues which the plan is expected to influence.

25. Implementation and monitoring of the Plan

- 25.12 The Monitoring Report collates data on mineral production, including how many mineral applications have been determined, data on aggregate production figures, and how effective the adopted policies have been (amongst a range of factors). It provides a means of assessing the effectiveness of this Mineral Plan and whether the spatial vision and objectives are being delivered. It will help to determine:
- whether policies and related targets or milestones have been met or progress is being made towards meeting them, or where they are not being met or on track being achieved, the reasons why;
 - what impact the policies are having in respect of national and local policy targets and any other targets identified in the document;
 - whether the policies, where adopted, need adjusting or replacing because they are not working as intended;
 - if policies or proposals need changing, the actions needed to achieve this.
- 25.13 Production of a Monitoring Report by the County Council will continue, helping to keep track of the country's position and performance. It will be made available to the public via the County Council website and on request.

What?

- 25.14 For monitoring to be effective it is important to select most relevant indicators and ensure that an effective approach is taken to data collection. Collating large quantities of data without a clear rationale will be time consuming, costly and may not show whether the Plan is effective or in need of revision.
- 25.15 The indicators proposed for assessing the effect of policies in the Mineral Plan can be described as contextual indicators and monitoring indicators.
- 25.16 Contextual indicators provide a general picture of the area being considered. They are used to establish a baseline against which monitoring indicators can be interpreted.
- 25.17 Monitoring indicators are activities that can be measured and are directly related to, or are a consequence of, the implementation of planning policies, such as tonnage of primary aggregate produced and tonnage of secondary aggregate produced.
- 25.18 It may transpire that the Plan is entirely appropriate and fit for purpose but is undermined by the policies not being properly applied. If this is the case the County Council will work closely with the mineral industry and other partners to ensure policies are applied correctly. If it is found that individual policies are not effective or the Plan objectives are not being met the policies of the Plan will be reviewed and revised as required.

25. Implementation and monitoring of the Plan

Contextual indicators		Description	Monitoring method	Baseline (if relevant)	Target (if relevant)	Policy reference	Signs that corrective action may be needed	Additional notes
c1		Population of Somerset		530,200 (2010)	Monitor only			
c2		Economy: a) GVA (£ per full time equivalent) b) Sales of crushed rock	a) Somerset economic assessment b) Somerset Local Aggregate Assessment	a) £41,452 (2013) b) 9.98 million tonnes (2013)	Monitor only			Sales of crushed rock reflect how much is being built
c3		Number of planning applications for mineral development: a) received; b) determined; c) granted.		Establish through Monitoring Report	Monitor only			

25. Implementation and monitoring of the Plan

Monitoring indicators							
	Description	Monitoring method	Baseline (if relevant)	Target (if relevant)	Policy reference	Signs that corrective action may be needed	Additional notes
1	Recycled and secondary aggregate production	Local Aggregate Assessment	108,713 tonnes (2013)	Increase (tonnes/year)	SMP1	Decrease (tonnes/year)	
2	Landbank for crushed rock: a) Permitted reserves b) Estimated time remaining for landbank	Local Aggregate Assessment	a) 425 million tonnes (2013) b) Over 40 years	> 15 years	SMP2	If the estimated time remaining drops below 15 years	
3	Planning permission for crushed rock extraction	Number of applications that are: a) received; b) approved; c) approved but deviate from planning policy; d) refused.	Establish through Monitoring Report	Monitor only	SMP3	If planning permission is granted that deviates from planning policy	

25. Implementation and monitoring of the Plan

Monitoring indicators						
	Description	Monitoring method	Baseline (if relevant)	Target (if relevant)	Policy reference	Signs that corrective action may be needed
4	Planning permission for sand and gravel extraction	Number of applications that are: a) received; b) approved; c) approved but deviate from planning policy; d) refused.	Establish through Monitoring Report	Monitor only	SMP4	If planning permission is granted that deviates from planning policy
5	Planning permission for building stone extraction	Number of applications that are: a) received; b) approved; c) approved but deviate from planning policy; d) refused.	Establish through Monitoring Report	Monitor only	SMP5	If planning permission is granted that deviates from planning policy
6	Building stone	Number of building stone types quarried in Somerset	8	22	SMP5	Refer to Minerals Topic Paper 2 for more information
7	Planning permission for peat extraction	Number of applications that are: a) received; b) approved; c) approved but deviate from planning policy; d) refused.	Establish through Monitoring Report	Monitor only	SMP6	If planning permission is granted that deviates from planning policy

25. Implementation and monitoring of the Plan

Monitoring indicators							
	Description	Monitoring method	Baseline (if relevant)	Target (if relevant)	Policy reference	Signs that corrective action may be needed	Additional notes
8	Peat: a) sales and b) permitted reserves	Mineral Topic Paper 3	a) 63,000m ³ (2011) b) 700,000m ³ (2012)				
9	Planning permission for oil and gas development	Number of applications for exploration and/or appraisal that are: a) received; b) approved; c) approved but deviate from planning policy; d) refused Number of applications for production that are: e) received; f) approved; g) approved but deviate from planning policy; h) refused	Establish through Monitoring Report	Monitor only	SMP7	If planning permission is granted that deviates from planning policy	
10	Site reclamation	Amount of land restored for appropriate priority habitat creation	Establish through Monitoring Report		SMP8 and DM2 and DM6		Data sourced from planning applications and decisions, and site monitoring

25. Implementation and monitoring of the Plan

Monitoring indicators							
	Description	Monitoring method	Baseline (if relevant)	Target (if relevant)	Policy reference	Signs that corrective action may be needed	Additional notes
11	Safeguarded minerals resources in Somerset	Area of commercial mineral development sterilised by non-mineral development		Zero	SMP9	If mineral development is sterilised by non-mineral development	
12	Biodiversity: a) impact of mineral development on habitats b) The local ecological networks (in particular for the Mendip Hills).	a) Area of suitable habitat available to selected populations of priority species lost or gained through mineral development b) Mineral Topic Paper 5	a) Establish through Monitoring Report b) Refer to the mapping of Somerset's ecological networks summarised in Minerals Topic Paper 5: Reclamation and its Annex	a) Increase b) Monitor only	DM2	a) Decrease in area available	Indicators to be informed and updated by liaison with the County Council's ecologist
13	Mineral extraction below the water table	Number of applications that are: a) received; b) approved; c) approved but deviate from planning policy; d) refused	Establish through Monitoring Report	Monitor only	DM5	If planning permission is granted that deviates from planning policy	

25. Implementation and monitoring of the Plan

Monitoring indicators						
	Description	Monitoring method	Baseline (if relevant)	Target (if relevant)	Policy reference	Signs that corrective action may be needed
14	Adverse impacts on amenity	Number of complaints associated with mineral development relating to vibration, dust and odour, noise and lighting	Establish through Monitoring Report	Monitor only	DM2, DM3, DM8	Also refer as appropriate to individual quarry liaison committee and monitor opinions
15	Minerals transportation	Adherence to policy DM9 regarding Transport Assessment	Establish through Monitoring Report	Submission of acceptable TA or Travel Plan with 100% of development proposals that will generate significant transport movements	DM9 and SMP7	
16		Adherence to policy DM9 regarding Travel Plans				

Appendices



Appendix A: Glossary

This informal Glossary of Terms has been prepared by Somerset County Council based on the most recent definitions available. It is non-exhaustive, has not been independently checked or verified and may be subject to revision during the Plan Period. It is written to help explain terms used in the County Council's work on mineral planning.

Active (status of quarry) The quarry is currently operational, extracting stone in accordance with an extent planning permission.

Aftercare The steps to be taken following restoration to bring land to the required standard for its intended use once working or landfill has taken place, and its subsequent maintenance.

Afteruse The ultimate use to which a minerals working site is put following its restoration, such as forestry, amenity, agriculture, nature conservation, recreation or industrial.

Aggregates The raw materials used to make construction products. Usually sourced by extracting hard rock, such as limestone, or land-won or marine-dredged sand and gravel.

AWP **Aggregate Working Party** A group providing technical advice to the Secretary of State in relation to the supply of, and demand for aggregate minerals within a specific area.

AOD **Above Ordnance Datum (AOD)** The height above a vertical datum point used by Ordnance Survey as a reference point for the level or altitude of any point (usually mean sea level).

AOP **Air-Overpressure** The air overpressure (AOP) at a particular point is the maximum short term pressure change with respect to ambient atmospheric pressure. The pressure pulse may be measured in Pascals (Pa) or in decibels (dB) when it is related to a reference pressure. The maximum AOP caused by a typical mineral production blast is generally a sound at frequency well below that detectable by human hearing.

Ancient Woodland Woodland that is believed to have existed since at least the fifteenth century.

AMR **Annual Monitoring Report** Part of the Local Development Framework, this annual report assesses the implementation of the Local Development Scheme (also known as the MWDS) and the extent to which policies are being successfully applied.

Apportionment A figure used to inform the level of minerals provision within a given area, based on the splitting of national supply guidelines for minerals demand between Minerals Planning Authorities or sub-regions.

Appendix A: Glossary

Appropriate Assessment A report produced as part of the requirements of the Habitats Regulations Assessment (HRA).

AHAP **Area of High Archaeological Potential** An area assessed to have high archaeological interest.

AONB **Area of Outstanding Natural Beauty** Landscape area of high natural beauty which has special status, and within which major development will not be permitted unless there are exceptional circumstances. AONBs are designated under the 1949 National Parks and Access to the Countryside Act.

Area of Search Broader areas where knowledge of mineral resources may be less certain than in Preferred Areas, but within which planning permissions could be granted to meet any shortfall in supply if suitable applications are made.

Ashlar A squared building stone cut more or less true on all faces adjacent to those of other stones so as to permit very thin mortar joints.

Barytes A colourless or white mineral consisting of barium sulphate, occurring in sedimentary rocks and with sulphide ores.

Best and Most Versatile Agricultural Land Land identified by the Department for Environment, Food and Rural Affairs (Defra) as falling within classification grades 1, 2, or 3a, based on the physical characteristics of the land and the limits these impose upon its agricultural uses.

BAP **Biodiversity Action Plan** A plan identifying targets for improving and protecting biodiversity in an area. There are regional, county and local Biodiversity Action Plans.

Borrow pit A temporary mineral working created to supply material for a particular project.

Buffer zone A zone or area that separates mineral workings from other land uses.

Bund An artificial mound or embankment used to either screen a site from view, or reduce noise emissions.

Carbon footprint The amount of carbon dioxide released into the atmosphere as a result of the activities of a particular individual, organization, or community.

Carboniferous limestone An important source of crushed rock aggregate, in Somerset found principally in the Mendips, suitable for concrete manufacture and roadstone.

CBM **Coal-bed methane** A form of natural gas extracted from coal beds.

Appendix A: Glossary

Compensation Measures and/or monies provided to a community where mineral development will be located, with a view to mitigating or offsetting identified residual impacts arising from such development.

Conservation area An area designated by a planning authority for its special architectural and historic interest.

Construction, demolition and excavation wastes Waste arising from the construction, repair, maintenance and demolition of buildings and structures, and waste from excavation process.

Conventional hydrocarbons Hydrocarbon extraction covers both conventional and unconventional hydrocarbons. Conventional hydrocarbons are oil and gas where the reservoir is sandstone or limestone. Also see unconventional hydrocarbons.

County Council (Somerset County Council) The local authority responsible for waste and minerals planning functions in non-unitary, and non-national park, local authority areas.

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

Cumulative impact A number of developments in a locality or a continuous activity over time that together may have an increased adverse impact on the environment, local community or economy.

DCLG **Department for Communities and Local Government** Government department with responsibility for planning, building and associated environment as well as regeneration and economic growth.

Deposit A concentration of mineral or sediment in a layer, vein or pocket.

Development Defined in Section 55 (1) of the Town and Country Planning Act 1990 as 'the carrying out of building, engineering, mining and other operations in, on, over or under land, or the making of any material change in the use of any buildings or land.'

Development management/planning control The process whereby a Local Planning Authority manages developments by considering the merits of a planning application and determines the application, having regard to the Development Plan and all other material considerations.

Appendix A: Glossary

DPD Development Plan Document Documents which form the statutory development plan and which contain planning policies and proposals. They are subject to independent examination and there will be a right for those making representations to be heard at an independent examination. Once adopted, development management decisions must be made in accordance with these DPDs, unless material considerations indicate otherwise.

Dormant site (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 – 6th June 1995. A dormant site cannot be worked without agreeing first modern working conditions between the operator and mineral planning authority.

Enforcement Procedures by a Local Planning Authority to ensure that the terms and conditions of a planning decision are carried out, or that development carried out without planning permission is brought under control.

English Heritage The principal heritage regulator in England with a remit to protect and promote historic assets. English Heritage is the responsible body for listing of historic buildings.

Environment Agency The principal environmental regulator in England and Wales. Established in April 1996 to combine the function of former waste regulation authorities, the National Rivers Authority and Her Majesty's Inspectorate of Pollution.

Environmental Impact Assessment (EIA) and Environmental Statement (ES) Applicants for certain types of development, usually more significant schemes, are required to submit an environmental statement accompanying a planning application. This evaluates the likely environmental impacts of the development, together with an assessment of how the severity of the impacts could be mitigated.

Environmental permit Permits are required from the Environment Agency to manage and regulate the waste resulting from the prospecting, extraction, treatment and storage of mineral resources and working of quarries. Permits are similarly required for shale gas development, to manage: water abstraction; groundwater activity; injecting fluids; and radioactive substances.

ERA Environmental Risk Assessment A high-level risk assessment process, used to frame discussions with the MPA and local communities, particularly in relation to the development of shale gas operations. This assessment covers the whole life-cycle of shale gas extraction, including the disposal of wastes and well abandonment.

Evidence base A collective term for the documents, studies, reports and consultation responses used to underpin waste planning policy

Appendix A: Glossary

- EiP Examination in Public** The process by which an Independent Planning Inspector (from PINS, the Planning Inspectorate) publicly examines the Minerals Plan, or any other Development Plan Document before issuing a report on its soundness.
- FRA Flood Risk Assessment** An assessment of the flooding risk in a particular area so that development needs and mitigation measures can be carefully considered.
- Fracking** Refers to the 'hydraulic fracturing' of deep rocks to enhance the release of natural gases beneath the earth's crust. Industry uses the term to refer to the hydraulic fracturing of shale rock under high pressure.
- Fracturing Plan (Outline hydraulic fracturing plan)** A detailed plan to be submitted to the Department of Energy and Climate Change if fracking operations are proposed. This should be submitted by the operator detailing the proposal and the associated operation of the site.
- General Permitted Development Order** A set of regulations made by the government which grants planning permission for specified limited or minor forms of development.
- Geodiversity** The range of rocks, minerals, fossils, soils and landforms.
- Grade I, II & II* Listed Buildings** Nationally important buildings placed on the Statutory List of Buildings of Special Architectural or Historic Interest.
- Groundwater** Water associated with rocks or soil below the ground surface.
- Groundwater Directive** A daughter directive of the Water Framework Directive, the Groundwater Directive helps to protect groundwater quality delivered via the permitting process.
- GPZ Groundwater Source Protection Zones** Geographical areas, defined by the Environment Agency, used to protect sources of groundwater abstraction.
- Gypsum** A widespread colourless, white or yellowish mineral used in the manufacture of plaster.
- Habitats Directive** European legislation which protects specific animal, plant and habitats of European importance.
- HRA Habitats Regulation Assessment** This legislation requires Somerset County Council to carry out appropriate assessments in certain circumstances where a plan or project affects a Natura 2000 site (established under the Habitats Directive).
- HGV Heavy goods vehicles** A vehicle that is over 3,500kg unladen weight and used for carrying goods.

Appendix A: Glossary

Heritage (built and architectural) A term used to refer to the historical, architectural and archaeological features, buildings and monuments that are of local, regional or national interest.

Heritage asset A building, monument, site, place, area or landscape positively identified as having a degree of significance meriting consideration in planning decisions. Heritage assets are the valued components of the historic environment. They include designated heritage assets identified by the local planning authority during the process of decision making or through the plan-making process.

Highways Agency An executive agency of the Department of Transport. The Highways Agency operates, maintains and improves 7000km of strategic road network, including motorways.

Historic environment The physical legacy of thousands of years of human activity in this country, in the form of buildings, monuments, sites and landscapes.

HER **Historic Environment Record** An Historic Environment Record, is a record of all known archaeological finds and features and historic buildings in an area, relating to all periods from the earliest human activity to the present day.

Hydraulic fracturing A technique of drilling deep into rocks beneath the earth's crust to enhance the release of natural gases.

Hydrocarbon A compound composed only of the elements carbon and hydrogen (e.g. methane).

Hydrology The study of the movement of surface water.

Inactive (status of quarry) Indicates that the quarry was worked in the period 22nd February 1982 to 6th June 1995 and possibly post this period. Is not currently operational but has modern working conditions.

Landbank The quantity of mineral with planning permission for extraction.

Landscape character assessment A tool for identifying the distinct and recognisable elements in the landscape that give a locality its sense of place, describing what makes it different from its neighbouring areas.

Land-won aggregates/mineral Mineral/aggregate excavated from the land.

Listed Buildings and Sites Buildings and sites protected under the Planning (Listed Buildings and Conservation Areas) Act 1990.

Limestone A sedimentary rock consisting predominantly of calcium carbonate. Often used as aggregate (crushed rock) or a building stone.

Appendix A: Glossary

Lintel A horizontal structural member, such as a beam or stone, that spans an opening, as between the uprights of a door or window or between two columns or piers.

LAA Local Aggregate Assessment An annual report produced by the Mineral Planning Authority which sets the Mineral Planning Authorities level of provision based on a rolling 10 year average sales data and any other relevant local information.

LDD Local Development Document A Local Development Document will form part of the Local Development Framework and can either be a Development Plan Document (DPD) or a Supplementary Planning Document (SPD). Somerset County Council is responsible for producing a Minerals and Waste Development Framework containing Minerals and Waste Local Development Documents.

LDF Local Development Framework The Local Development Framework comprises a portfolio of local development documents that will provide the framework for delivering the spatial planning strategy for the area. Where minerals and waste is concerned it is also called the Minerals and Waste Local Development Framework.

Local Development Order An order made by a Local Planning Authority extending Permitted Development rights for certain forms of development, with regard to a Local Development Document.

LEP Local Economic Partnership A partnership between local authorities and businesses which cover natural economic areas. Priorities include ensuring that planning and infrastructure investment supports business need as well as supporting enterprise, global trade and inward investment. Somerset is part of the Heart of the South West LEP.

Local Geological Sites Sites which are selected by voluntary geoconservation groups, such as Geology Trusts, on the following criteria. Local Geological Sites were formally known as Regionally Important Geological Sites (RIGS)

- The value of a site for educational purposes in life-long learning
- The value of a site for study by both amateur and professional Earth scientists
- The historical value of a site in terms of important advances in Earth science knowledge, events or human exploitation
- The aesthetic value of a site in the landscape, particularly in relation to promoting public awareness and appreciation of Earth sciences.

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

Appendix A: Glossary

- LNP Local Nature Partnership** The Somerset Local Nature Partnership is a partnership spanning the county, comprising groups, organisations and companies interested in the restoration and enhancement of the local natural environment for the benefit of our economic and social health and well-being.
- Local Nature Partnerships are a key aspect of the Government's 2011 Natural Environment White Paper for England, which states these locally organised bodies should 'bring a diverse range of individuals, businesses and organisations together at a local level to create a vision and plan of action of how the natural environment can be taken into account in decision making.'
- At present the SLNP has over 20 partners, including local authorities, Government agencies, and private and third sector groups and organisations.
- LP Local Plan** A Development Plan Document prepared by district and other local planning authorities, including minerals and waste planning authorities, to guide development in their administrative area.
- Local Plan Regulations 2012** Regulations which detail the way in which local councils prepare and consult upon Development Plan Documents.
- Local Planning Authority** The local authority or council that is empowered by law to exercise planning functions. Somerset County Council is the planning authority for waste and minerals matters in the county.
- LTP Local Transport Plan** A statutory plan produced by Somerset County Council detailing its approach to transport.
- Local Wildlife Sites** Areas of land with significant wildlife value. These were previously known as Sites of Importance for Nature Conservation (SINCs) and County Wildlife Sites (CWSs).
- Localism Act 2011** The Localism Act seeks to give effect to the Government's ambitions to decentralise power away from Whitehall and back into the hands of local councils, communities and individuals to better work on local priorities.
- MASS Managed Aggregate Supply System** A system of addressing the spatial imbalances in aggregates supply and demand, used by government to secure adequate and steady supplies of minerals needed by society and the economy without irreversible damage, within the limits set by the environment and assessed through sustainability appraisals.
- Marine-dredged aggregates** Sand and gravel dredged from the seabed and landed at wharves for use as an aggregate.
- Material consideration** A matter that should be taken into account in deciding a planning application or on an appeal against a planning decision.

Appendix A: Glossary

Minerals Includes all substances of a kind ordinarily worked for removal by underground or surface working, except that it does not include peat cut for purposes other than for sale (s.336 to s.336(1), Town and Country Planning Act 1990 (as amended)).

Mineral Consultation Area Areas in Somerset where the county's District and Borough councils are required to consult the Mineral Planning Authority over proposed non-mineral development.

Mineral development Any development primarily involving the extraction, processing, storage, transportation or manufacture of minerals. It includes associated development such as rail aggregate depots, facilities for aggregate recycling, secondary processing facilities and coastal wharves for mineral transportation.

Mineral extraction Refers to the quarrying of mineral and the ancillary development associated with this, such as processing plants, site offices, and weighbridges.

Minerals hierarchy The minerals hierarchy provides a way of setting out the different approaches to the supply of minerals, ordering them in terms of their sustainability. The most sustainable option is to reduce the amount of minerals used, followed by sourcing minerals from secondary and recycled materials, and finally through the primary extraction of minerals.

Minerals Local Plan The Somerset Minerals Local Plan sets out the broad land use framework for mineral development in Somerset; it was adopted in 2004 and will be replaced by this Somerset Mineral Plan.

MPA **Mineral Planning Authority** The planning authority responsible for planning control of minerals development. The Mineral Planning Authorities are the statutory bodies which control mineral workings in their area e.g. Somerset County Council.

MPS **Mineral Planning Statement** Minerals Planning Statements were published by the Department for Communities and Local Government. Minerals Planning Statements replaced Minerals Planning Guidance Notes.

Minerals Products Association National trade association for companies involved in the supply of minerals such as sand and gravel.

Mineral reserve A mineral deposit which has been tested to establish the quality and quantity of material present and which could be economically and technically exploited.

Appendix A: Glossary

Mineral resource A potential mineral deposit where the quality and quantity on material present has not been tested.

Mineral Safeguarding Area Areas of known specific minerals resources designated by the County Council so they are not needlessly sterilised by non-mineral development.

MWDS **Minerals and Waste Development Scheme** A document which sets out the documents that Somerset County Council intends to produce within its Minerals and Waste Development Framework, and the timetable for producing them. This can be downloaded from www.somerset.gov.uk/mineralsandwaste

Mitigation A process by which the frequency, severity or size of adverse effects of a mineral facility are identified (for example, increased traffic movements on local roads) and reduced or eliminated (by measures such as for example, operating hour restrictions).

NNR **National Nature Reserve** An area designated by Natural England to protect and conserve nationally important areas of wildlife habitat and geological formations and to promote scientific research.

NPPF **National Planning Policy Framework** The National Planning Policy Framework is a key part of this government's reforms to make the planning system less complex and more accessible. It vastly simplifies the number of policy pages about planning. The framework acts as guidance for local planning authorities and decision-takers, both in drawing up plans and making decisions about planning applications. It provides a framework within which local people and their accountable councils can produce their own distinctive local and neighbourhood plans, which reflect the needs and priorities of their communities.

National Parks National Parks in the UK are areas which were mostly set aside in the 1950s and 1960s by the state because of their outstanding value in terms of natural beauty, ecological, archaeological, geological and other features, and recreational value. There are fifteen National Parks in the UK. National Parks are run by National Park Authorities.

Natura 2000 sites An ecological network of protected sites, comprising of Special Protection Areas (sites important for bird populations) and Special Areas of Conservation (designated for all species other than birds, and their habitats).

Natural England Body formed by bringing together English Nature, the landscape, access and recreation elements of the Countryside Agency and the environmental land management functions of the Rural Development Service.

Appendix A: Glossary

New build A new home, other building or structure (for example a new curtilage wall), that has been built very recently or that is to be built soon. It may also include any subsequent improvements to such structures.

Offsetting (biodiversity offsetting) A process whereby an area of land of at least equivalent ecological value is provided, within or outside the development boundary, to replace land supporting important supporting important species populations or habitats lost to development or associated works (such as highway works).

Old minerals permission A planning permission held for the extraction of minerals and any overlying materials granted under the Town and Country Planning Acts between 1948 and 1983. Also includes dormant sites (which have been valid planning permission but where there has been no substantial working of minerals between 22 February 1982 and 6 June 1995).

Overburden Soil and other material that overlay a mineral deposit, and which has to be excavated and either tipped or stockpiled to gain access to the underlying mineral.

PEDL Petroleum Exploration and Development Licence Issued by Government (Department of Energy and Climate Change), this licence gives the right to search for, and hydrocarbons, but does not give any 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.

Permitted development rights Permitted development rights grant automatic planning permission to proposals for development that is a physical operation, or a material change of use, or both.

Permitted reserve Minerals which benefit from a valid planning permission for extraction.

Planning & Compulsory Purchase Act 2004 Requires the production of Local Development Frameworks. This requires Development Documents to have a positive spatial strategy and vision for the authority at the end of the plan period, as well as policies for Development Management.

Planning conditions Conditions attached to a planning permission for the purpose of regulating and controlling the development.

PINS Planning Inspectorate Governmental agency responsible for scheduling independent examinations and producing binding reports on the soundness and legal compliance of planning policy and related decisions.

Appendix A: Glossary

Policies map A map of the area covered by the associated Development Plan which highlights spatially the operating extent of the policies contained within the plan.

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

Preferred Area Areas of known resource where planning permission might reasonably be anticipated providing the proposals are environmentally acceptable or appropriate conditions can be applied to mitigate adverse impacts.

Preferred Options An interim stage of Development Plan Document production which guides the preparation of the Pre-submission Minerals Plan.

Primary aggregates Naturally occurring sand, gravel and crushed rock used for construction purposes.

Processing Treatment of an extracted mineral. Taking building stone as an example, this would include sawing, guillotining, dressing, carving, masoning and polishing. Taking aggregate as an example, this would include crushing, grading and washing.

PRoW **Public Right of Way** A Public Right of Way is a highway over which the public has a right of access along the route.

Quoin Quoins are masonry blocks at the corner of a wall. They exist in some cases to strengthen for a wall made with inferior stone or rubble and in other cases to make a feature of a corner.

Ramsar sites Internationally important wetland sites identified for conservation under the Ramsar convention (1971). Somerset has two such areas - the Somerset Levels and Moors, and the Severn Estuary (Bridgwater Bay).

Reclamation The process of returning the land to the agreed after-use and standard which includes both the restoration and the aftercare periods (Schedule 5 of the Town and Country Planning Act (1990).

Recycled aggregate Recycled construction material, produced from crushing and screening inert demolition waste, road planning etc.

Registered Parks and Gardens Nationally important sites placed on the Register of Parks and Gardens of Special Historic Interest.

Appendix A: Glossary

Restoration Operations associated with the winning and working of minerals and which are designed to return the area to an acceptable environmental condition, whether for the resumption of former land use or a new use (Technical Guidance to the NPPF).

ROMP Review of Mineral Planning Permission These are periodic reviews for planning permissions for mineral extraction or the deposition of mineral waste (including Interim Development Orders) granted after 22nd February 1982. The process is a 15 year rolling cycle, where each active site must be reviewed every 15 years.

Safeguarding The method of protecting needed facilities or mineral resources and of preventing inappropriate development from affecting it. Usually, where sites are threatened, the course of action would be to object to the proposal or negotiate an acceptable resolution.

Saved Policies with unitary development plans, local plans and structure plans that are in force until such time as Local Development Documents are adopted.

Scoping Report This sets out the framework that will be used to appraise policies, proposals or guidance against sustainability criteria.

SAM/ SM Scheduled Ancient Monument Archaeological sites or monuments of national importance given legal protection by being placed on a list or 'schedule'. Monuments in Somerset can be researched on the Historic Environment Record: www.somerset.gov.uk/her

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

Secretary of State for Communities and Local Government The lead Minister for all policies relating to Town and Country Planning, having powers of intervention on Development Plans and Planning Casework under certain circumstances.

Section 106 agreement (S106) The Town and Country Planning act 1990 allows a local planning authority (LPA) to enter into a legally-binding agreement or planning obligation with a landowner when granting planning permission. The obligation is termed a Section 106 Agreement. These agreements are a way of dealing with matters that are necessary to make a development acceptable in planning terms.

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

Appendix A: Glossary

Somerset Historic Environment Record A database of information on archaeological sites, monuments and buildings in the county of Somerset: www.somerset.gov.uk/her

Source Protection Zone The Environment Agency identifies Source Protection Zones to protect groundwater (especially public water supply) from developments that may damage its quality.

South West Aggregates Working Party Aggregate Working Parties provide technical advice about the supply and demand for aggregates to Government and mineral planning authorities, and undertake annual monitoring of aggregates production. The SW AWP delivers this function for the South West of England.

Spatial planning Spatial planning goes beyond traditional land use planning, bringing together and integrating policies for the development and use of land with other policies and programmes which influence the nature of places and how they function.

SAC Special Areas of Conservation Designation made under the Habitats Directive to ensure the restoration or maintenance of certain natural habitats and species some of which may be listed as 'priority' for protection at a favourable conservation status - also see 'Natura 2000 sites'.

SPA Special Protected Areas Designations made under the EC Directive 79/409 on bird conservation (The Birds Directive), the aim of which is to conserve the best examples of the habitats of certain threatened species of bird the most important of which are included as priority species - also see 'Natura 2000 sites'.

SCI Statement of Community Involvement A document which sets out the way in which local authorities will involve individuals, communities, businesses and other stakeholders in the preparation of Local Development Documents. Somerset County Council's Statement of Community Involvement was adopted in November 2006.

Statutory Required by law (statute), usually through an Act of Parliament.

Mineral sterilisation When development or land use changes prevent possible mineral exploitation in the foreseeable future.

SEA Strategic Environmental Assessment SEA integrates environmental considerations into the preparation and adoption of plans and programmes. They are required by the European Directive 2000/42/EC "on the assessment of the effects of certain plans and programmes on the environment" (the SEA Directive). Government guidance considers that it is possible to satisfy the requirements for Sustainability Appraisal and SEA through a single approach provided that the requirements of the SEA Directive are met. The environmental, economic and social effects of the plan are presented in the form of an iterative Environmental Report which informs each consultation stage of the Minerals Local development.

Appendix A: Glossary

SFRA Strategic Flood Risk Assessment An assessment which is carried out which highlights the potential level of risk of flooding on land in a given area from a strategic perspective.

Strategic transport network Though not formally adopted as a term, this describes the strategic road network in a defined area (in this case, the county) and water and rail transport options.

Submission Document A Development Plan Document submitted to the Secretary of State for independent examination by a government-appointed planning inspector.

SPD Supplementary Planning Document Supplementary Planning Documents do not hold 'development plan' status but can form an important part of the local development framework. They can be used to provide further detail in support of Development Plan Documents.

SA Sustainability Appraisal 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 economic, environmental and social factors.

Sustainable development Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

SUDS Sustainable Urban Drainage Systems Drainage systems designed to reduce the potential impact of new and existing developments with respect to surface water drainage. This could include the use of swales or attenuation ponds.

Town & Country Planning (Local Planning) (England) Regulations 2012 The formal regulations setting out the scope of local development documents and the process for preparing them, including consultation, the examination of DPDs, publication and notification arrangements.

Traffic Assessment A Traffic Assessment forms part of an Environmental Statement submitted with most applications requiring Environmental Impact Assessment (EIA).

TA Transport Assessment A Transport assessment is a comprehensive and systematic process that sets out transport issues relating to a proposed development. It identifies what measures will be taken to deal with the anticipated transport impacts of the scheme and to improve the accessibility and safety for all modes of travel, particularly for alternatives to the car such as walking, cycling, and public transport.

Travel Plan A Travel Plan is a range of measures aimed at managing the transport needs of an organisation to encourage safe, healthy and sustainable travel options.

Appendix 2: Glossary

Unauthorised development Development that has taken or is taking place without the benefit of planning permission. It may then risk being the subject of enforcement action.

Unconventional hydrocarbons Hydrocarbon extraction covers both conventional and unconventional hydrocarbons. Unconventional hydrocarbons refers to oil and gas which comes from sources such as shale or coal seams which act as the reservoirs. Also see conventional hydrocarbons.

Wildlife & Countryside Act (1981) Mechanism for the legislative protection of wildlife in Great Britain.

Winning and working To win a mineral is to make it available or accessible to be removed from the land. Working a mineral is to extract or separate the raw material from the solid earth in which it occurs.

Appendix B: Maps

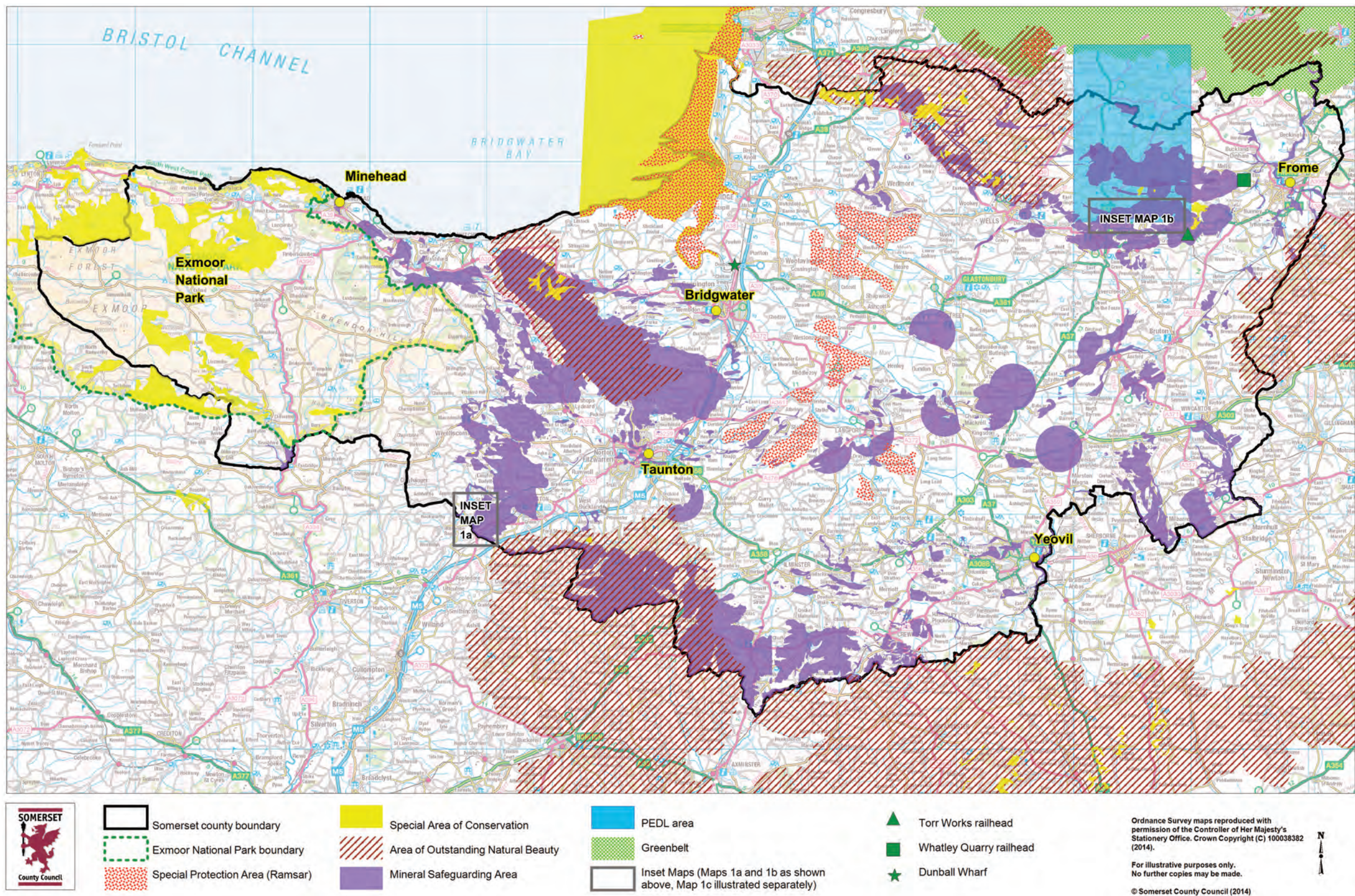
Map no.	Description	Page no.
1	Somerset Mineral Plan policies map	142
1a	Inset map – sand and gravel preferred area and Area of Search	143
1b	Inset map – Silurian Andesite Area of Search	144
1c	Inset map – building stone Area of Search	145
2	Carboniferous Limestone resource	146
3	Sand and gravel 'Pebble Bed' resource	147
4	Location of quarry sites in Somerset	148
5	Peat resource areas west of Glastonbury	149
6	Petroleum Exploration & Development Licence (PEDL) area - Sept 2014	150
7a	Broadleaved woodland and rivers and streams ecological networks	151
7b	Heathland and grassland ecological networks	152
8	Mineral Safeguarding Areas	153
9	Torr Works railhead	154
10	Whatley Quarry railhead	155
11	Dunball Wharf	156

Note: 1, 1a, 1b, 1c, 2, 3, 5 & 8 are derived from data under Licence number 2003/140
British Geological Survey © NERC

Larger format maps are available from www.somerset.gov.uk/mineralsandwaste
or available on request from the Planning Policy team.

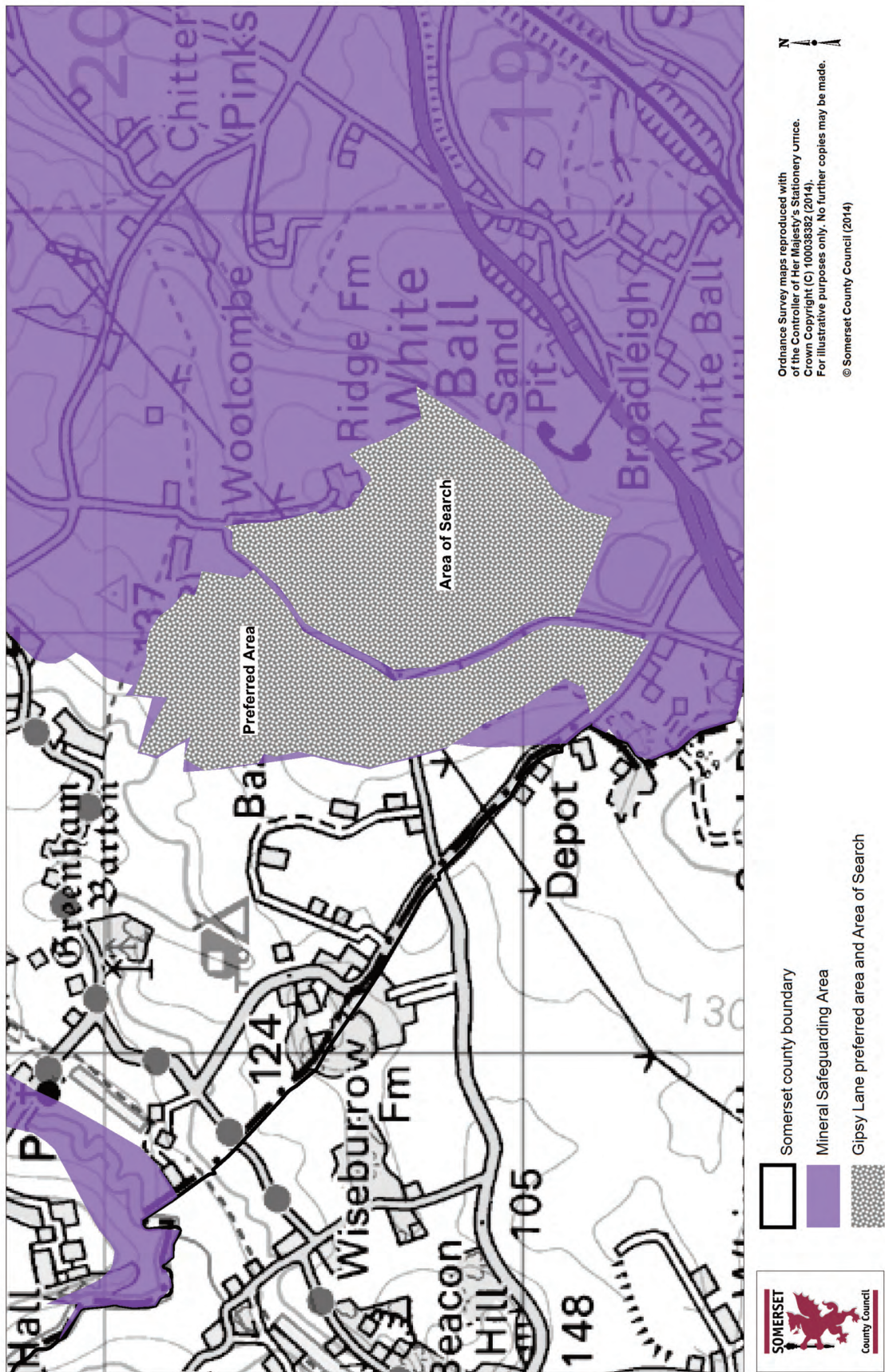
Appendix B: Maps

Map 1: Somerset Mineral Plan policies map

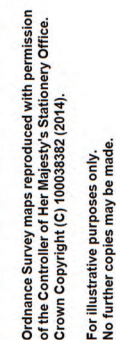


Appendix B: Maps

Map 1a: inset map – sand and gravel preferred area and Area of Search



Map 1b: inset map – Silurian Andesite Area of Search

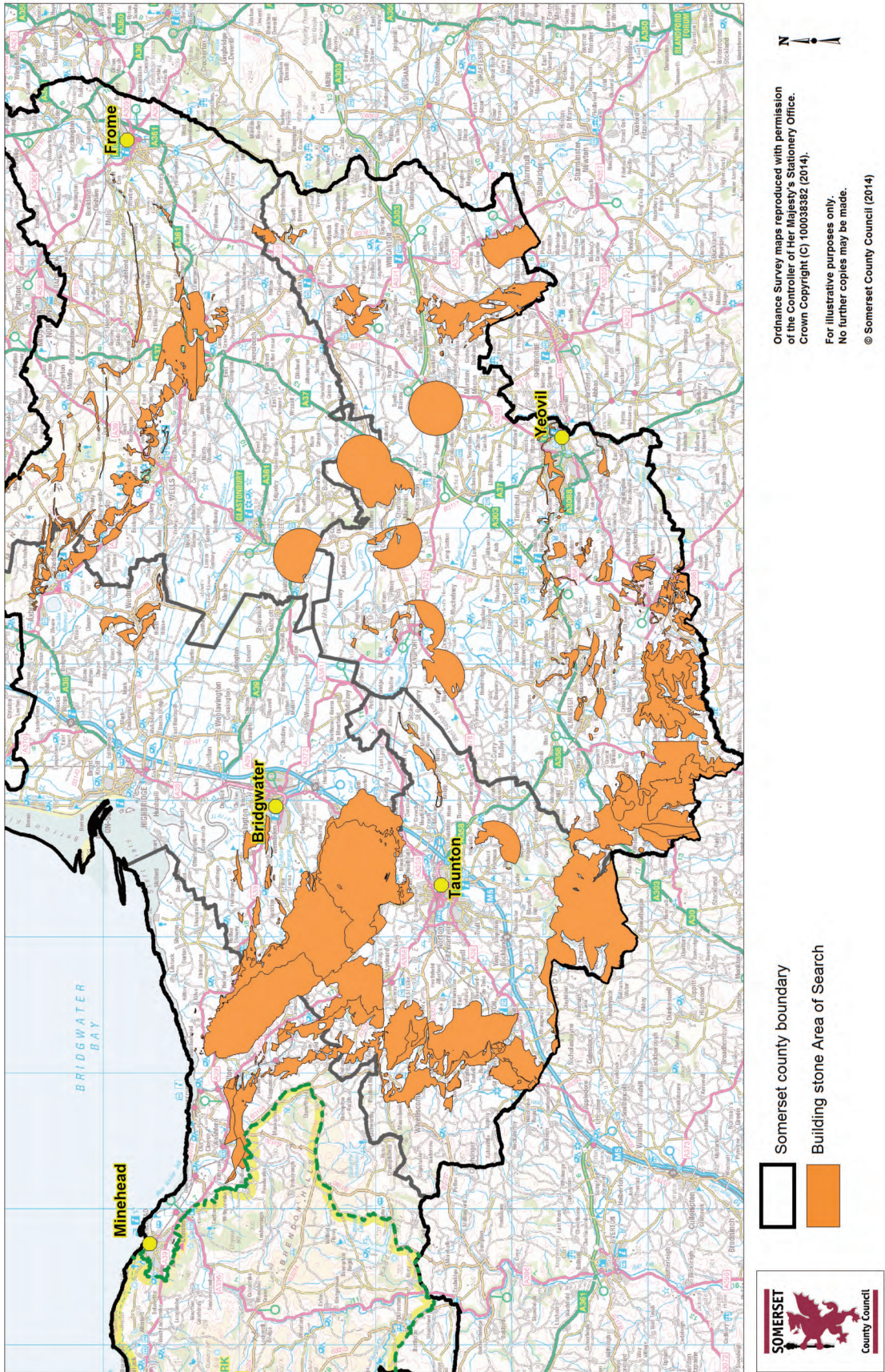


Somerset county boundary

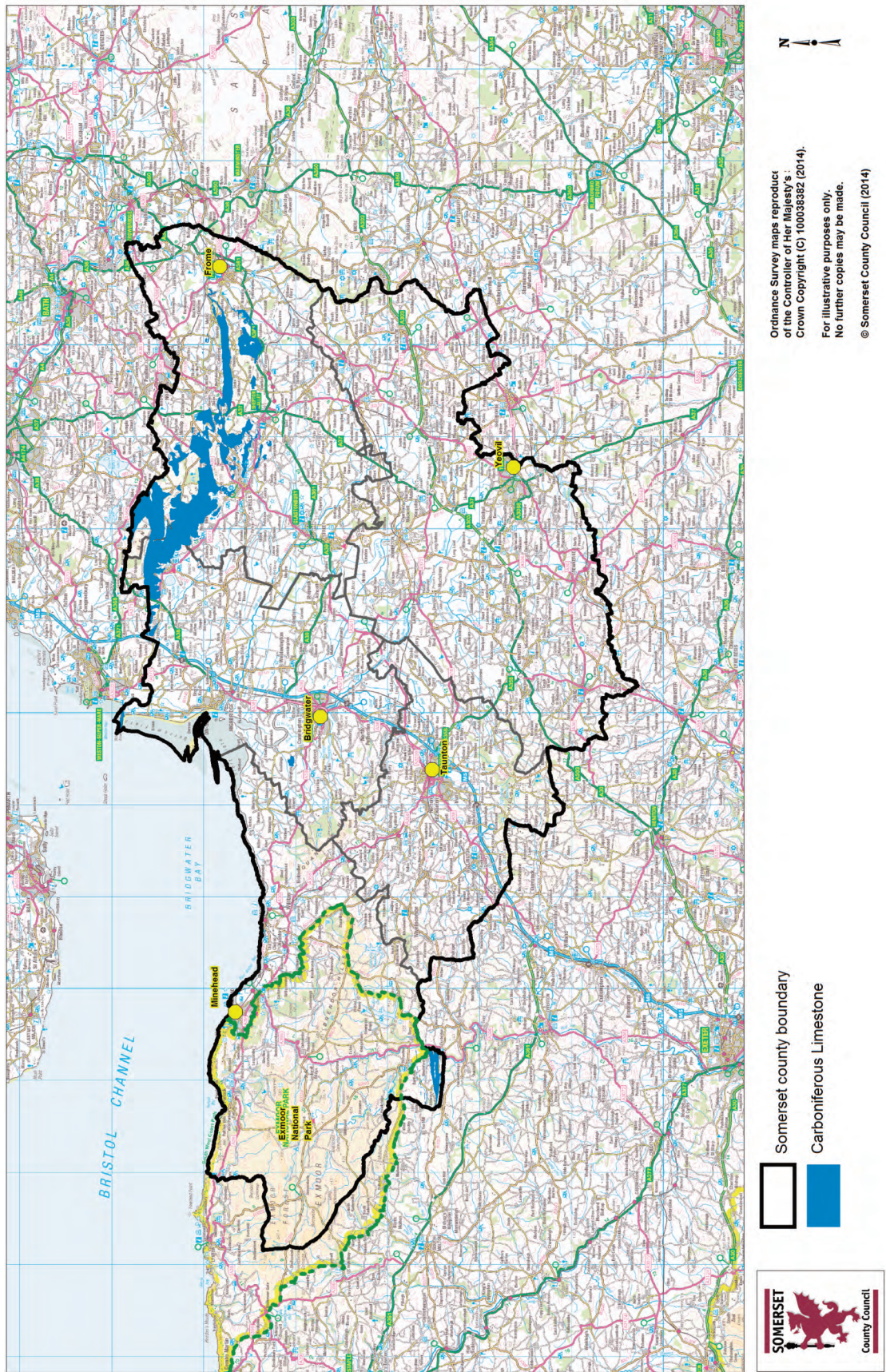
Silurian Andesite Area of Search



Map 1c: inset map – building stone Area of Search



Map 2: Carboniferous Limestone resource



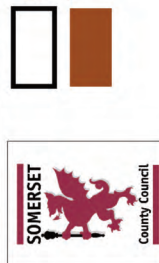
Appendix B: Maps

Map 3: sand and gravel 'Pebble Bed' resource

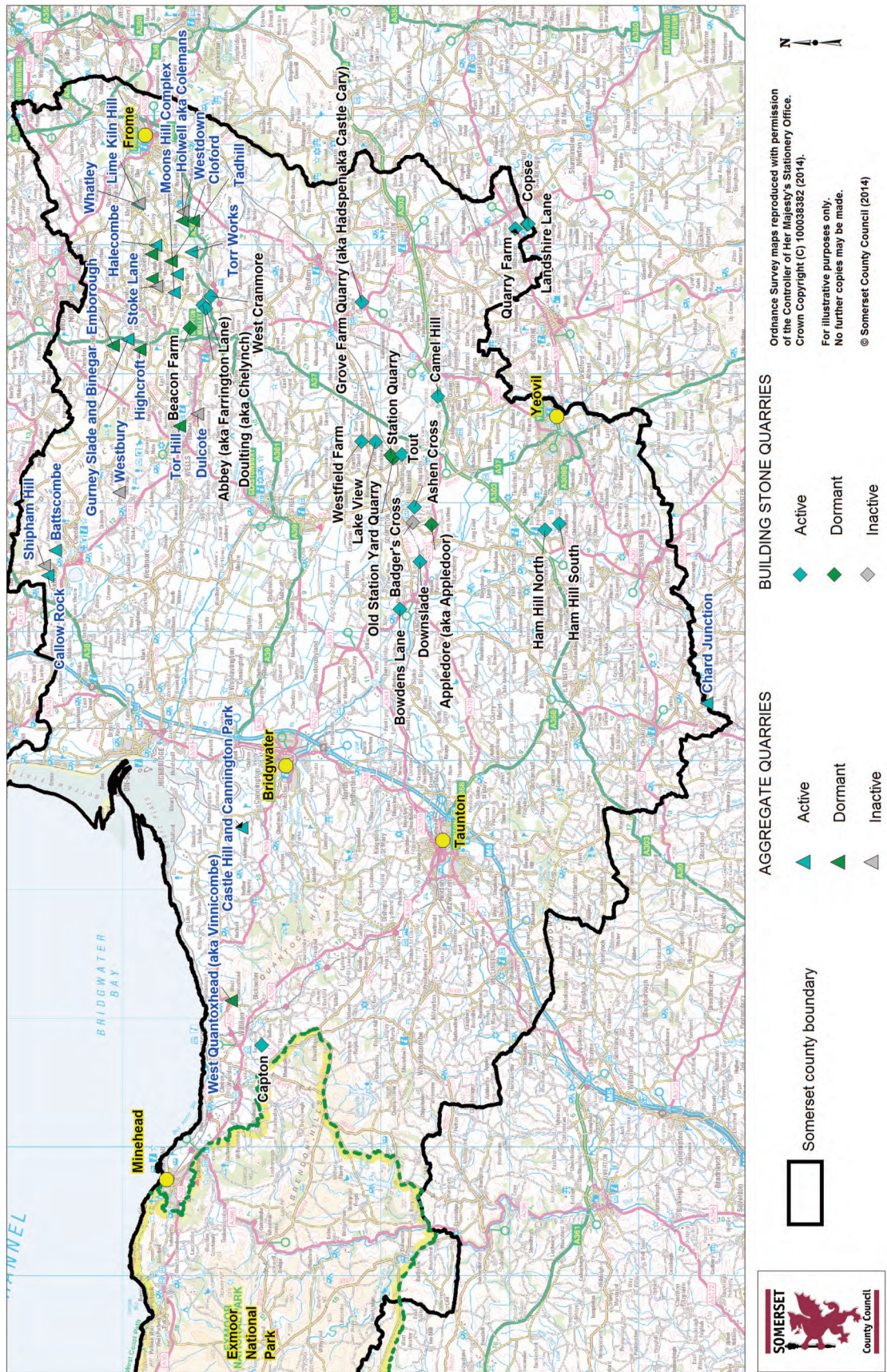


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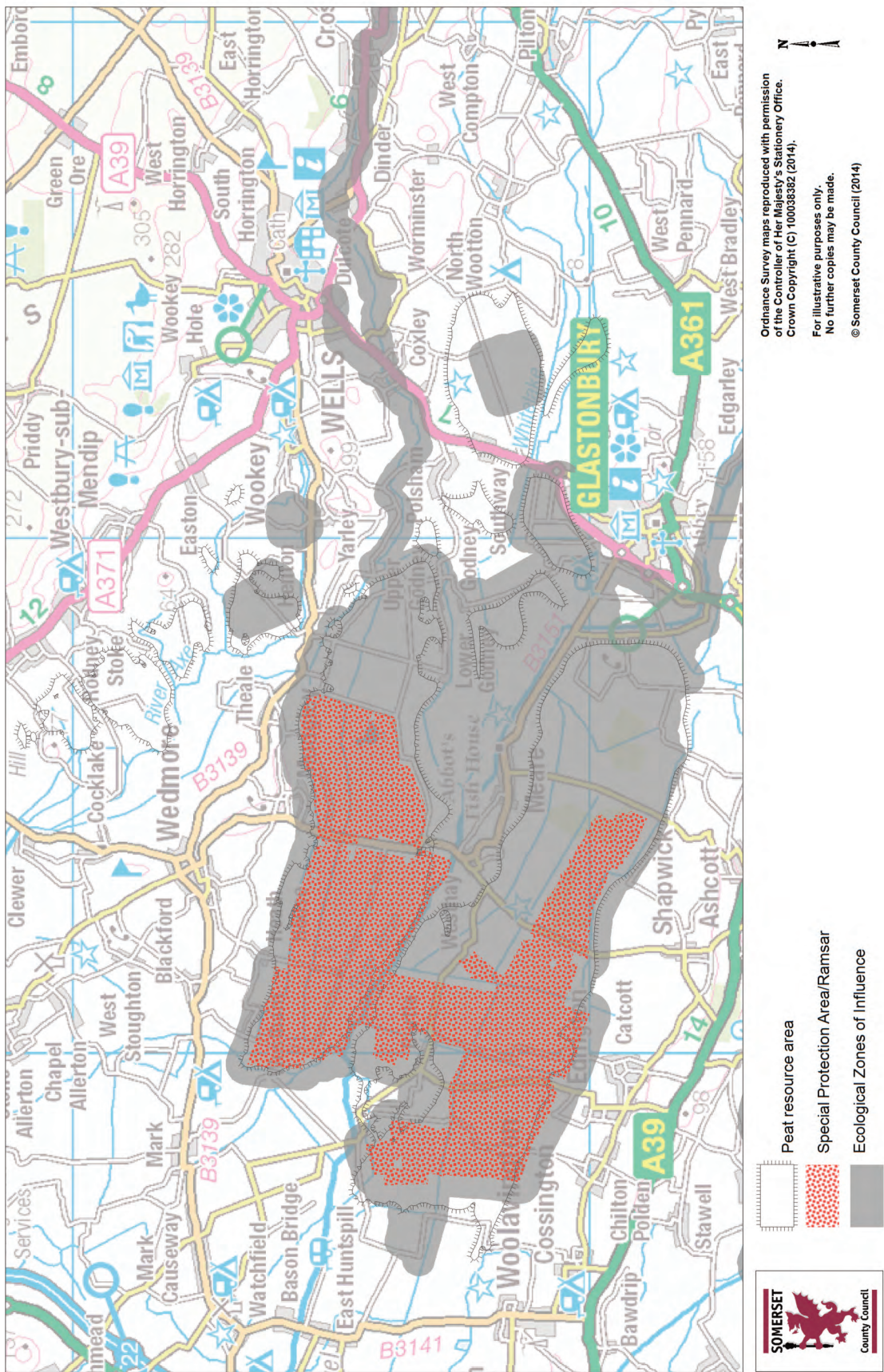
Somerset county boundary
Triassic Budleigh Salterton Pebble Bed formation



Map 4: location of quarry sites in Somerset

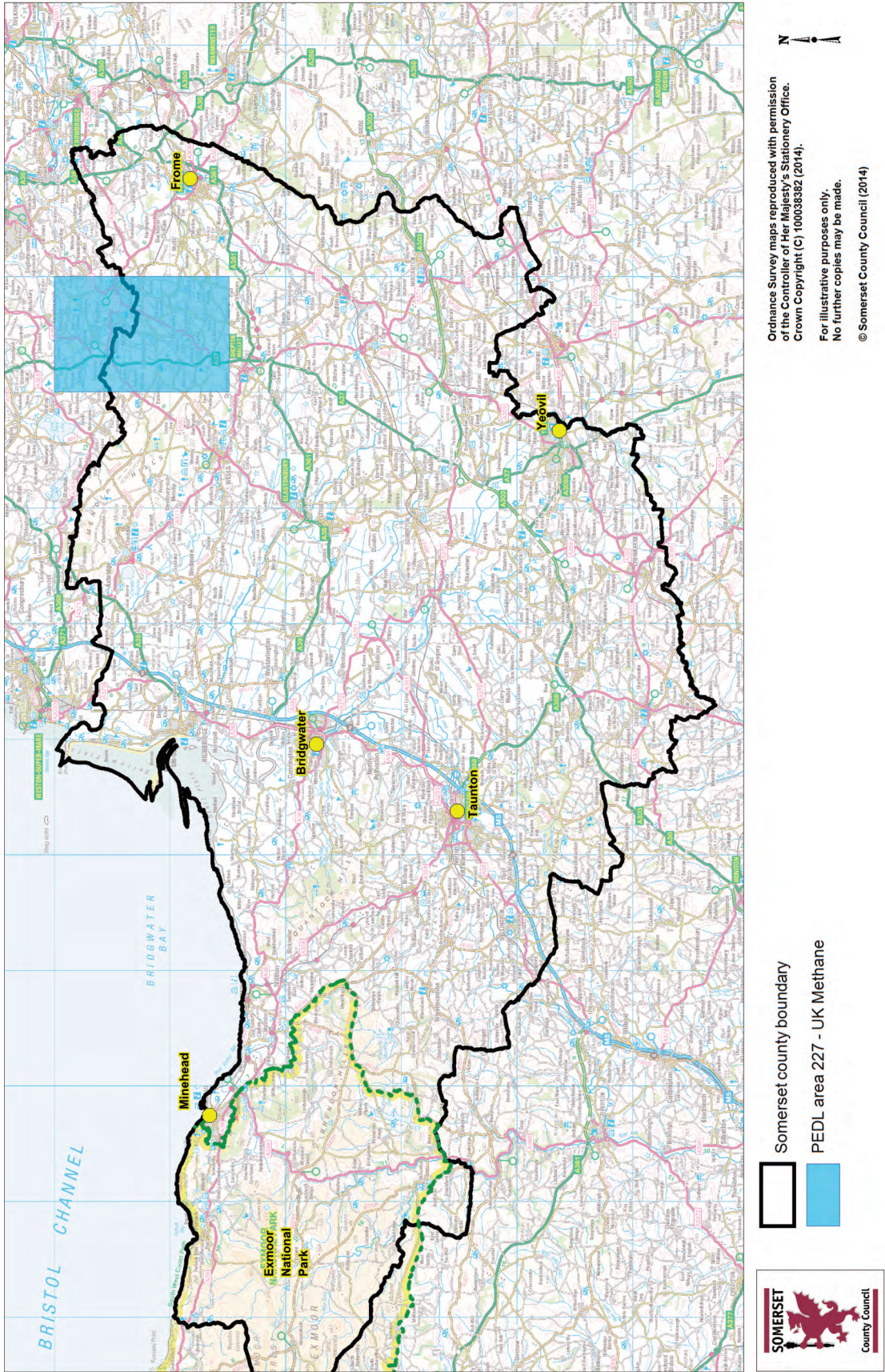


Map 5: peat resource areas west of Glastonbury

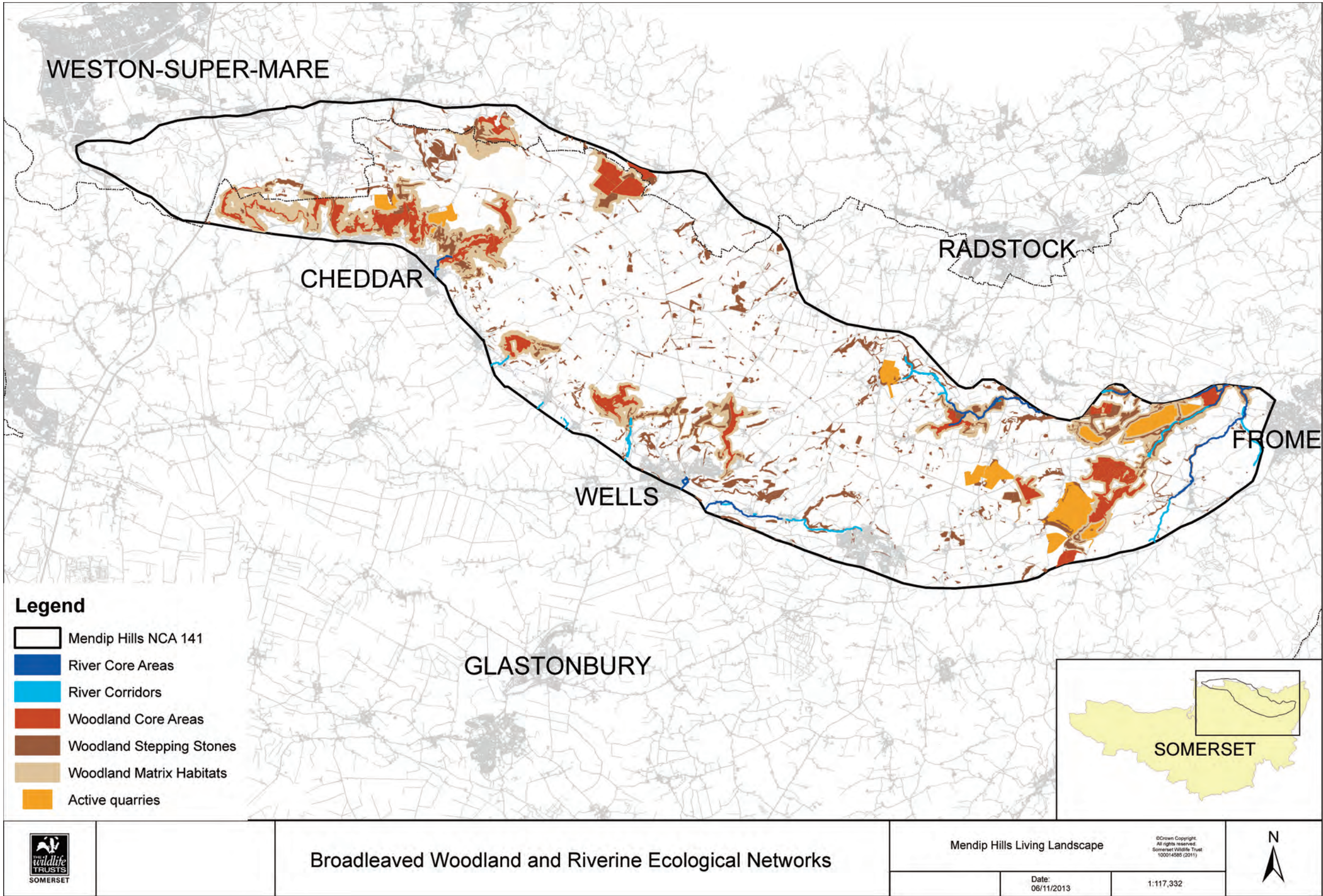


Appendix B: Maps

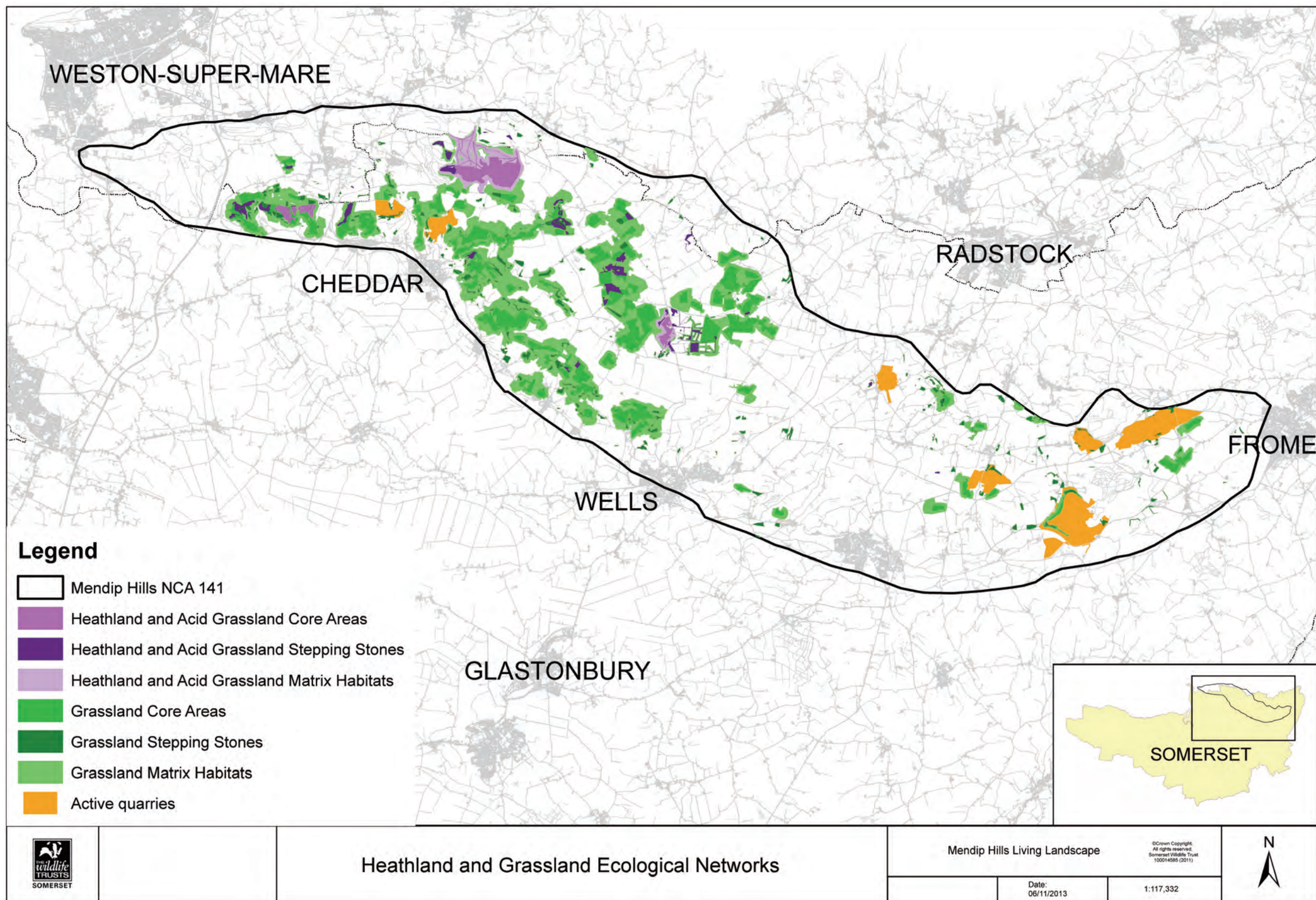
Map 6: Petroleum Exploration and Development Licence (PEDL) area – September 2014



Map 7a: broadleaved woodland and rivers and streams ecological networks

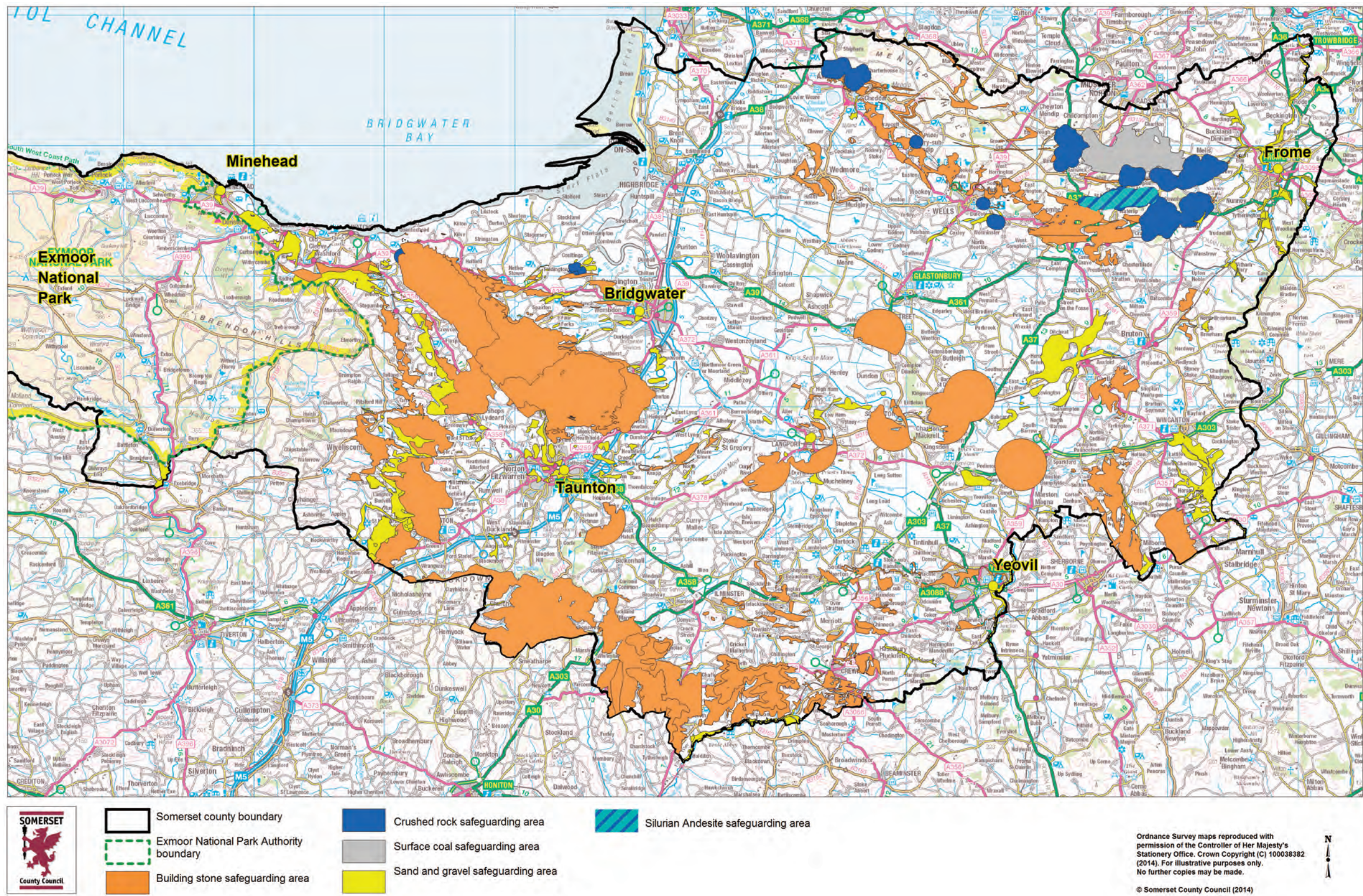


Map 7b: heathland and grassland ecological networks



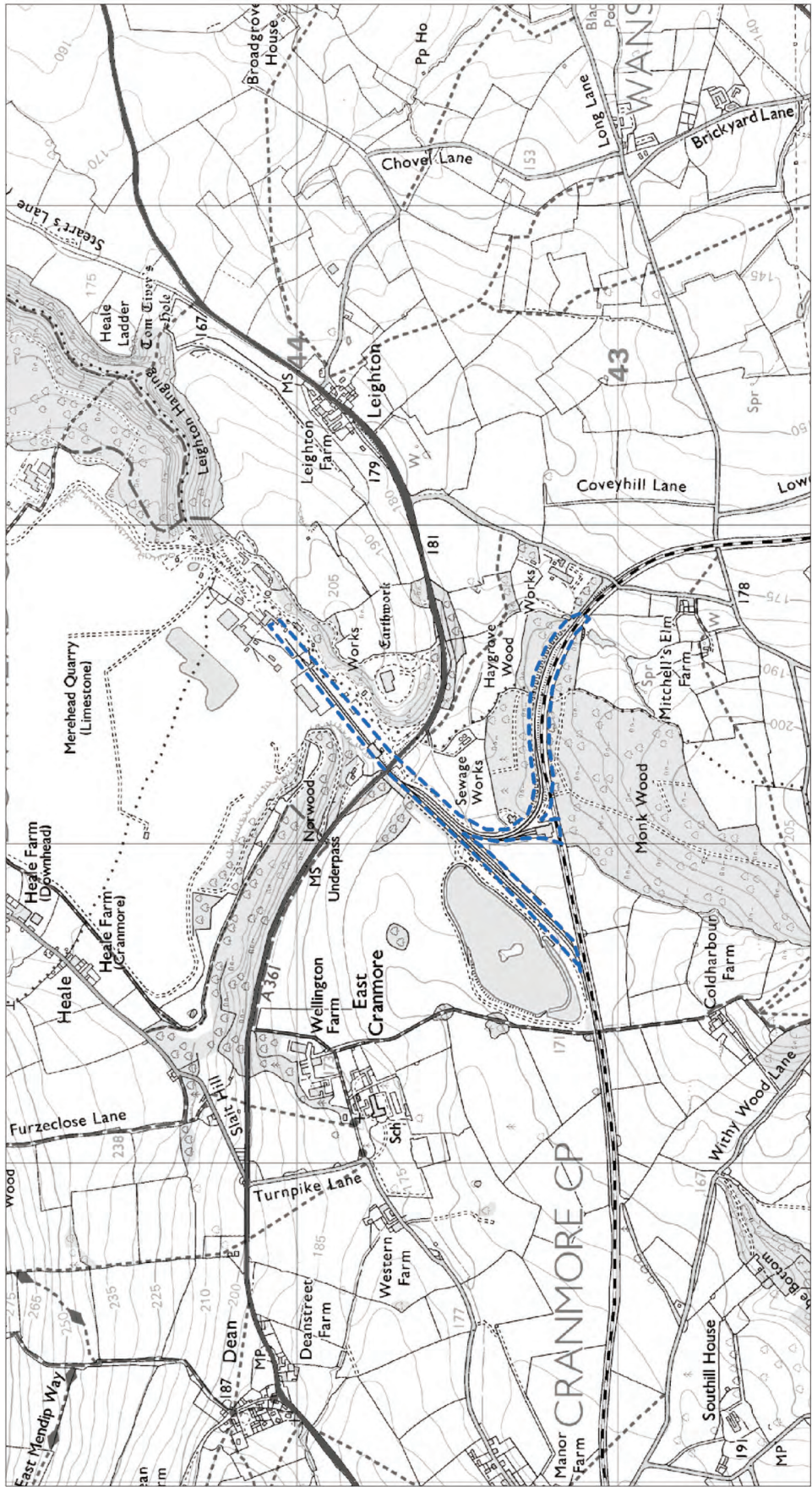
Appendix B: Maps

Map 8: Mineral Safeguarding Areas



Appendix B: Maps

Map 9: Torr Works railhead

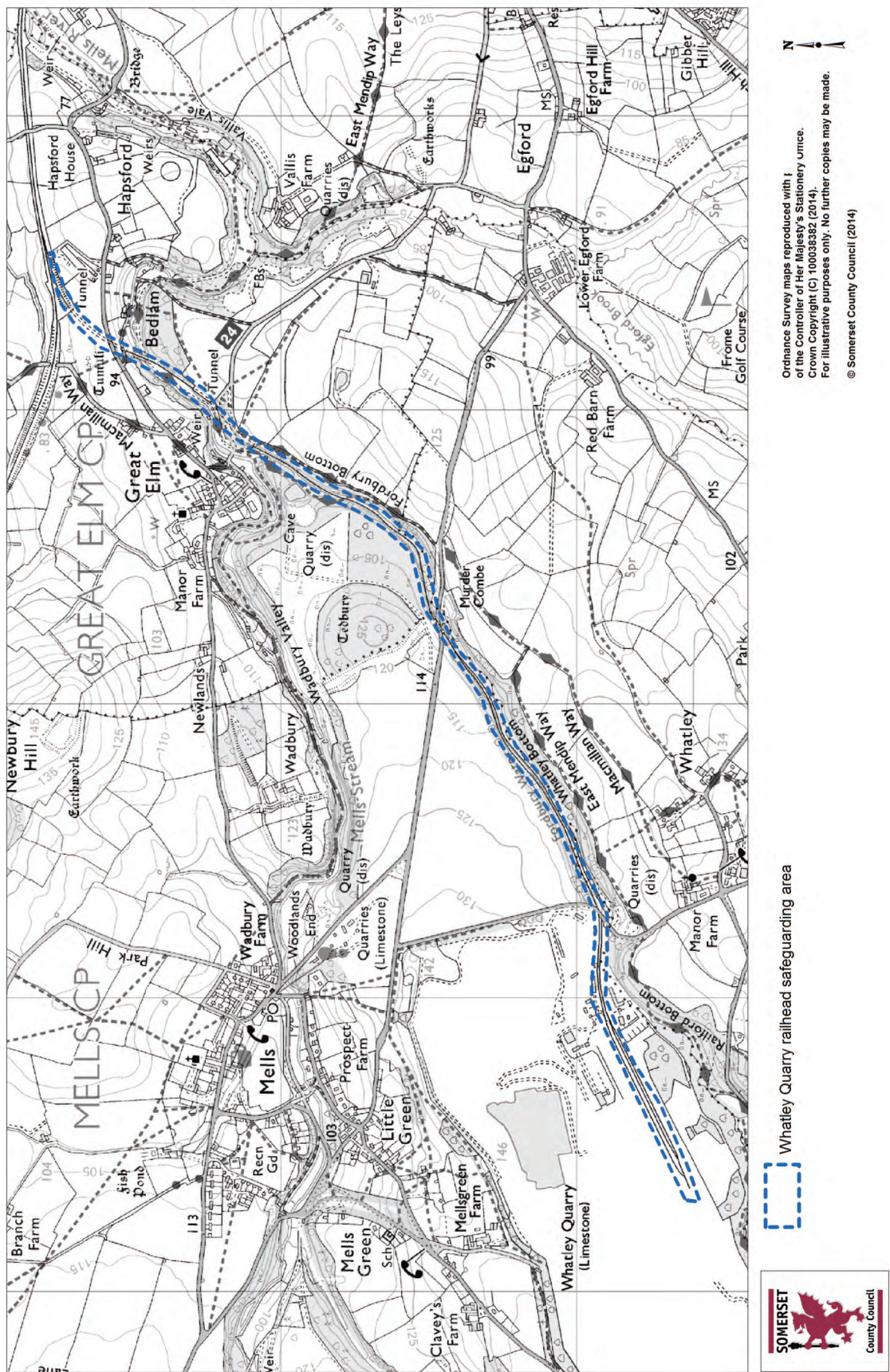


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Torr Works Quarry railhead safeguarding area

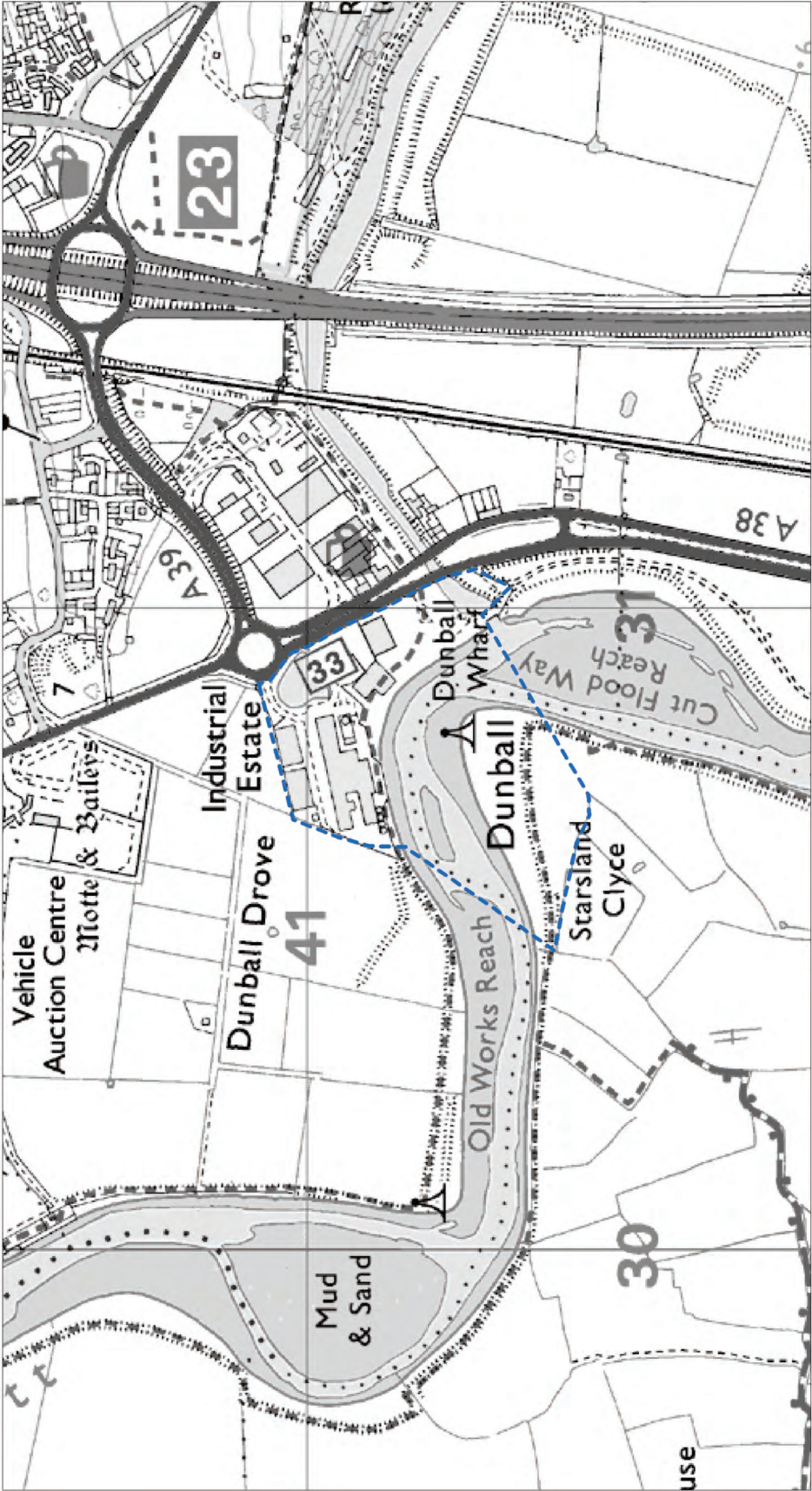


Map 10: Whatley Quarry railhead



Appendix B: Maps

Map 11: Dunball Wharf



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Dunball Wharf safeguarding area



Appendix C: Site Profiles

Planning status	Quarry name	Page no.
Active	Abbey	159
	Ashen Cross	161
	Battscombe	164
	Bowdens Lane	166
	Callow Rock	167
	Camel Hill	168
	Capton	169
	Castle Hill/Cannington Park	170
	Chard Junction	171
	Copse	174
	Doultling (Chelynych)	175
	Downslade	176
	Grove Farm (Castle Cary/Hadspen)	179
	Gurney Slade (including Binegar site)	180
	Halecombe	181
	Ham Hill (North)	182
	Ham Hill (South)	183
	Lake View	186
	Moons Hill	189
	Quarry Farm	191
	Torr Works	197
	Tout	198
	Westfield Farm	202
	West Cranmore	203
	Whatley	204
Inactive	Badger's Cross	162
	Dulcote	177
	Holwell/Colemans	185
	Lime Kiln Hill	188
	Shipham Hill	192
	Stoke Lane	194
	Westbury	200

Appendix C: Site Profiles

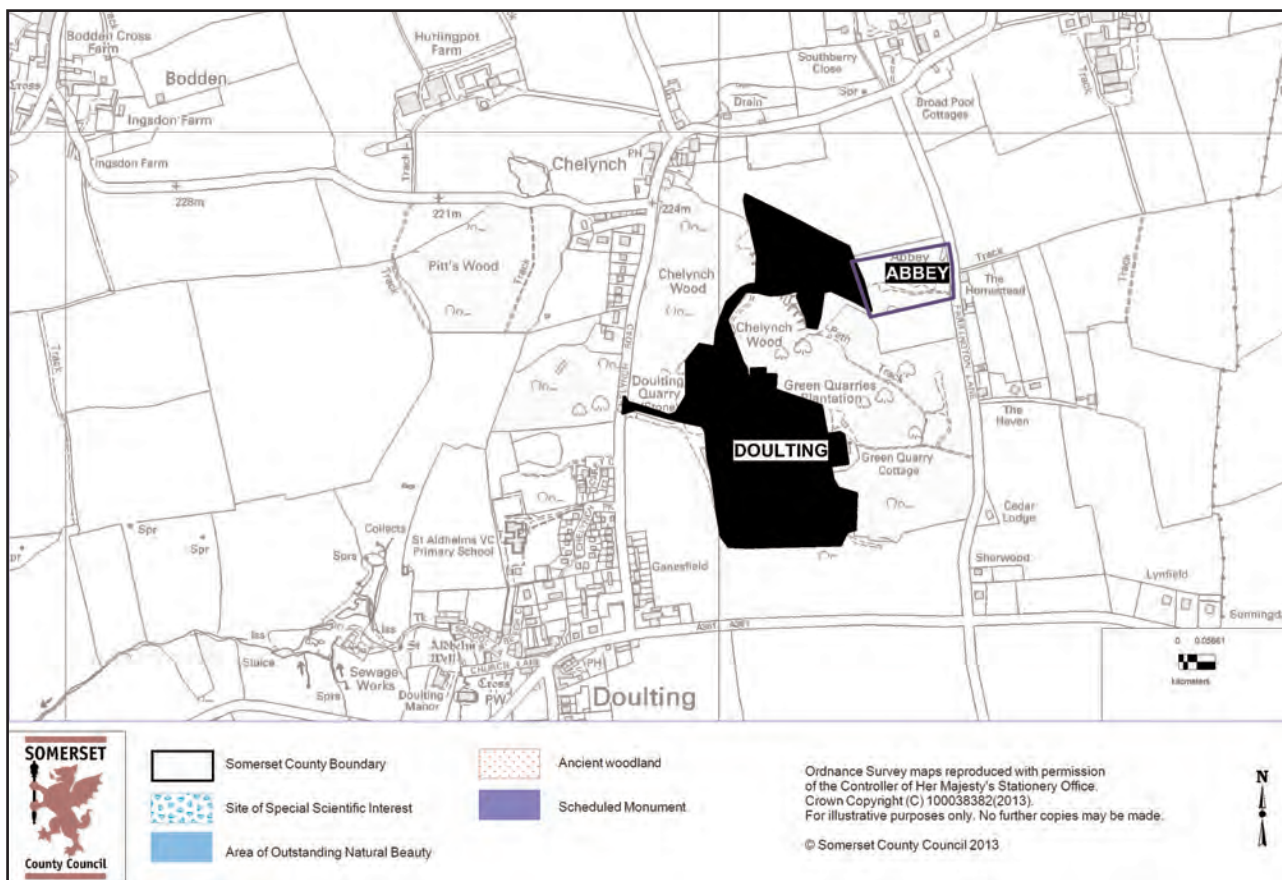
Planning status	Quarry name	Page no.
Dormant	Appledore	160
	Barnclose	163
	Beacon Farm	165
	Cloford	172
	Cookswood/Holcombe	173
	Emborough	178
	Highcroft	184
	Landshire Land	187
	Old Station Yard	190
	Station Quarry	193
	Tadhill	195
	Tor Hill	196
	West Quantoxhead/Vinnicombe	199
	Westdown	201

Notes on site profiles: the site profiles in this Somerset Minerals Plan collate basic site information available at time of going to print. Site profiles change over time, so reference should be made to the latest information in discussion with an SCC planning officer when making related decisions. The scales between maps vary to enable the reader to place the site in the context of its surrounding environment. Neighbouring quarries are shaded in black.

Appendix C: Site Profiles

Abbey (Farrington Lane): this is an active building stone site

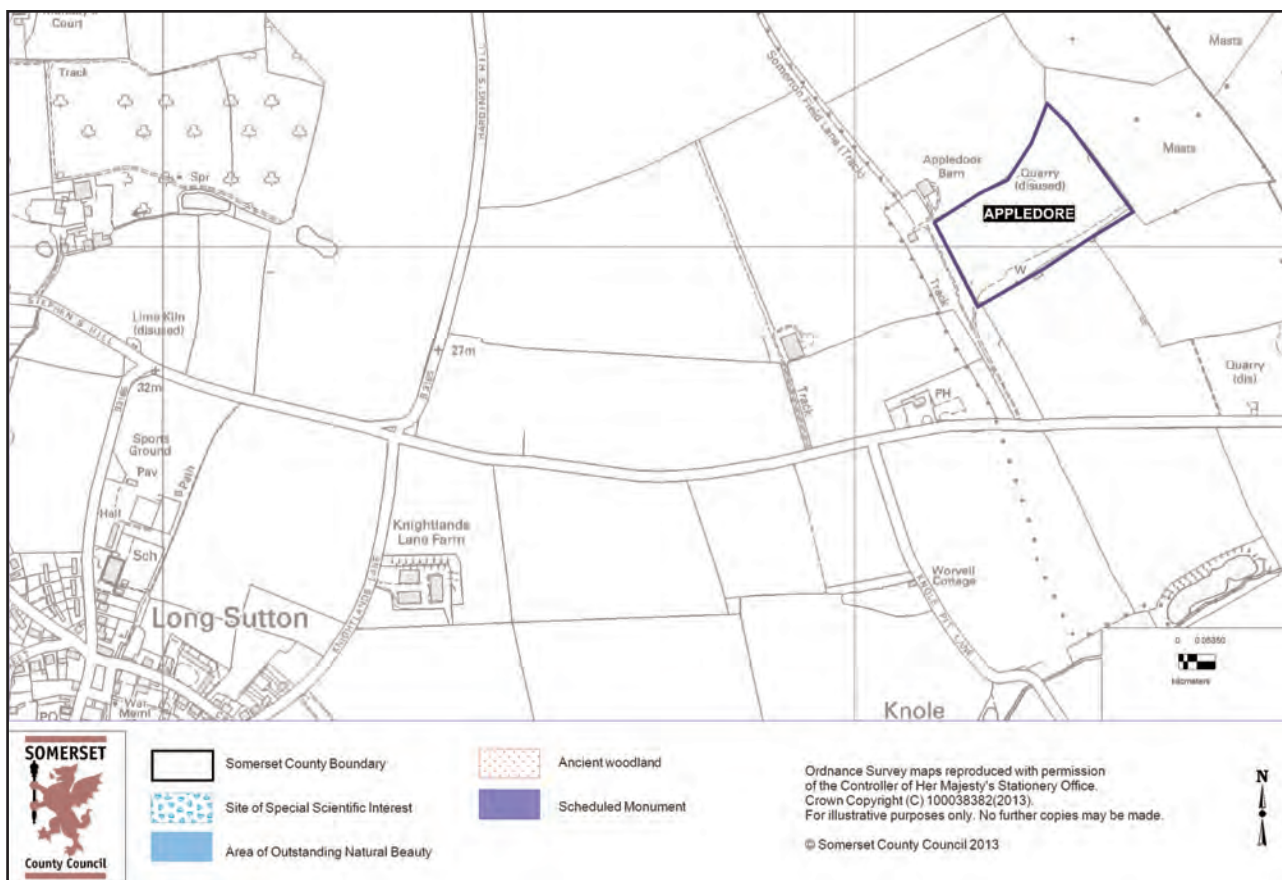
District	Mendip
OS Grid reference	ST 648 435
Location	0.5km NE of Douling
Planning Status	Active
Mineral	Douling stone
Mineral Uses	Building, roofing, walling, ornamental, paving and statuary
Area of permission	2 hectares
Operator	Ham & Douling Stone Company Ltd.
Permitted Output	2500 tonnes per annum
Permission End Date	21 February 2042



Appendix C: Site Profiles

Appledore Field: this is a dormant building stone site

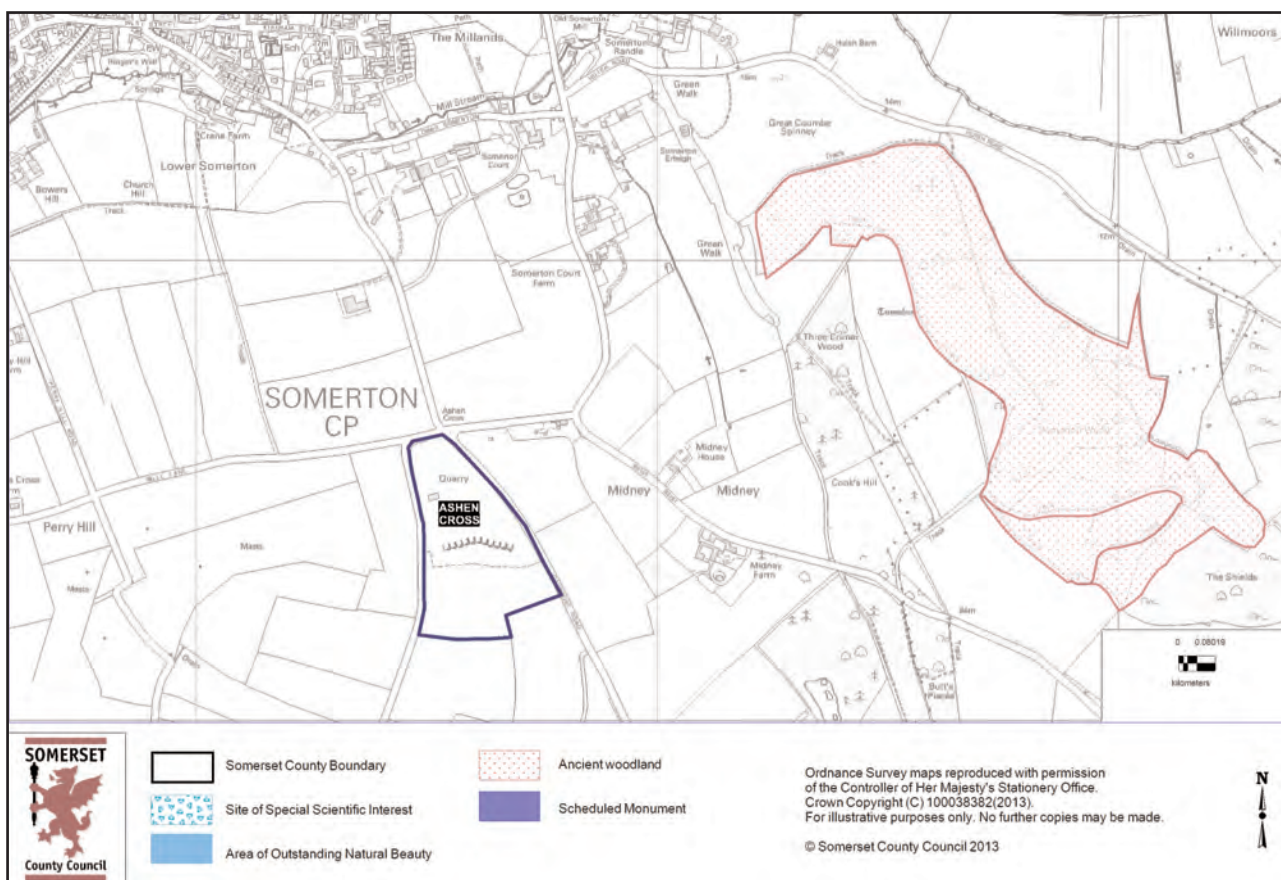
District	South Somerset
OS Grid reference	ST 482 260
Location	6km SW of Somerton
Planning Status	Dormant
Mineral	Blue Lias
Mineral Uses	Building stone
Area of permission	3.78 hectares
Operator	N/A
Permitted Output	N/A
Permission End Date	N/A



Appendix C: Site Profiles

Ashen Cross: this is an active building stone site

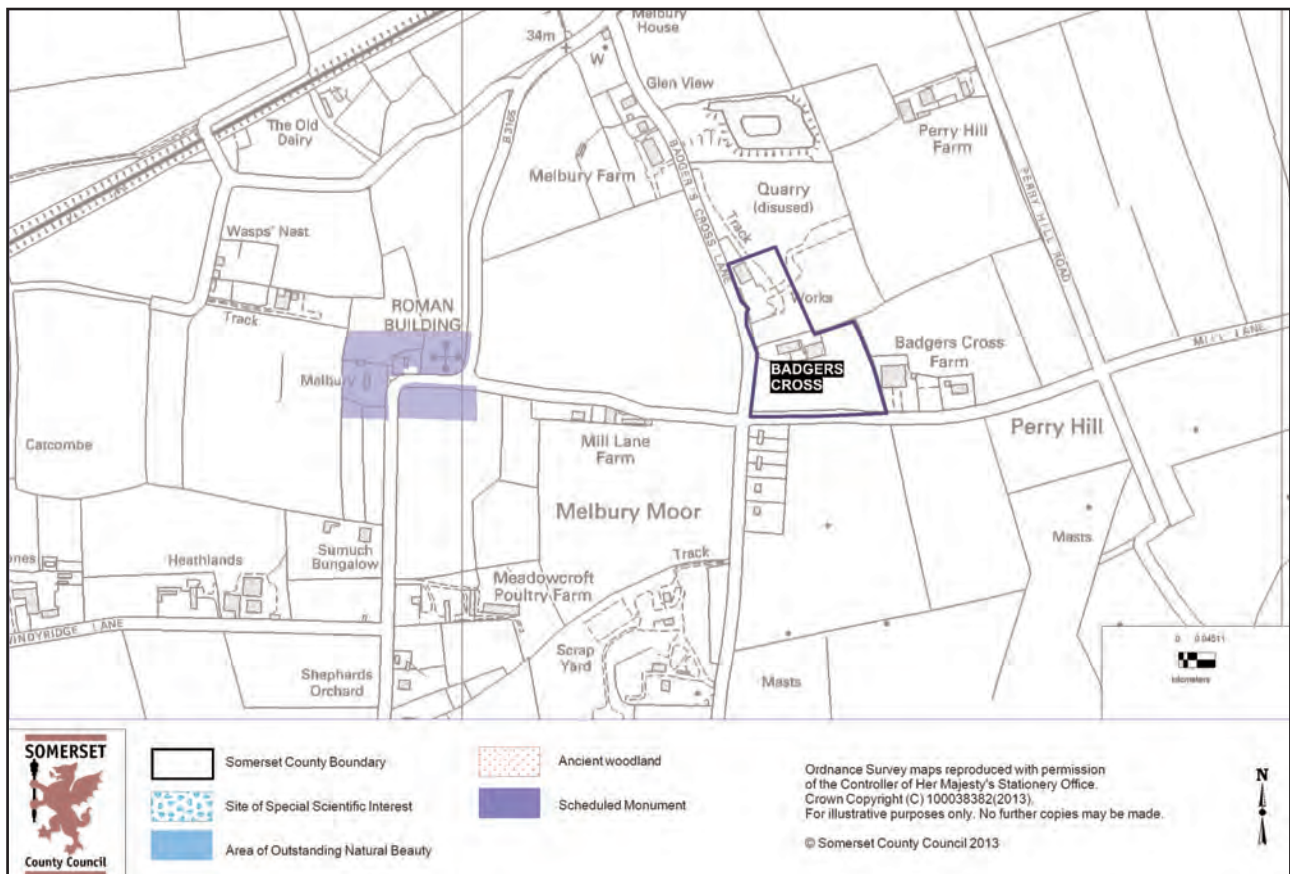
District	South Somerset
OS Grid reference	ST 495 274
Location	1km SE of Somerton
Planning Status	Active
Mineral	Blue Lias Limestone
Mineral Uses	Building, walling, roofing, paving and ornamental stone
Area of permission	8.9 hectares
Operator	Alan R. Purnell Ltd.
Permitted Output	6000 tonnes per annum
Permission End Date	21 February 2042



Appendix C: Site Profiles

Badger's Cross: this is an inactive building stone site

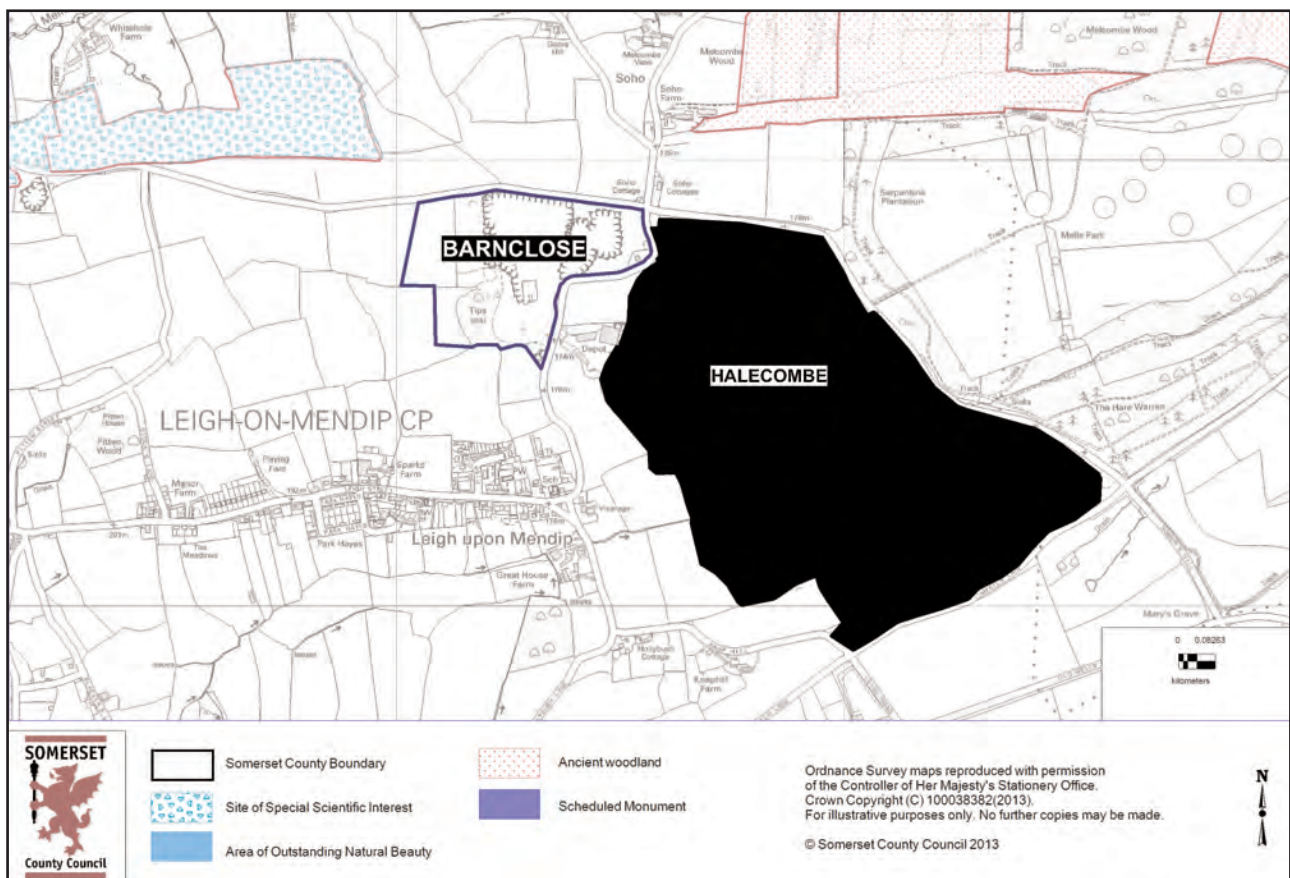
District	South Somerset
OS Grid reference	ST 483 276
Location	0.5km S of Somerton
Planning Status	Inactive
Mineral	Blue Lias Limestone
Mineral Uses	Building, walling, roofing, flooring and paving
Area of permission	2.18 hectares
Operator	Individual
Permitted Output	No output restriction but no extraction of stone shall take place beneath 3.0 metres below existing ground levels
Permission End Date	21 February 2042



Appendix C: Site Profiles

Barnclose: this is a dormant aggregate site

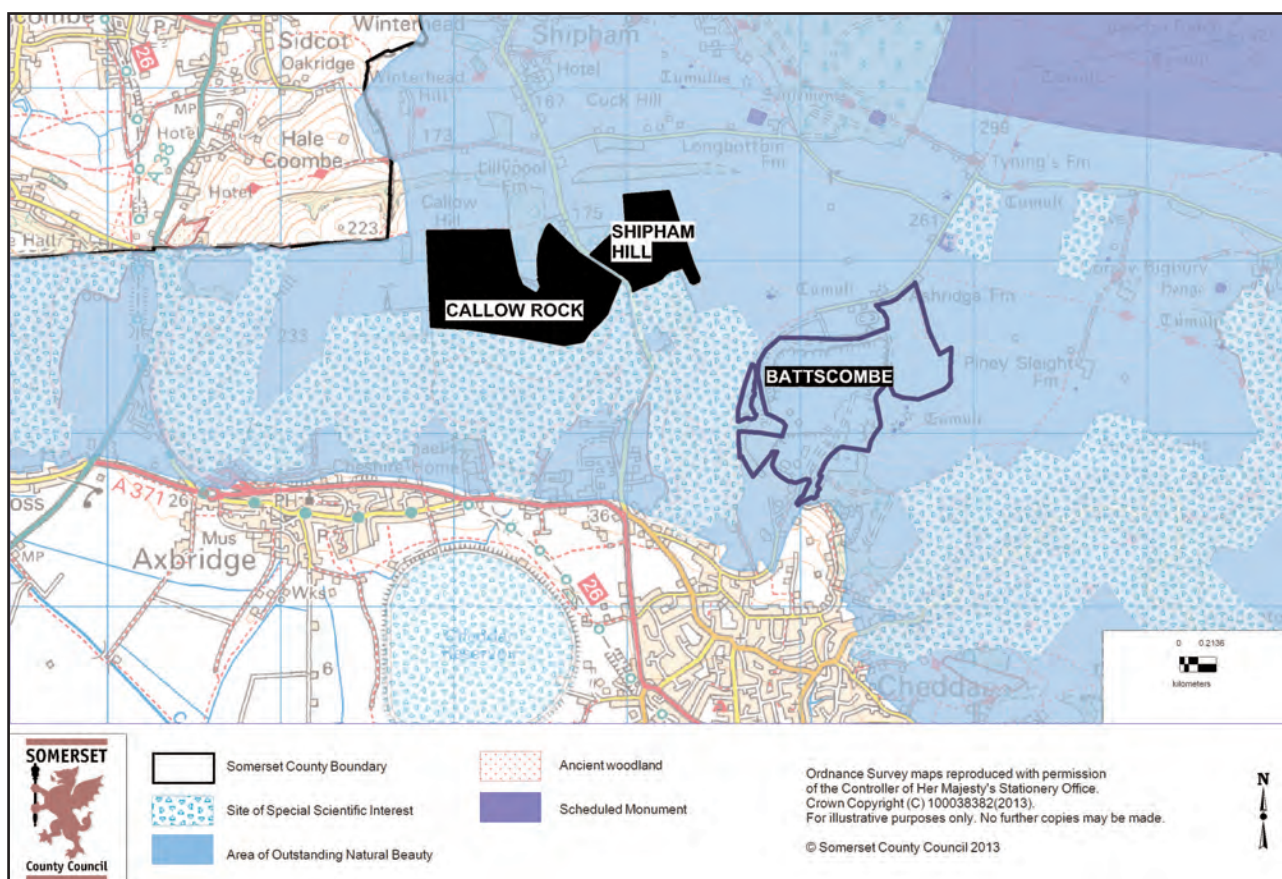
District	Mendip
OS Grid reference	ST 693 478
Location	To the north of Leigh upon Mendip
Planning Status	Dormant
Mineral	Carboniferous Limestone – Clifton Down Limestone and Hotwells Limestone
Mineral Uses	Aggregate
Area of permission	13.73 hectares
Operator	N/A
Permitted Output	N/A
Permission End Date	N/A



Appendix C: Site Profiles

Battscombe: this is an active aggregate site

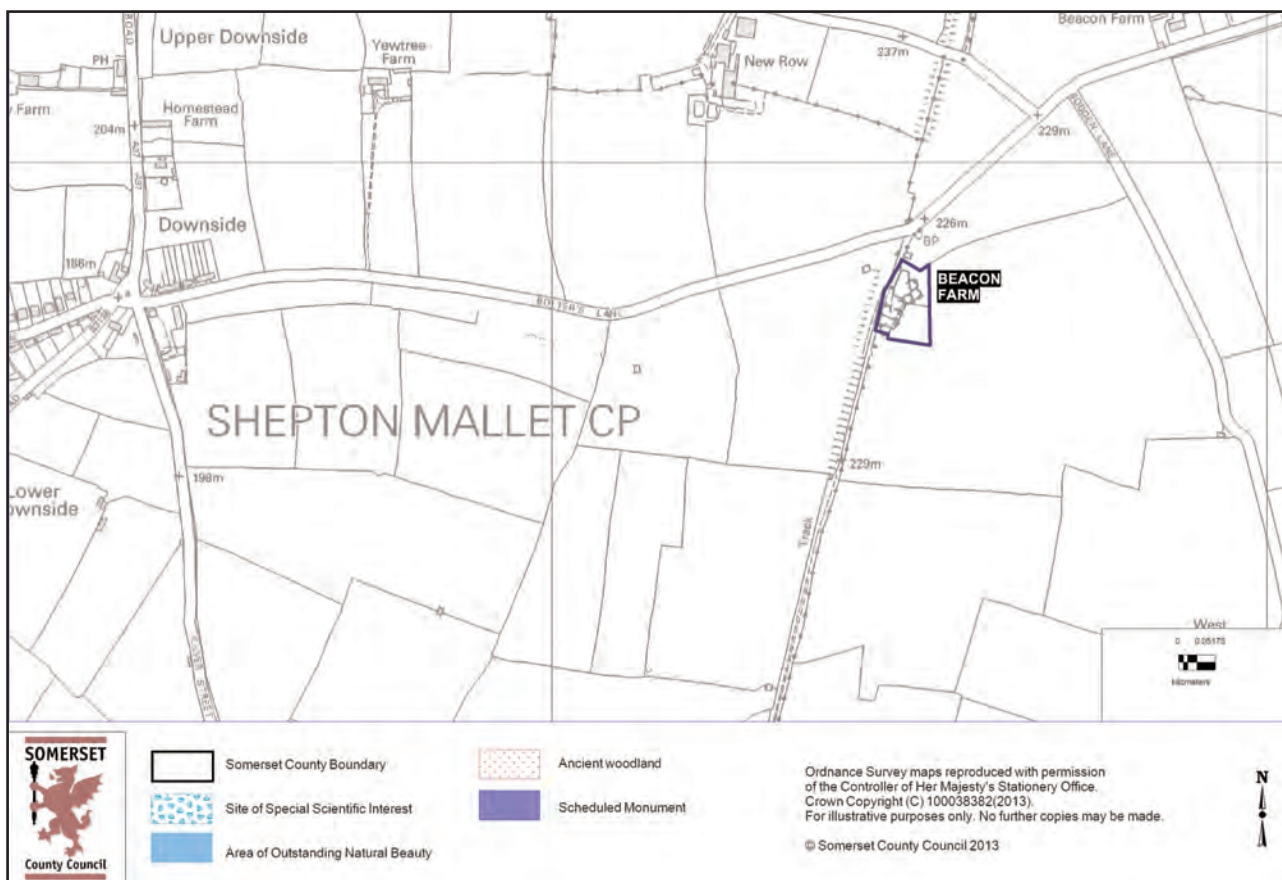
District	Sedgemoor
OS Grid reference	ST 459 544
Location	600m N of Cheddar
Planning Status	Active
Mineral	Carboniferous Limestone – Cheddar Oolite, Cheddar Limestone and Burrington Oolite
Mineral Uses	Aggregate used both as road stone and as a concrete aggregate. Burrington Oolite is used to produce metallurgical grade lime, which is processed on site for use in the steel and chemical industry.
Operator	Hanson Quarry Products Europe Ltd.
Area of permission	60 Hectares plus a 8.4 hectare extension
Permitted Output	Total sales should not exceed 6.5 million tonnes over a period of 60 calendar months
Permission End Date	21 February 2042



Appendix C: Site Profiles

Beacon Farm: this is a dormant building stone site

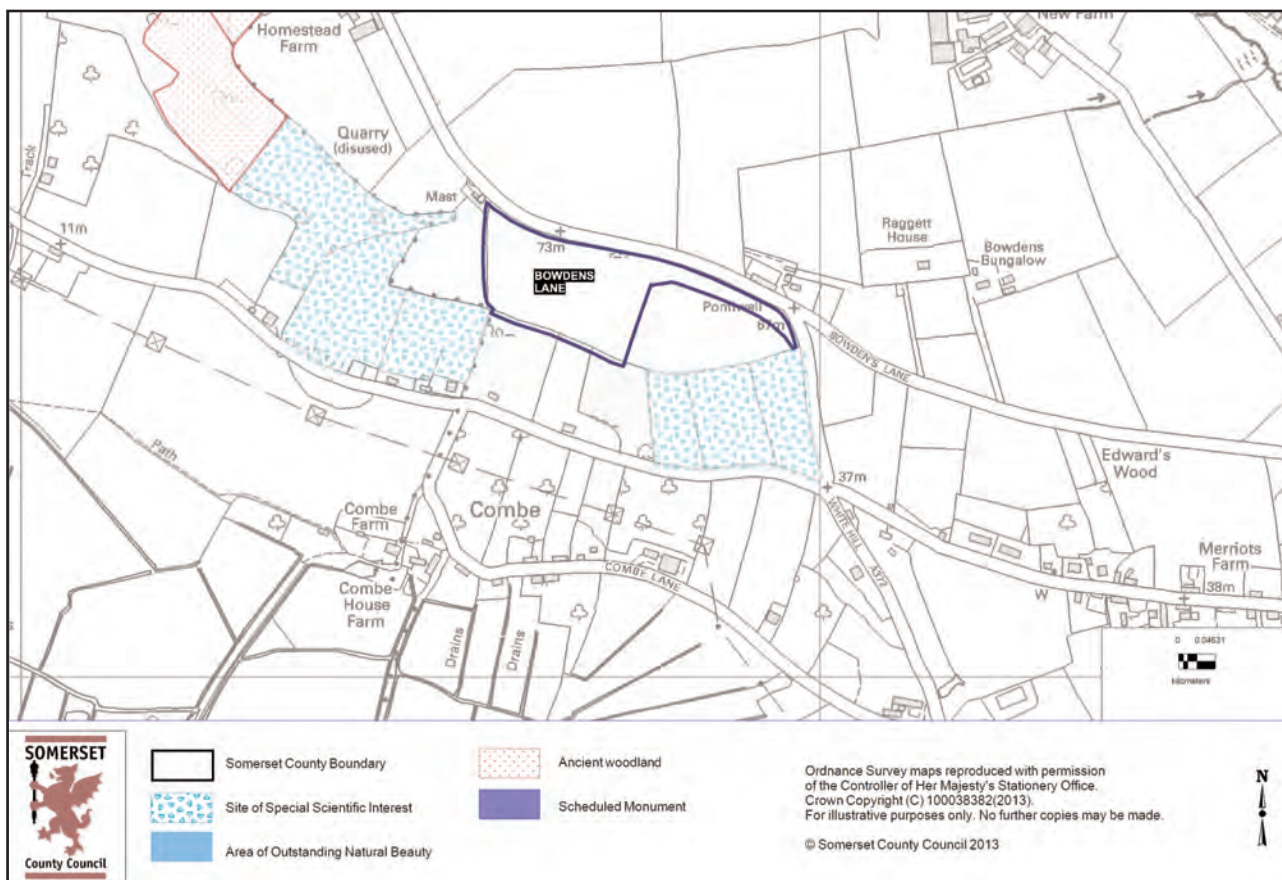
District	Mendip
OS Grid reference	ST 635 447
Location	2km NE of Shepton Mallet
Planning Status	Dormant
Mineral	Oolitic Limestone
Mineral Uses	Building Stone
Area of permission	0.65 hectares
Operator	N/A
Permitted Output	N/A
Permission End Date	N/A



Appendix C: Site Profiles

Bowdens Lane: this is an active building stone site

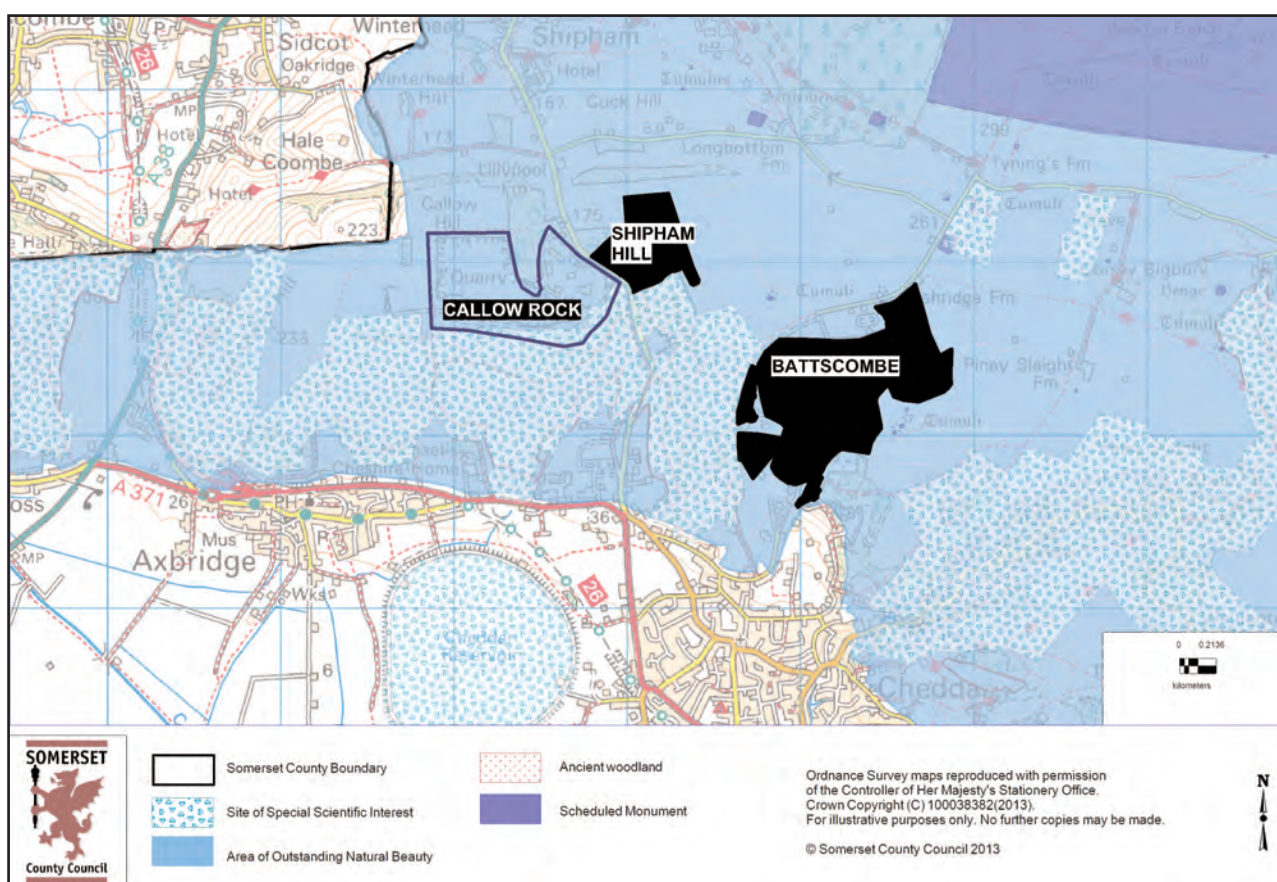
District	South Somerset
OS Grid reference	ST 416 284
Location	1km NW of Langport
Planning Status	Active
Mineral	White Lias
Mineral Uses	Building stone, walling stone and blocks of stone for masonry working
Area of permission	3 hectares
Operator	Lovell Purbeck Ltd.
Permitted Output	3000 tonnes per annum
Permission End Date	30 April 2047



Appendix C: Site Profiles

Callow Rock: this is an active aggregate site

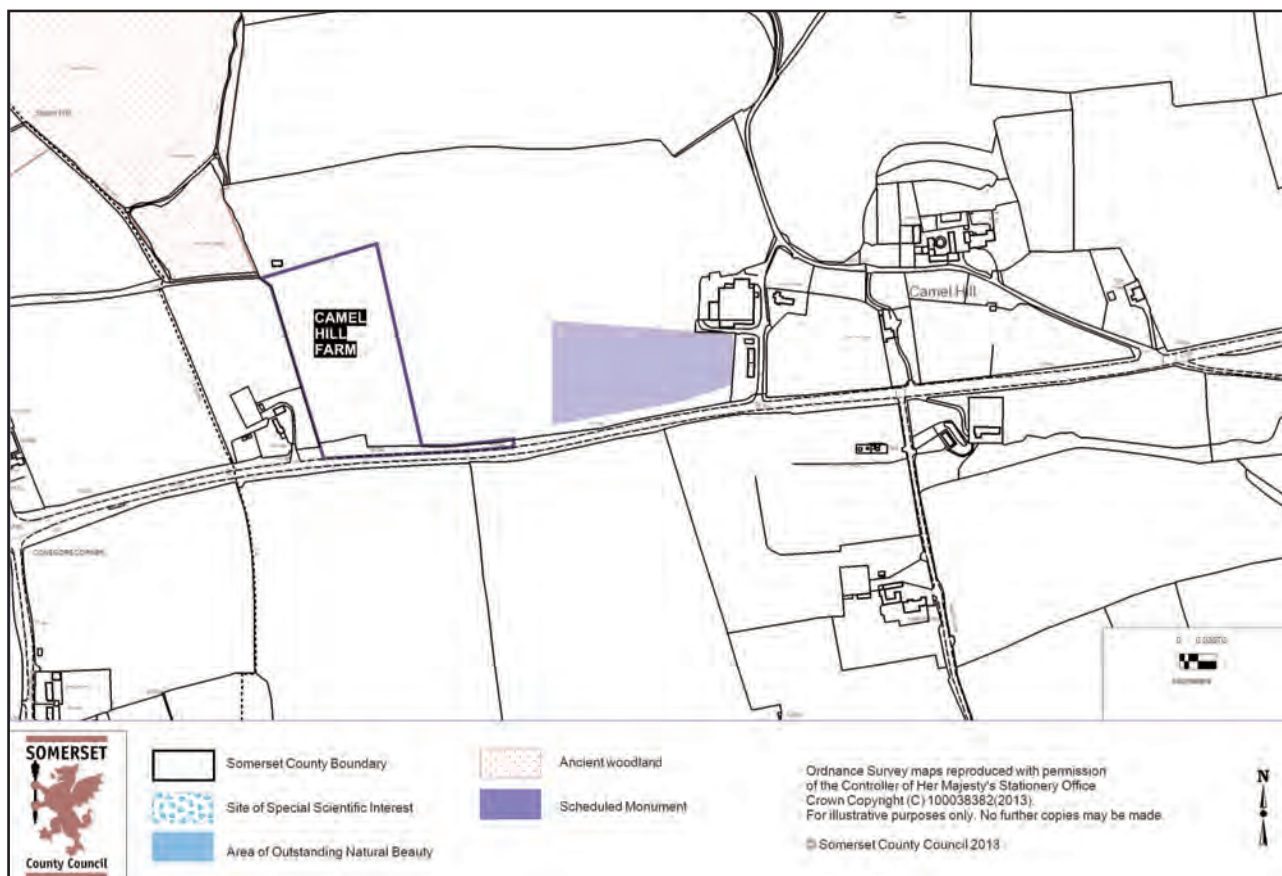
District	Sedgemoor
OS Grid reference	ST 441 558
Location	2km NW of Cheddar
Planning Status	Active
Mineral	Carboniferous Limestone
Mineral Uses	Much of the output leaves the site as concrete products
Area of permission	43.3 hectares
Operator	Aggregate Industries UK Ltd.
Permitted Output	Total output shall not exceed 6.5 million tonnes over 60 calendar months
Permission End Date	21 February 2042



Appendix C: Site Profiles

Camel Hill: this is an active building stone site

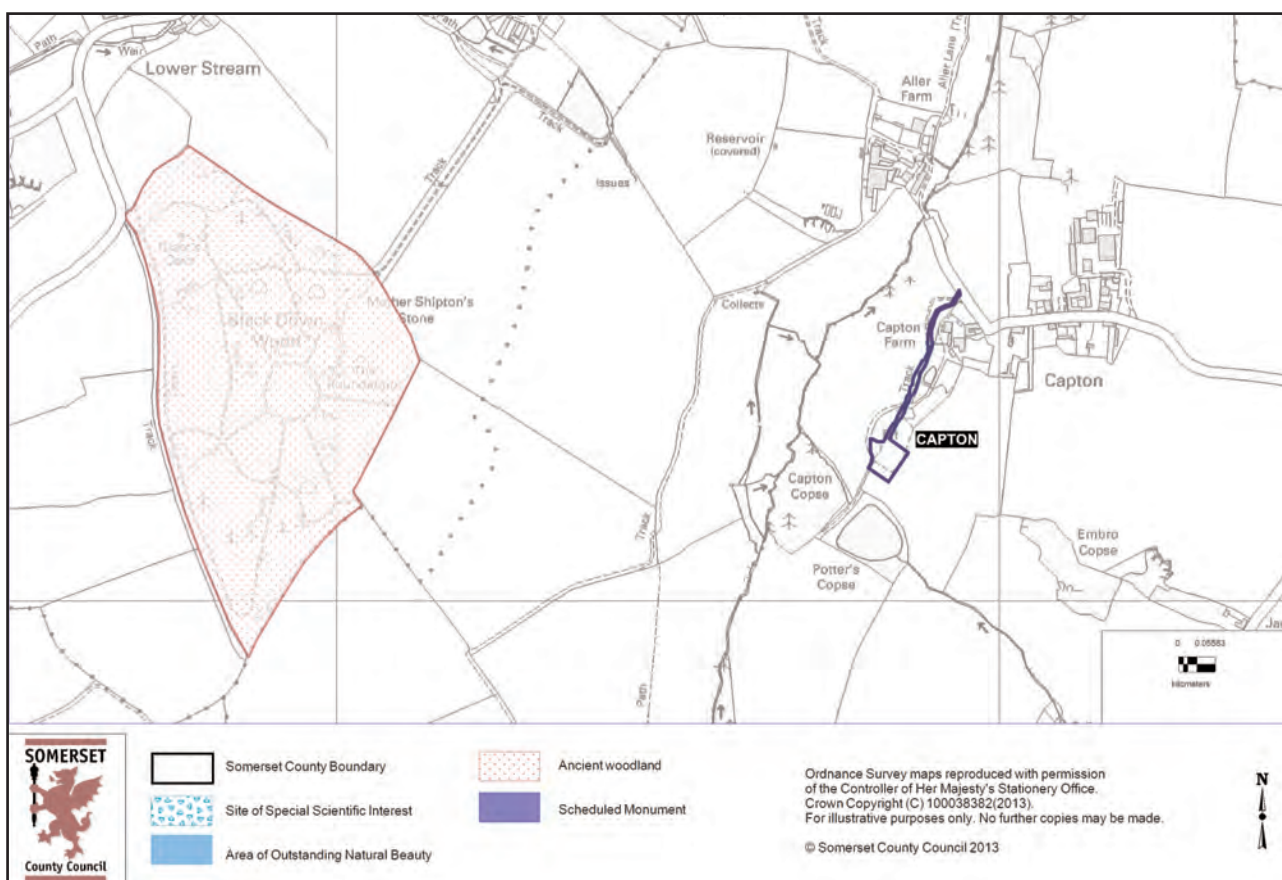
District	South Somerset
OS Grid reference	ST 581 255
Location	1.7km NW of Queen Camel
Planning Status	Active
Mineral	White Lias
Mineral Uses	Building, walling and roofing
Area of permission	2.1 hectares located in the south-western corner of a 12.9 hectare agricultural field
Operator	Alan R. Purnell Ltd.
Permitted Output	Within any one calendar year the total output of the quarry, including waste stone returned to site for restoration purposes, shall not exceed 4000 tonnes of stone.
Permission End Date	31 July 2033



Appendix C: Site Profiles

Capton: this is an active building stone site

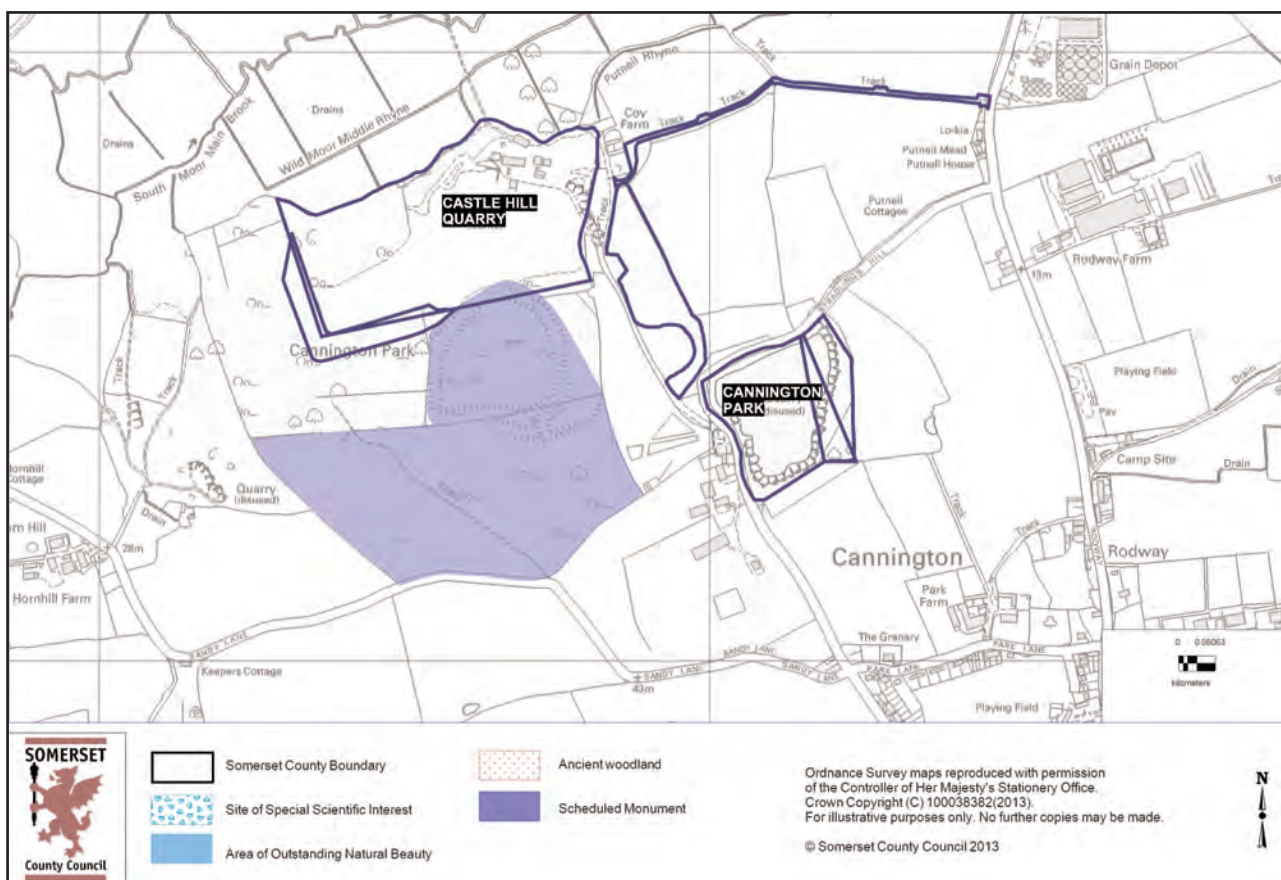
District	West Somerset
OS Grid reference	ST 078 392
Location	2km SW of Sampford Brett
Planning Status	Active
Mineral	Permo-Triassic Sandstone – marl and pebble beds
Mineral Uses	Building stone, particularly used in conservation and restoration work
Area of permission	0.32 hectares
Operator	Individual
Permitted Output	1500 tonnes per annum
Permission End Date	30 September 2028



Appendix C: Site Profiles

Castle Hill /Cannington Park: this is an active aggregate site

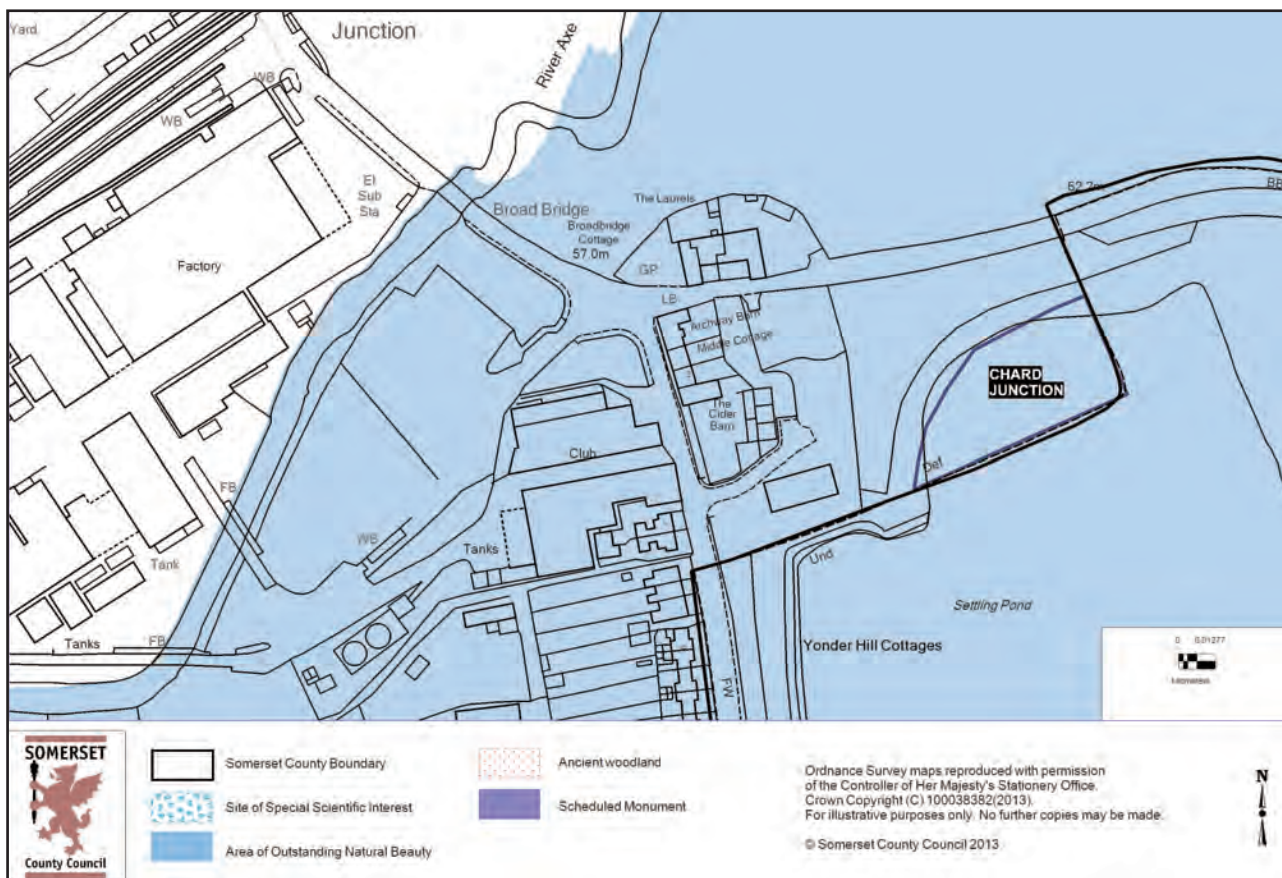
District	Sedgemoor
OS Grid reference	ST 246 407 (Cannington Park – ST 251 404)
Location	5km NW of Bridgwater
Planning Status	Active
Mineral	Carboniferous Limestone
Mineral Uses	Aggregate/animal feed
Area of permission	10.7 hectares (Cannington Park 4.8 hectares)
Operator	Castle Hill Quarry Company Ltd.
Permitted Output	190,000 tonnes combined output
Permission End Date	21 February 2042



Appendix C: Site Profiles

Chard Junction: this is an active sand and gravel site

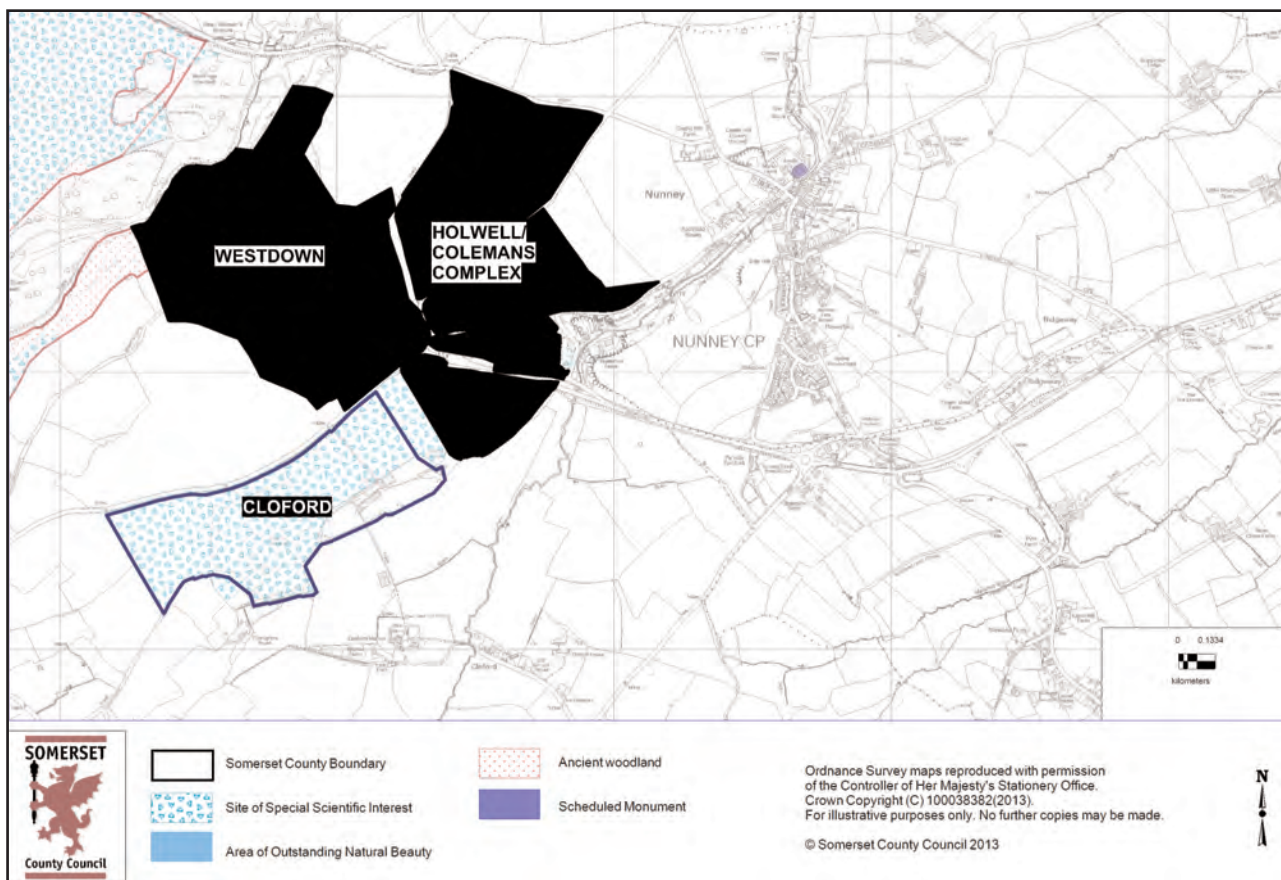
District	South Somerset – although the majority of the site lies in Dorset.
OS Grid reference	ST 342 044
Location	4.5km SE of Chard
Planning Status	Active
Mineral	Pleistocene / recent sand and gravel
Mineral Uses	Aggregate
Area of permission	0.6 hectares in Somerset
Operator	Aggregate Industries UK Ltd.
Permitted Output	No output restriction but limit on HGV numbers
Permission End Date	31 March 2023



Appendix C: Site Profiles

Cloford: this is a dormant aggregate site

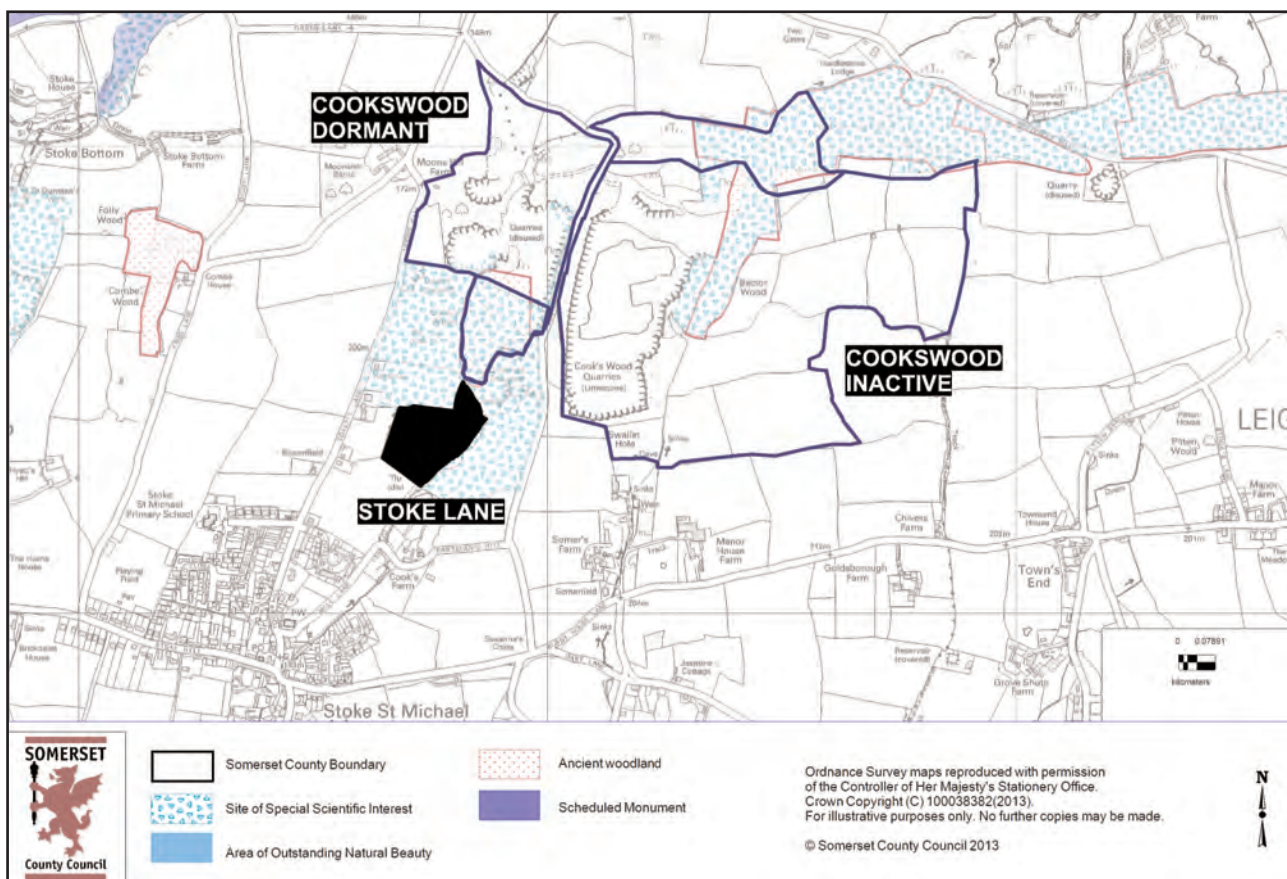
District	Mendip
OS Grid reference	ST 717 445
Location	6km SW of Frome
Planning Status	Dormant
Mineral	Carboniferous Limestone – Clifton Down Group
Mineral Uses	Aggregate
Area of permission	40.6 hectares
Operator	N/A
Permitted Output	N/A
Permission End Date	N/A



Appendix C: Site Profiles

Cookswood/Holcombe: this is a dormant (area to the west) and inactive (area to the east) aggregate site

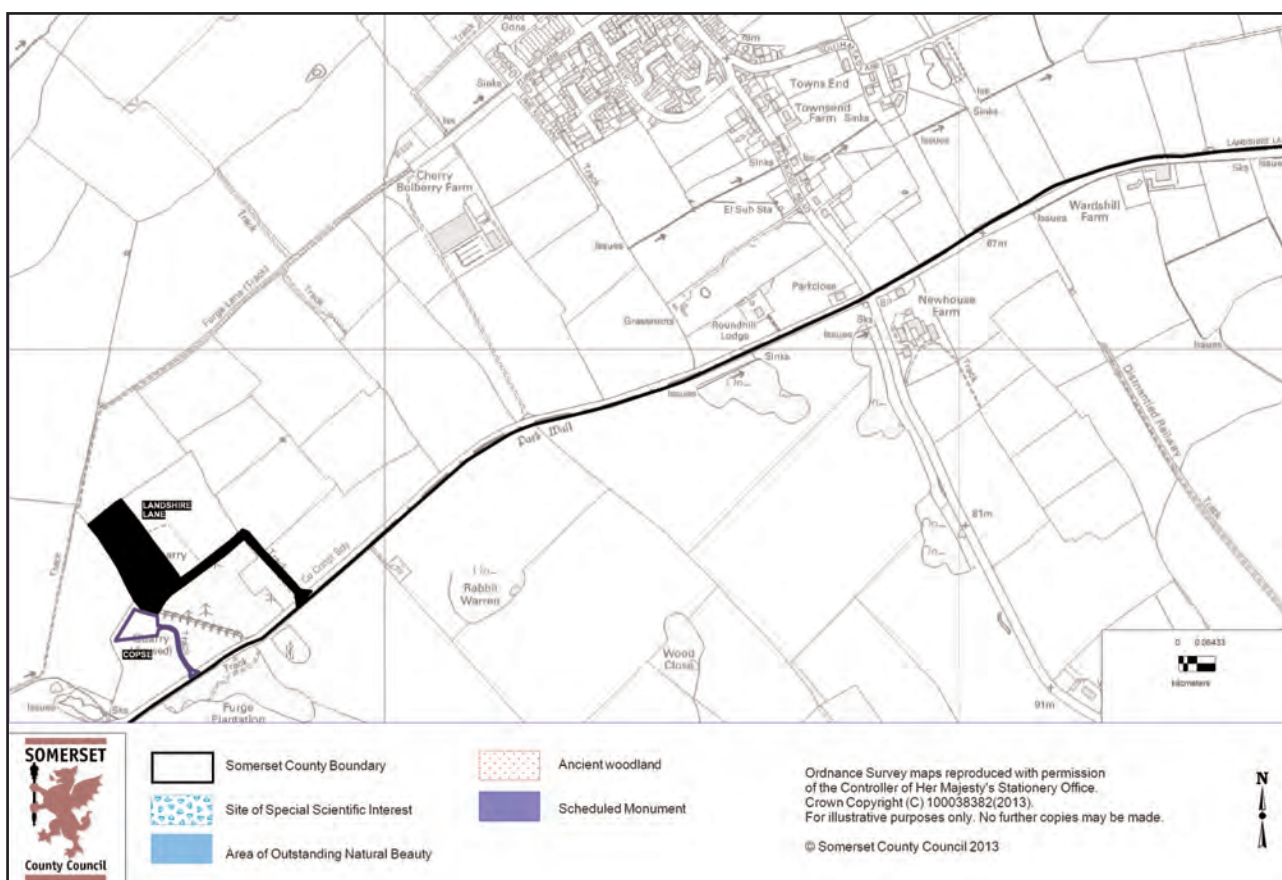
District	Mendip
OS Grid reference	ST 669 479
Location	6.5km NE of Shepton Mallet
Planning Status	Dormant
Mineral	Carboniferous Limestone – the Burrington Oolite up to and including the lower part of the Hotwells limestone Formation
Mineral Uses	Aggregate
Area of permission	57.1 hectares
Operator	N/A
Permitted Output	N/A
Permission End Date	N/A



Appendix C: Site Profiles

Copse: this is an active building stone site

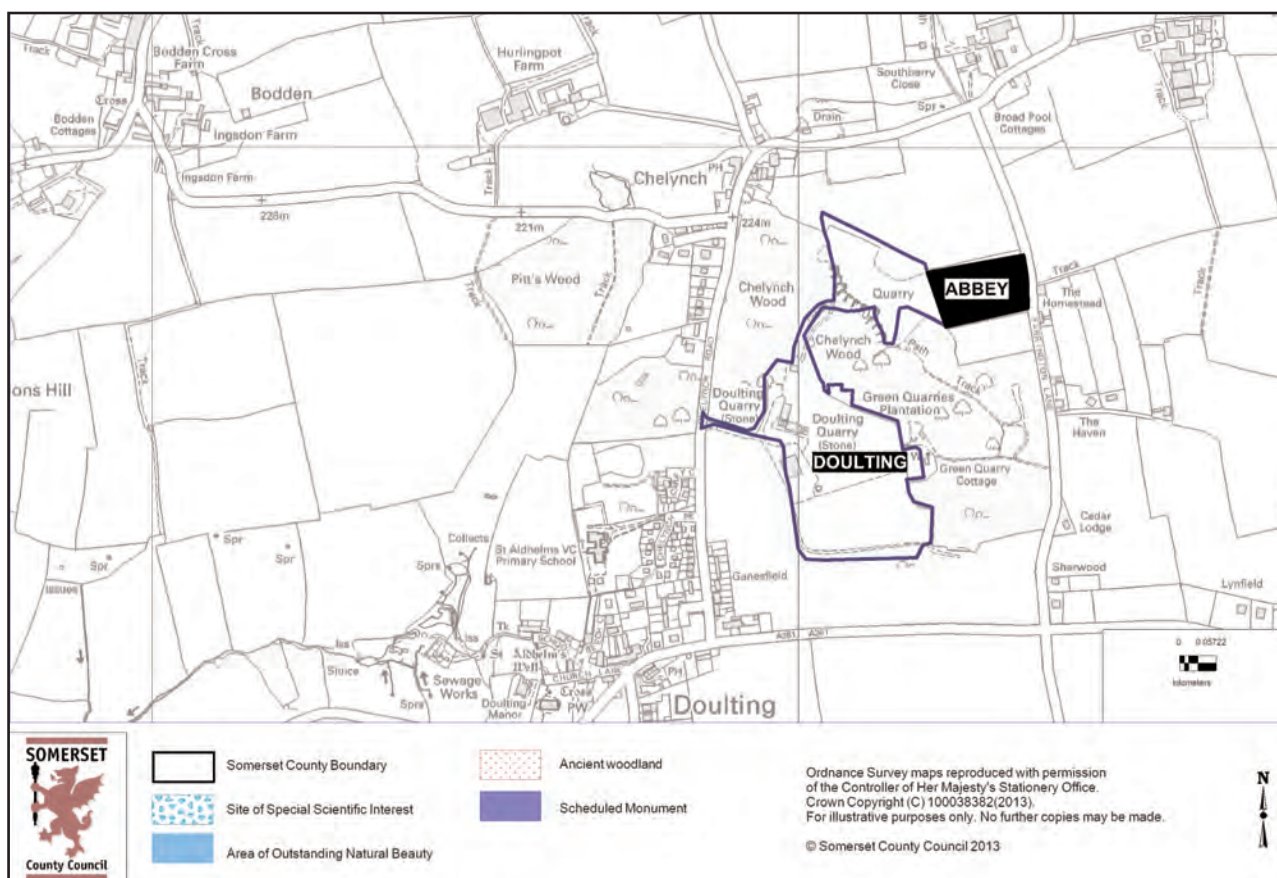
District	South Somerset
OS Grid reference	ST 715 184
Location	2km SW of Henstridge
Planning Status	Active
Mineral	Jurassic Limestone – Forest Marble and Cornbrash
Mineral Uses	Building, rockery and paving stone
Area of permission	0.24 hectares
Operator	Individual
Permitted Output	500 tonnes per annum
Permission End Date	30 November 2015



Appendix C: Site Profiles

Doultong (Chelynych): this is an active building stone site

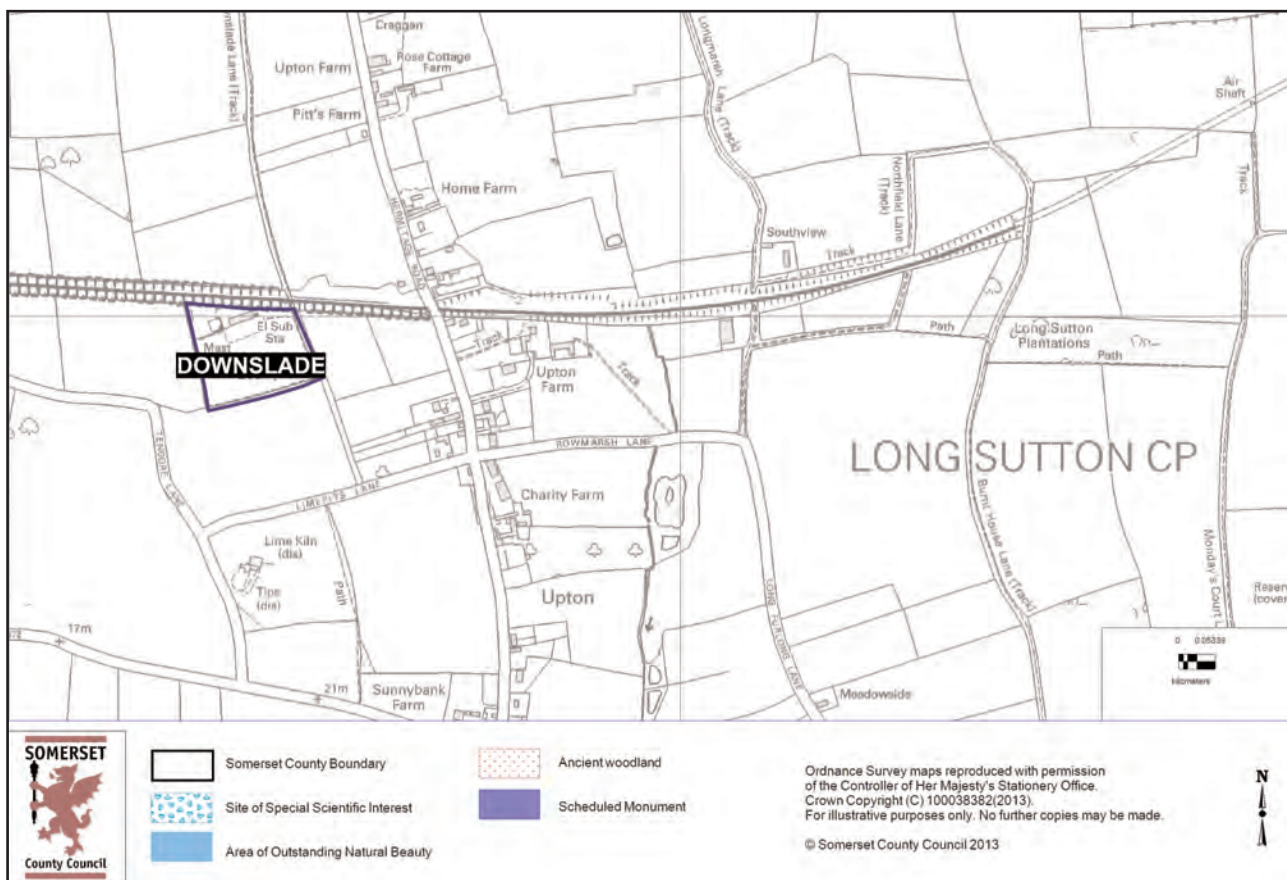
District	Mendip
OS Grid reference	ST 648 435
Location	At the NE of Doultong
Planning Status	Active
Mineral	Jurassic Limestone – inferior oolite (doultong stone)
Mineral Uses	Building, roofing, walling, ornamental, paving stone, weathered brash (measuring 15cm or less), statuary render and dust
Area of permission	10.5 hectares
Operator	Colin Keevil (Doultong Stone Quarry)
Permitted Output	The annual output of the quarry complex shall not exceed 6,000 tonnes per annum. No more than 2,500 tonnes per annum of this permitted output will be aggregate/non-building stone
Permission End Date	21 February 2042



Appendix C: Site Profiles

Downslade: this is an active building stone site

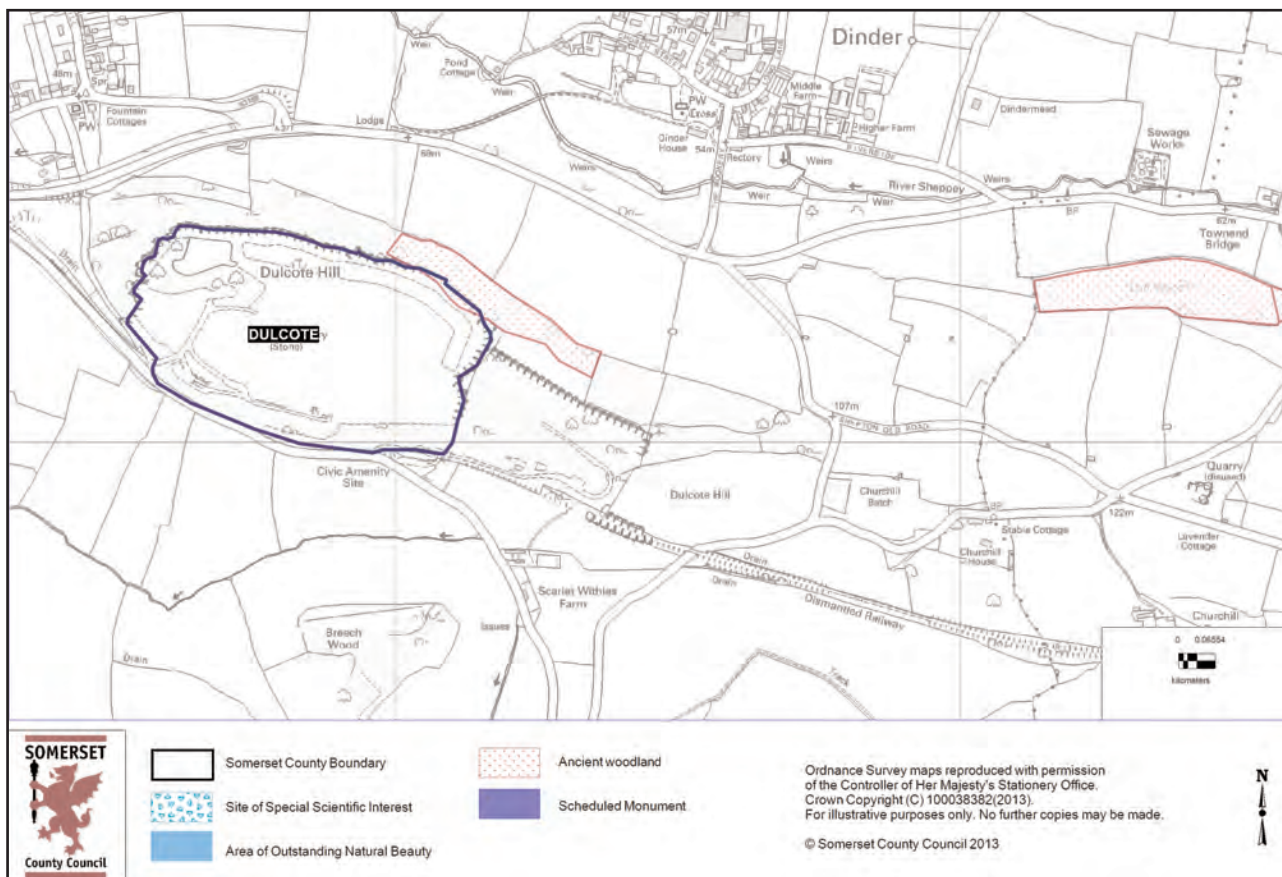
District	South Somerset
OS Grid reference	ST 453 269
Location	3.5km SW of Somerton
Planning Status	Active
Mineral	Jurassic Limestone – Blue Lias and White Lias
Mineral Uses	Building, walling, roofing and stone used for floor coverings
Area of permission	1.8 hectares
Operator	Downslade Quarry Ltd.
Permitted Output	800 tonnes per annum
Permission End Date	30 July 2019



Appendix C: Site Profiles

Dulcote: this is an inactive aggregate site

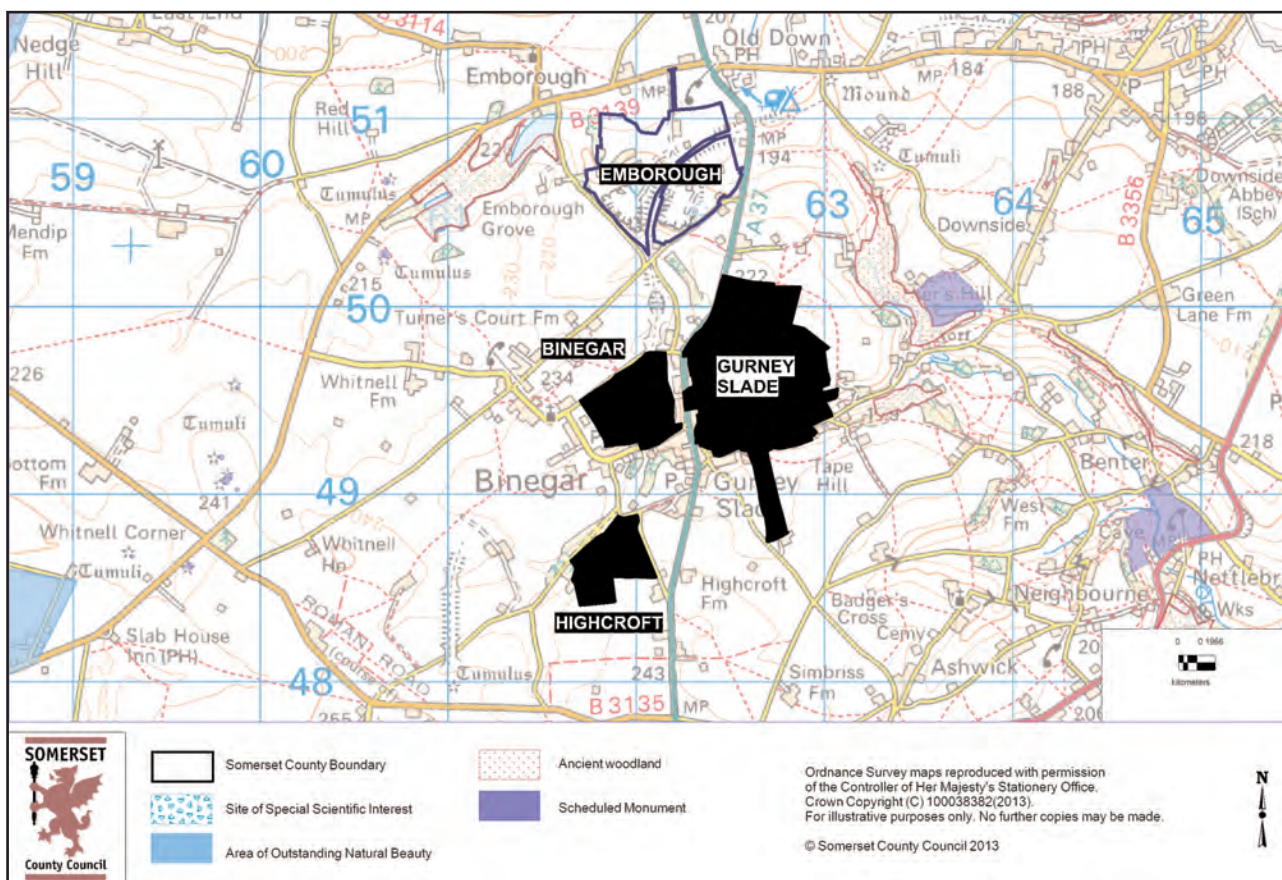
District	Mendip
OS Grid reference	ST 568 440
Location	2.5km SE of Wells
Planning Status	Inactive
Mineral	Carboniferous Limestone
Mineral Uses	Aggregate
Area of permission	22.9 hectares
Operator	Hansteen plc.
Permitted Output	240,000 tonnes per annum
Permission End Date	31 December 2013



Appendix C: Site Profiles

Emborough: this is a dormant aggregate site

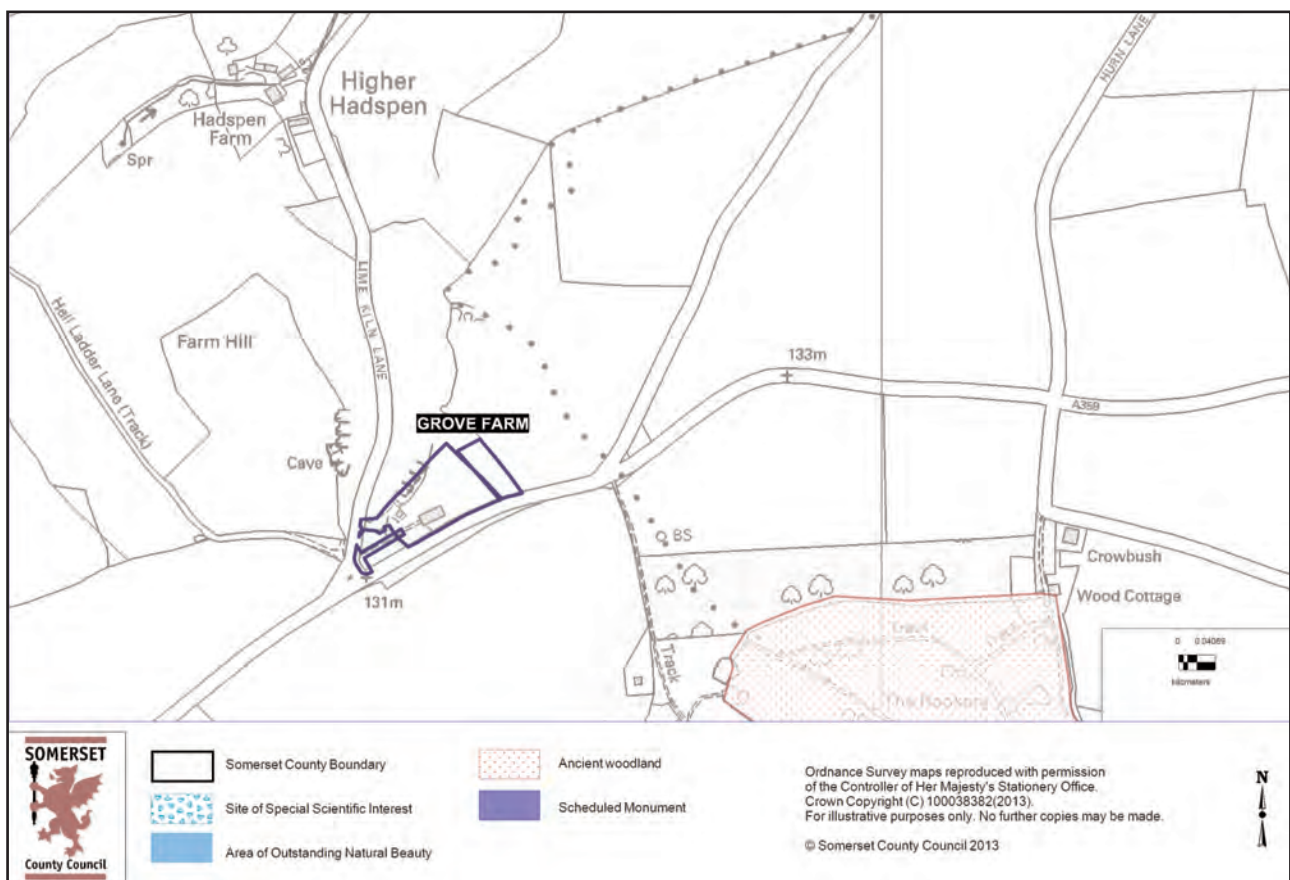
District	Mendip
OS Grid reference	ST 622 508
Location	7km N of Shepton Mallet
Planning Status	Dormant
Mineral	Carboniferous Limestone
Mineral Uses	Manufacture of concrete products
Area of permission	41 hectares
Operator	N/A
Permitted Output	N/A
Permission End Date	N/A



Appendix C: Site Profiles

Grove Farm Quarry (Castle Cary/Hadspen): this is an active building stone site

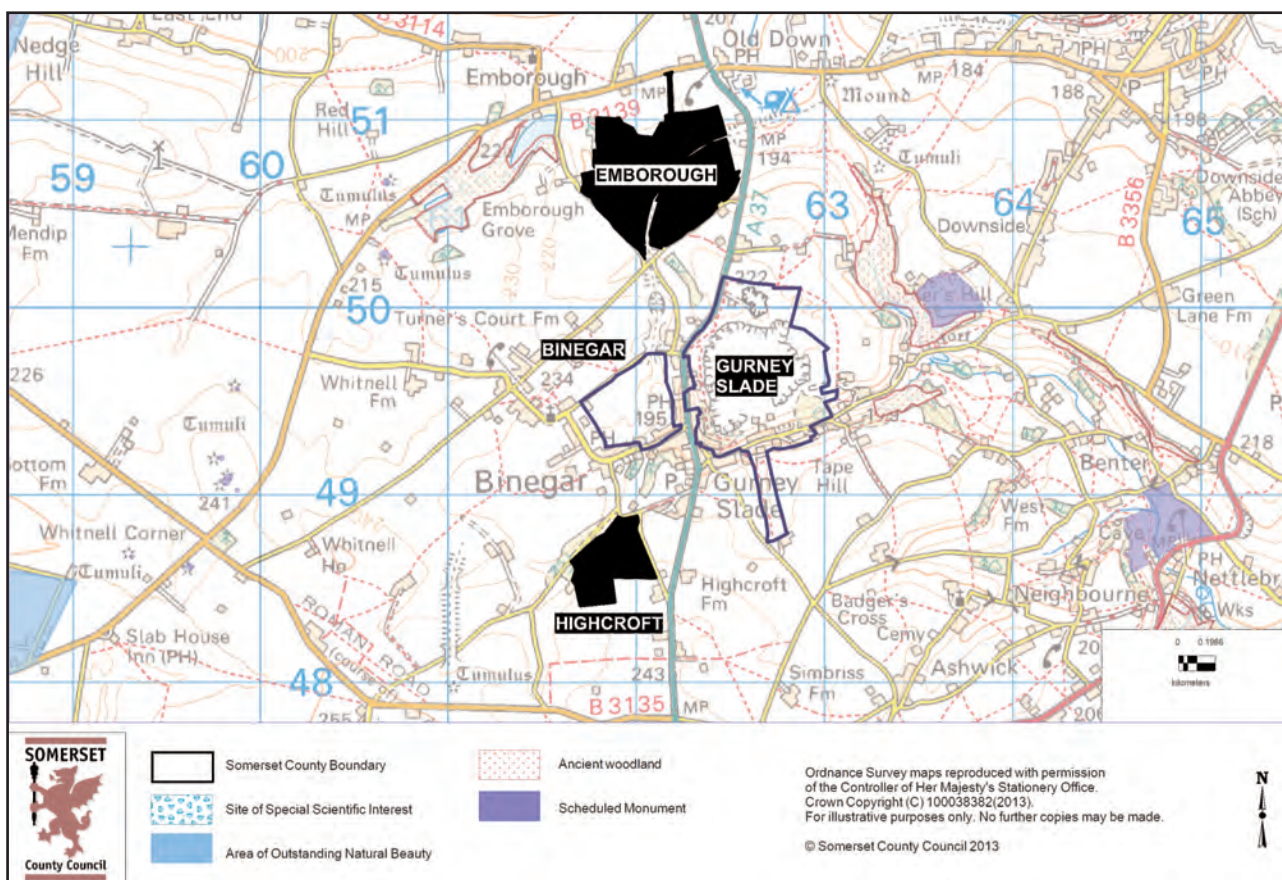
District	South Somerset
OS Grid reference	ST 654 314
Location	2km SE of Castle Cary
Planning Status	Active
Mineral	Oolitic Limestone (Hadspen Stone)
Mineral Uses	Building Stone
Area of permission	0.41 hectares
Operator	Robert Comer (Hadspen Quarry Ltd.)
Permitted Output	2500 tonnes per annum
Permission End Date	31 December 2028



Appendix C: Site Profiles

Gurney Slade/Binegar: this is an active aggregate site

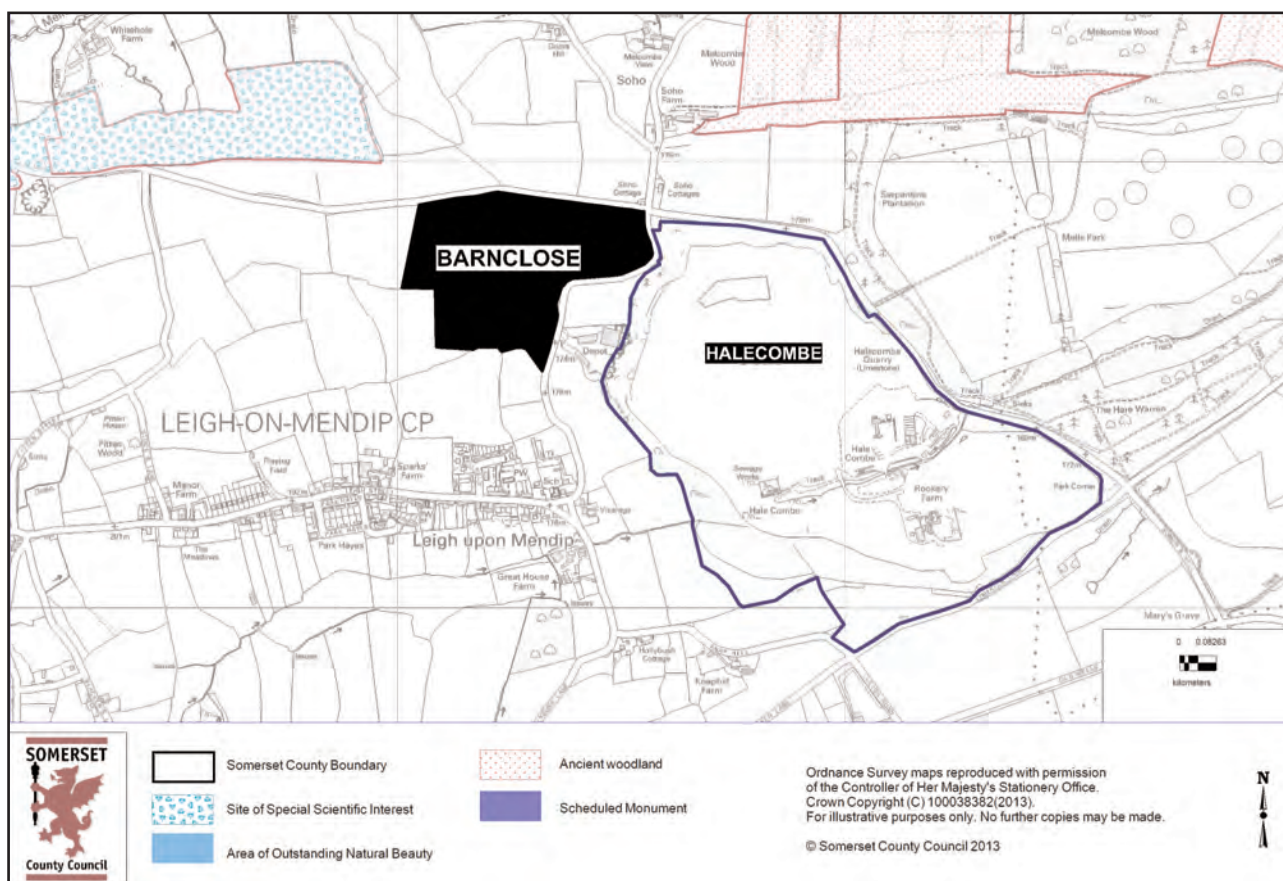
District	Mendip
OS Grid reference	ST 625 497
Location	6km N of Shepton Mallet
Planning Status	Active
Mineral	Carboniferous Limestone – Hotwells Limestone
Mineral Uses	Aggregate
Area of permission	73.9 hectares
Operator	Morris & Perry Ltd.
Permitted Output	2.0 million tonnes per annum
Permission End Date	21 February 2042



Appendix C: Site Profiles

Halecombe: this is an active aggregate site

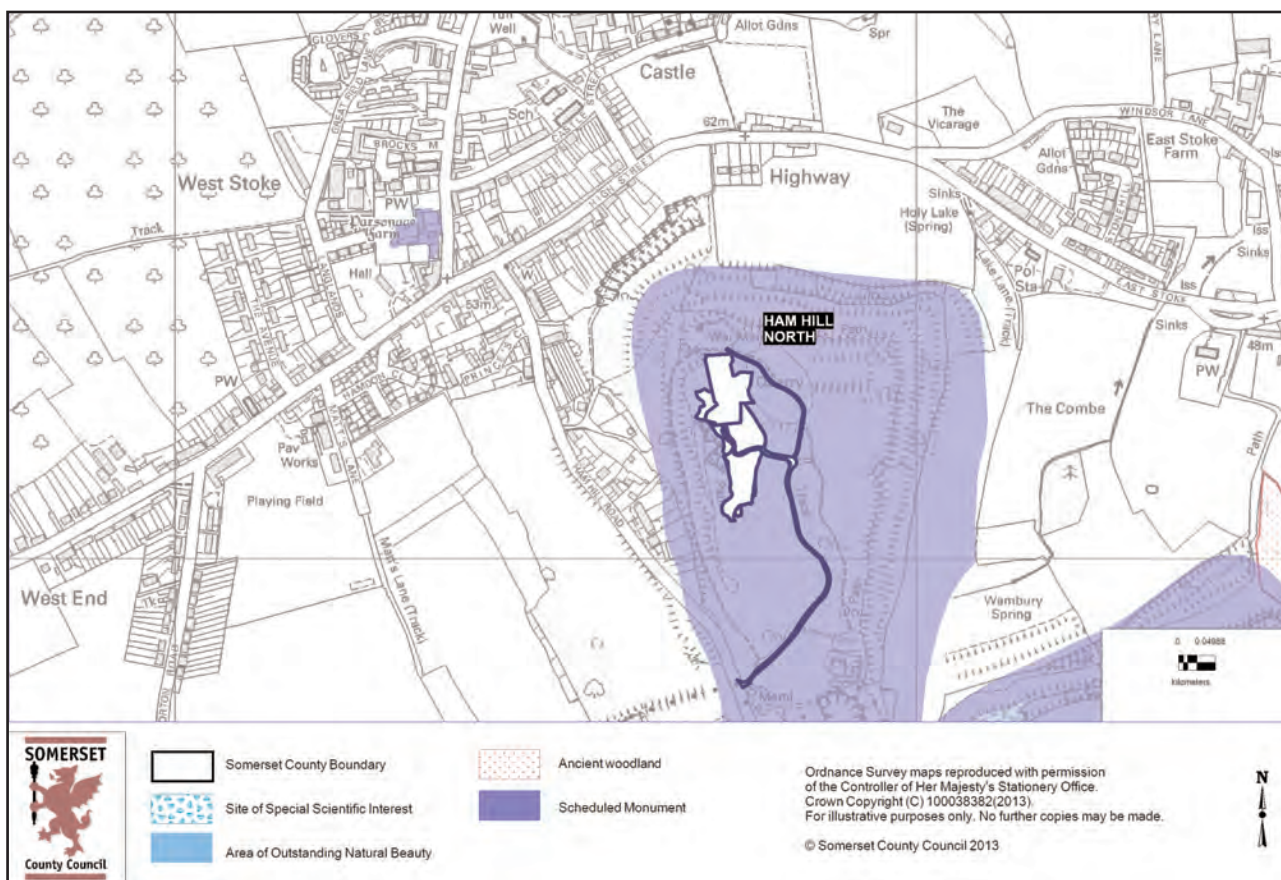
District	Mendip
OS Grid reference	ST 701 474
Location	6.5km W of Frome
Planning Status	Active
Mineral	Carboniferous Limestone – Black Rock Group
Mineral Uses	Aggregate – concrete and blocks, coated stone
Area of permission	60 hectares
Operator	Lafarge Tarmac Ltd.
Permitted Output	The annual output of stone shall not exceed 1 million tonnes in any one year, or an annual average of 900,000 tonnes over any three-year period
Permission End Date	31 December 2023



Appendix C: Site Profiles

Ham Hill (North): this is an active building stone site

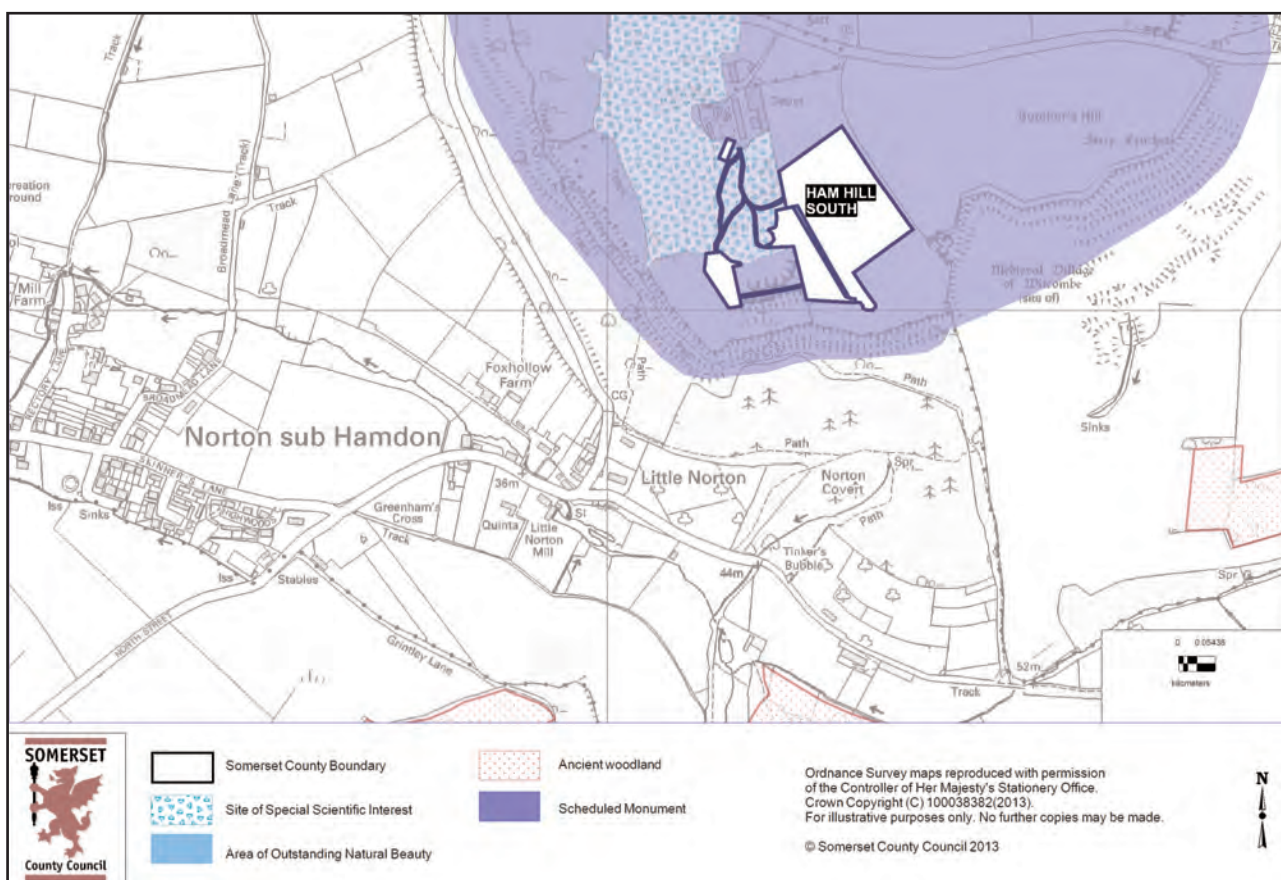
District	South Somerset
OS Grid reference	ST 477 141
Location	6km W of Yeovil
Planning Status	Active
Mineral	Upper Lias – Ham Hill Stone
Mineral Uses	Building Stone
Area of permission	1 hectare
Operator	Ham and Doultong stone Company Ltd.
Permitted Output	2000 tonnes per annum
Permission End Date	30 September 2014



Appendix C: Site Profiles

Ham Hill (South): this is an active building stone site

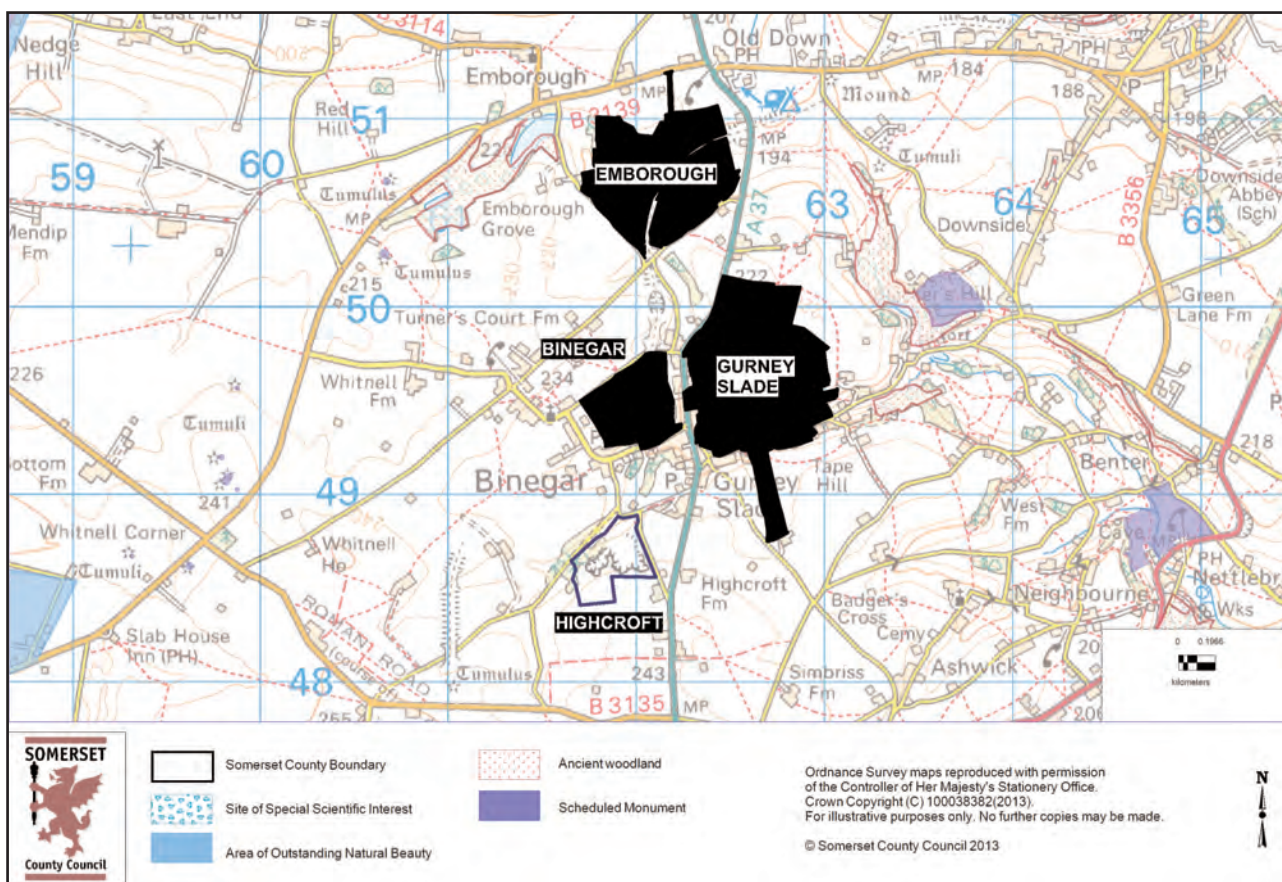
District	South Somerset
OS Grid reference	ST 483 161
Location	6km W of Yeovil
Planning Status	Active
Mineral	Upper Lias – Ham Hill Stone
Mineral Uses	Building, walling and roofing stone
Area of permission	4 hectares
Operator	Harvey Stone
Permitted Output	6000 tonnes per annum
Permission End Date	31 March 2066



Appendix C: Site Profiles

Highcroft: this is a dormant aggregate site

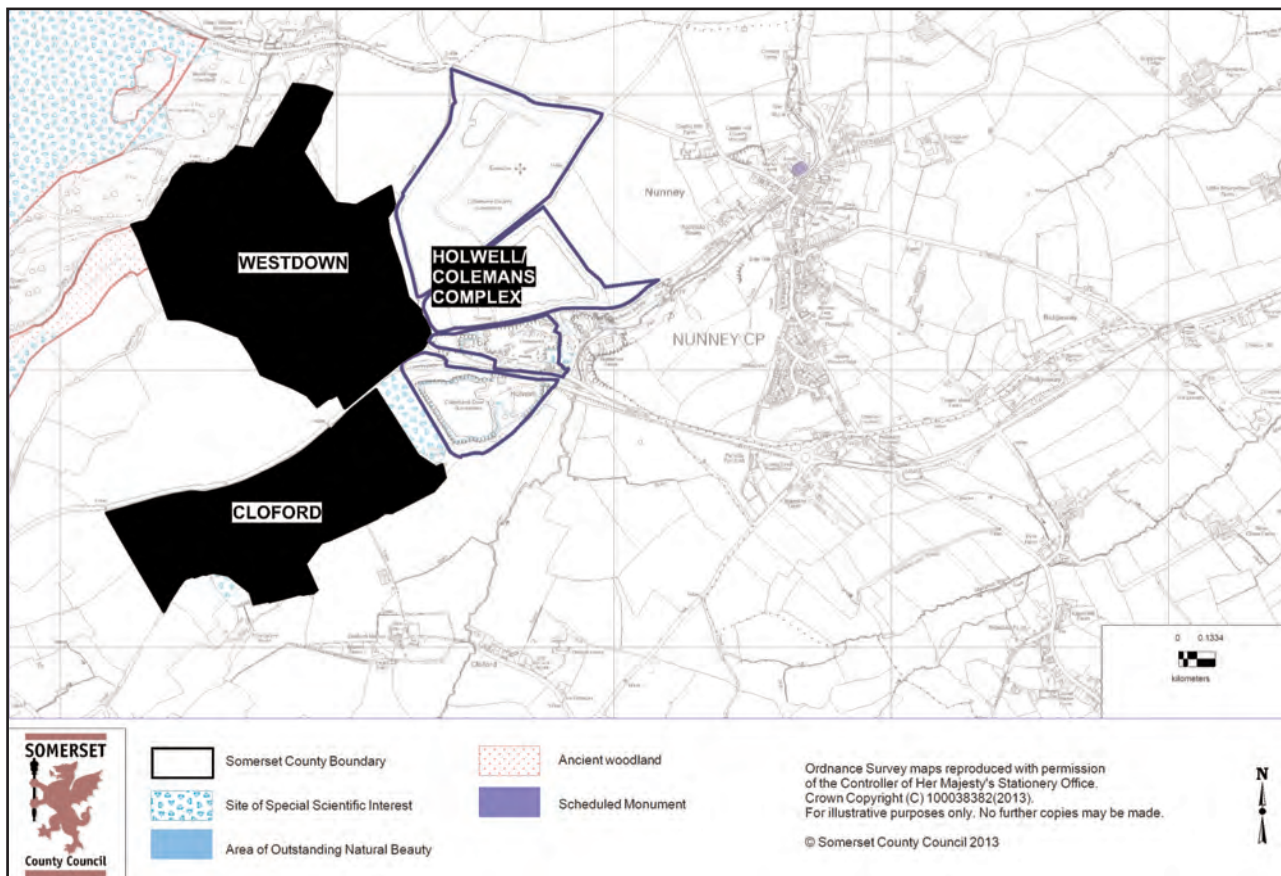
District	Mendip
OS Grid reference	ST 619 487
Location	4.5km N of Shepton Mallet
Planning Status	Dormant
Mineral	Carboniferous Limestone – Clifton Down Limestone
Mineral Uses	Aggregate
Area of permission	7.1 hectares
Operator	N/A
Permitted Output	N/A
Permission End Date	N/A



Appendix C: Site Profiles

Holwell/Colemans: this is an inactive aggregate site

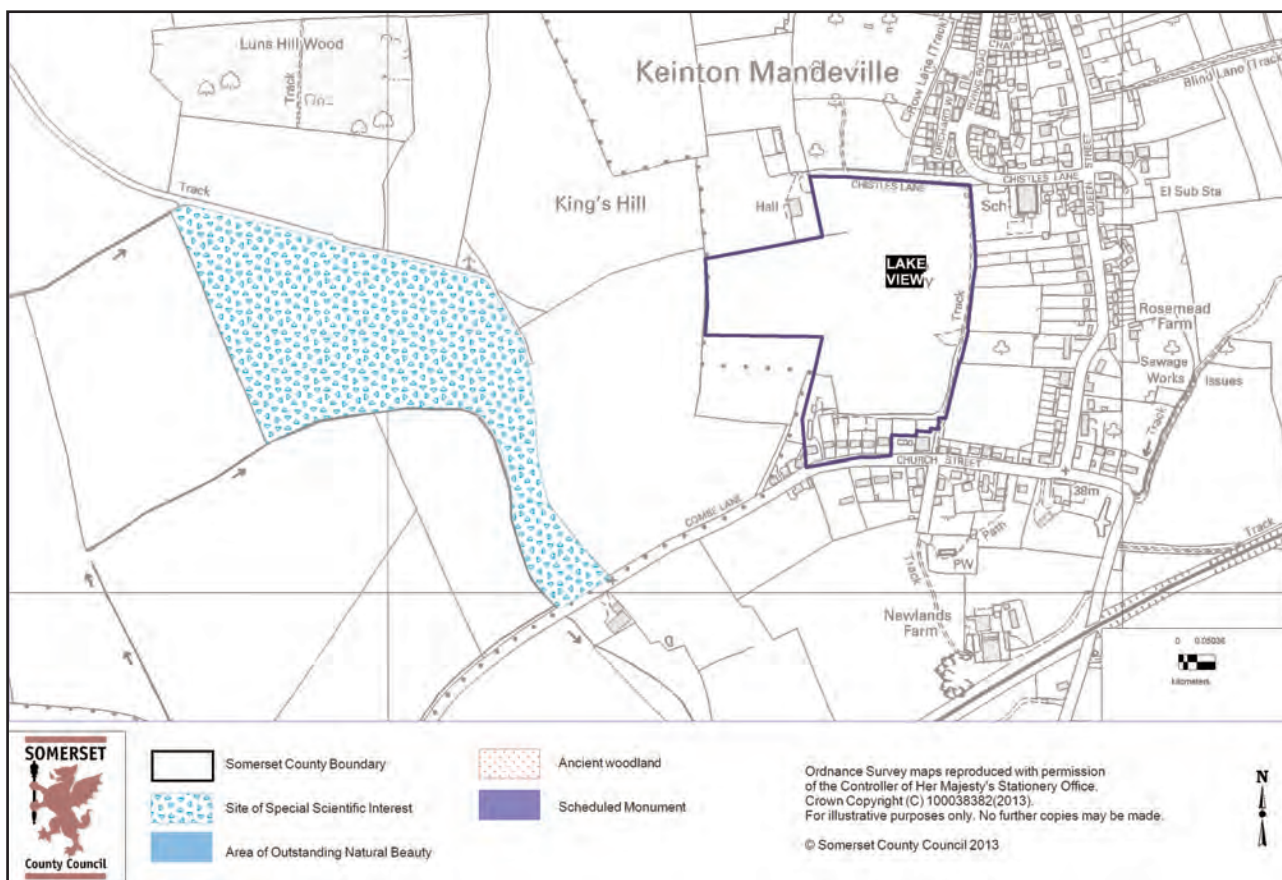
District	Mendip
OS Grid reference	ST 726 460
Location	5km SW of Frome
Planning Status	Inactive
Mineral	Carboniferous Limestone – Black Rock Limestone, Vallis Limestone and Clifton Down Limestone
Mineral Uses	Aggregate
Area of permission	61.9 hectares
Operator	Aggregate Industries UK Ltd.
Permitted Output	930,000 tonnes per annum
Permission End Date	21 February 2042



Appendix C: Site Profiles

Lake View: this is an active building stone site

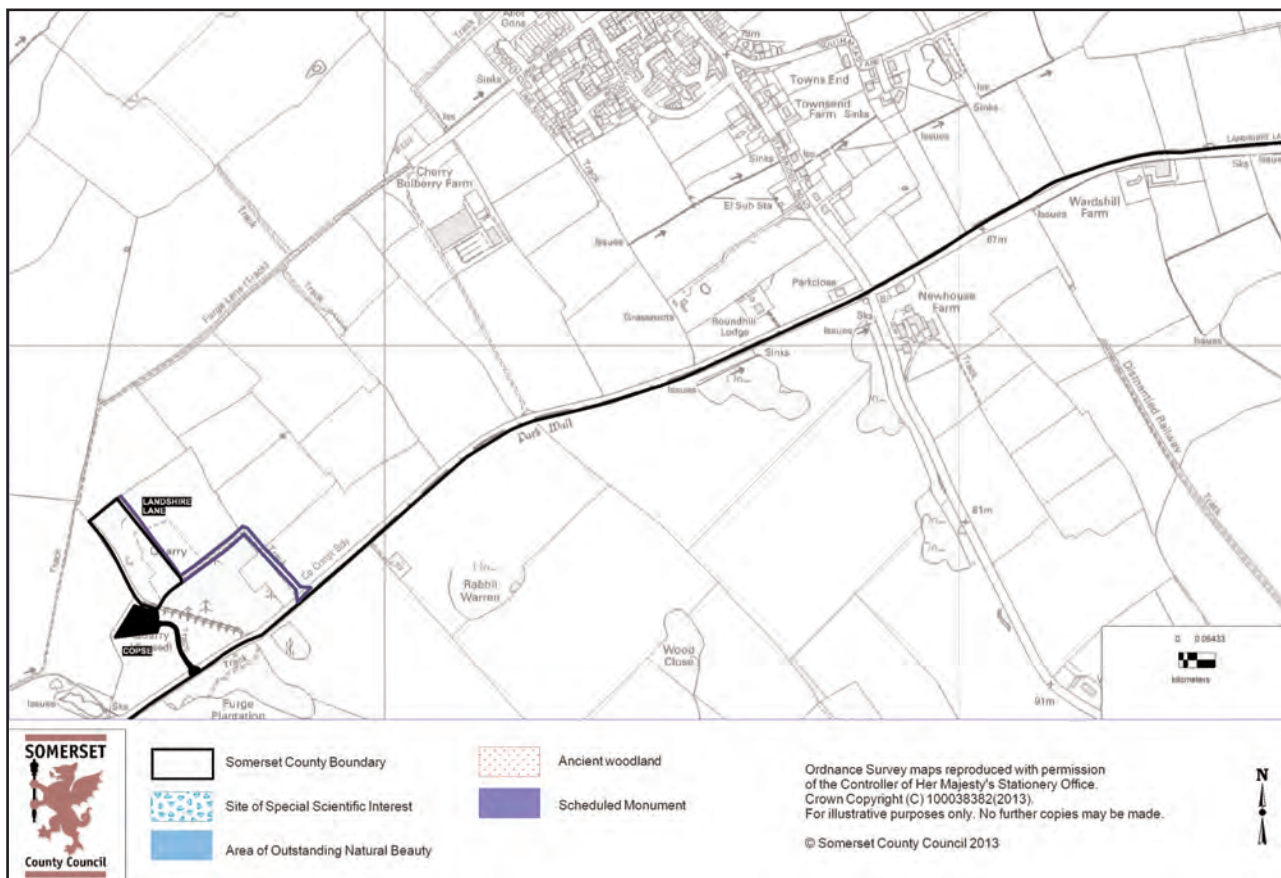
District	South Somerset
OS Grid reference	ST 546 304
Location	In the SW of Keinton Mandeville
Planning Status	Active
Mineral	Jurassic Limestone – Blue Lias
Mineral Uses	Building Stone
Area of permission	9.2 hectares
Operator	Individual
Permitted Output	5000 tonnes per annum
Permission End Date	21 February 2042



Appendix C: Site Profiles

Landshire Lane: this is a dormant building stone site

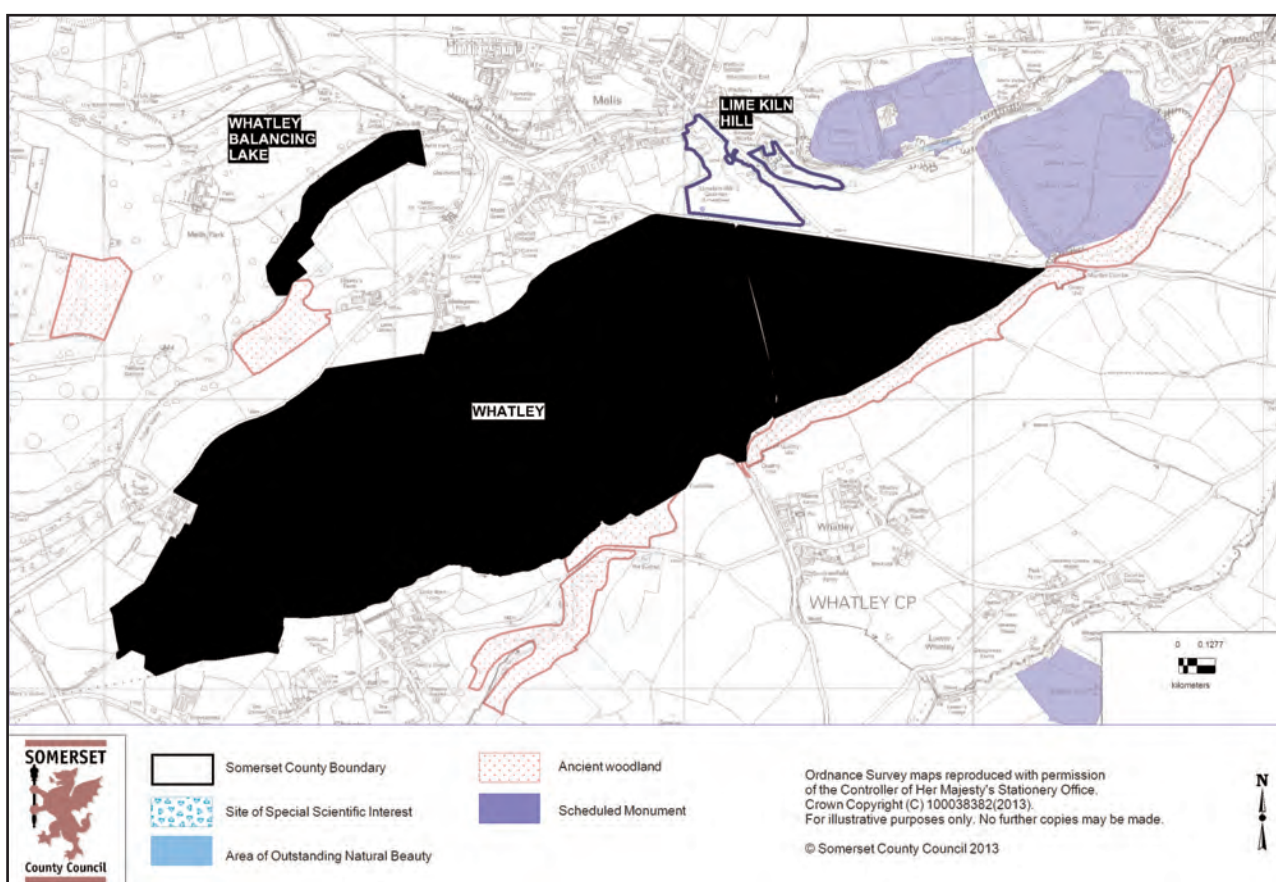
District	South Somerset
OS Grid reference	ST 716 186
Location	2km SW of Henstridge
Planning Status	Dormant
Mineral	Jurassic Limestone – Forest Marble
Mineral Uses	Building, roofing, walling and paving stone.
Area of permission	1.7 hectares
Operator	N/A
Permitted Output	N/A
Permission End Date	N/A



Appendix C: Site Profiles

Lime Kiln Hill: this is an inactive aggregate site

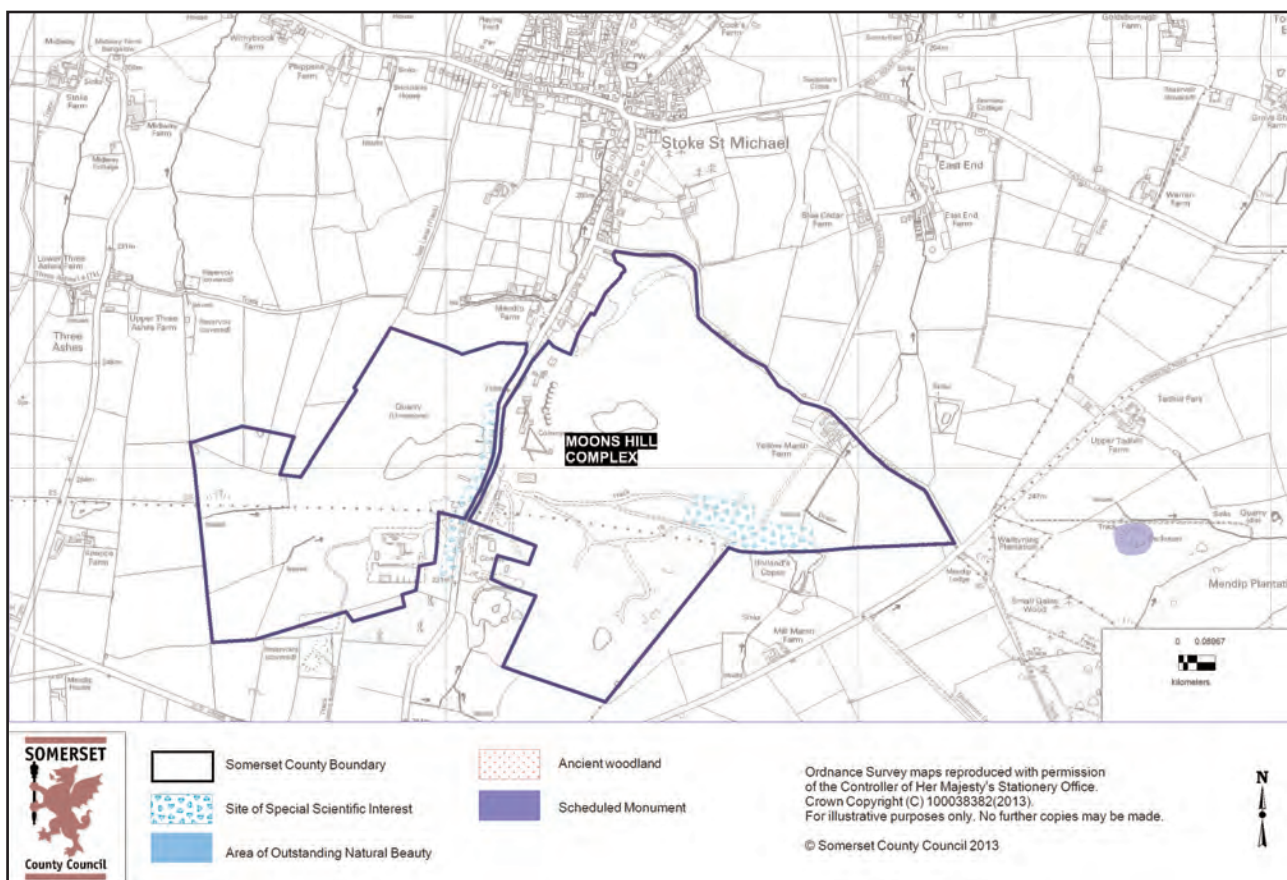
District	Mendip
OS Grid reference	ST 731 487
Location	3.5km W of Frome
Planning Status	Inactive
Mineral	Carboniferous Limestone – Clifton Hill Limestone and Hotwells Limestone
Mineral Uses	Aggregate
Area of permission	8.1 hectares
Operator	The Trustees of the Viscount Aramith 1999 Settlement Trust
Permitted Output	No condition
Permission End Date	21 February 2042



Appendix C: Site Profiles

Moons Hill: this is an active aggregate site

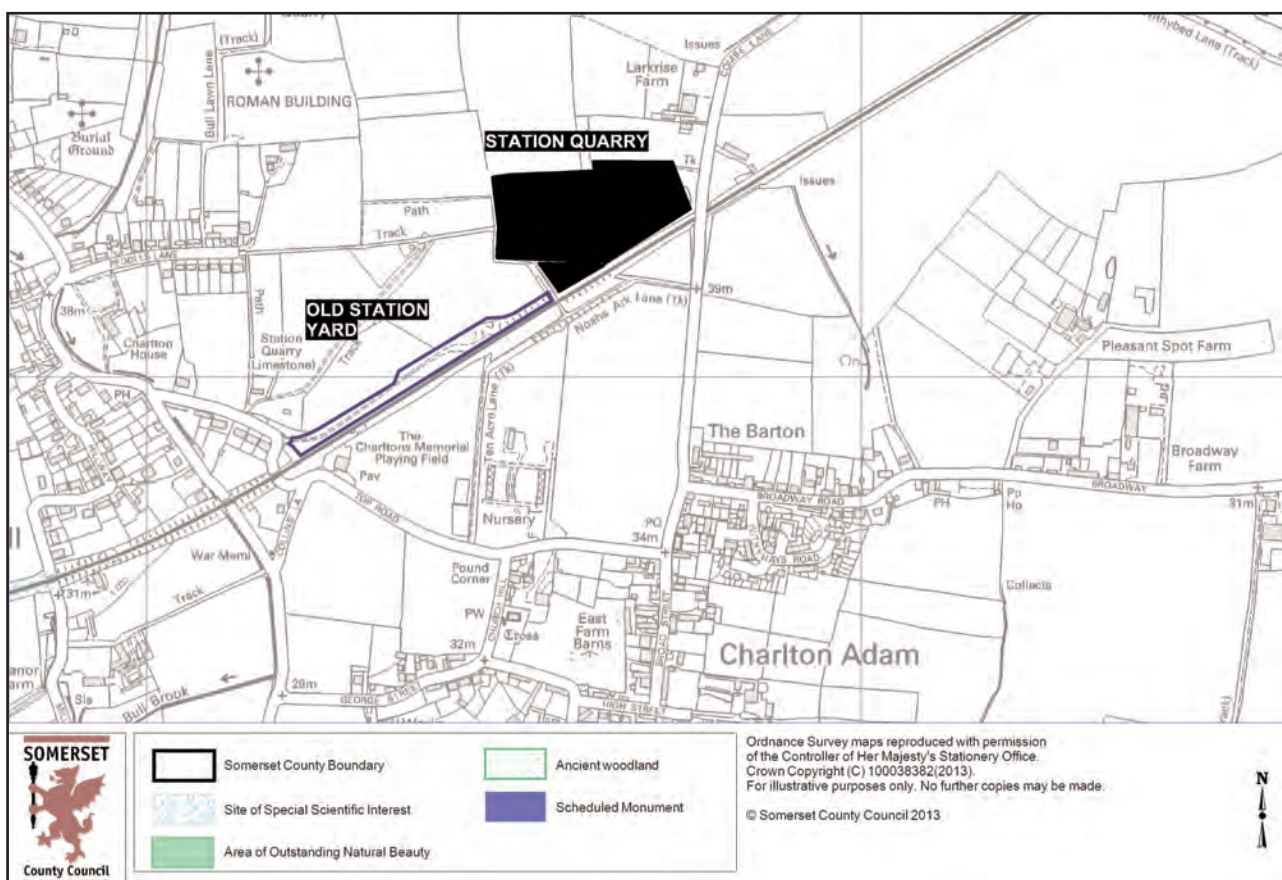
District	Mendip
OS Grid reference	ST 662 460
Location	5km NE Shepton Mallet
Planning Status	Active
Mineral	Silurian andesite – Basalt Group
Mineral Uses	Aggregate – principally roadstone
Area of permission	95.1 hectares
Operator	John Wainwright & Co. Ltd.
Permitted Output	No condition
Permission End Date	21 February 2042



Appendix C: Site Profiles

Old Station Yard: this is a dormant building stone site

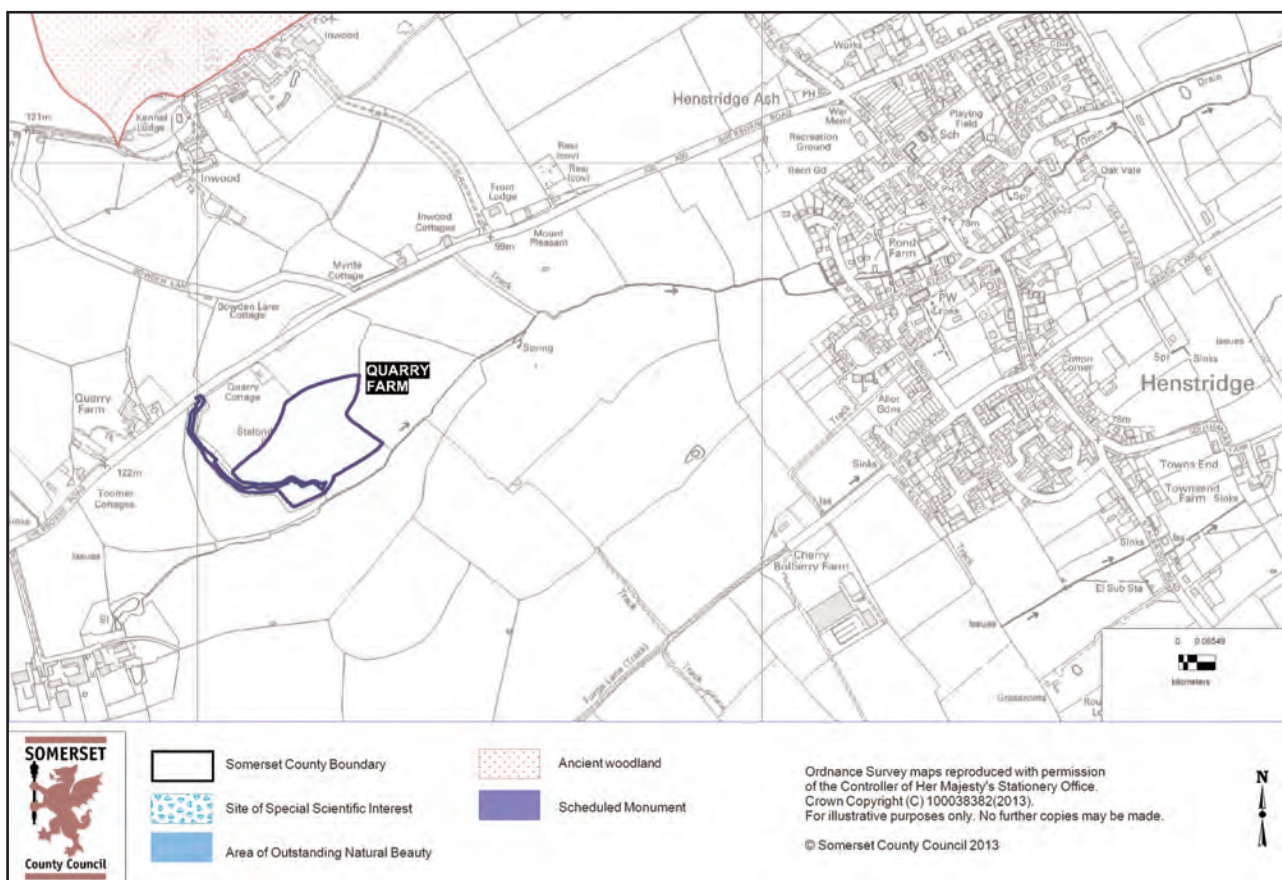
District	South Somerset
OS Grid reference	ST 533 290
Location	On the eastern edge of Charlton Mackrell
Planning Status	Dormant
Mineral	Jurassic Limestone – Blue Lias
Mineral Uses	Building, walling and paving stone
Area of permission	0.83 hectares
Operator	N/A
Permitted Output	N/A
Permission End Date	N/A



Appendix C: Site Profiles

Quarry Farm: this is an active building stone site

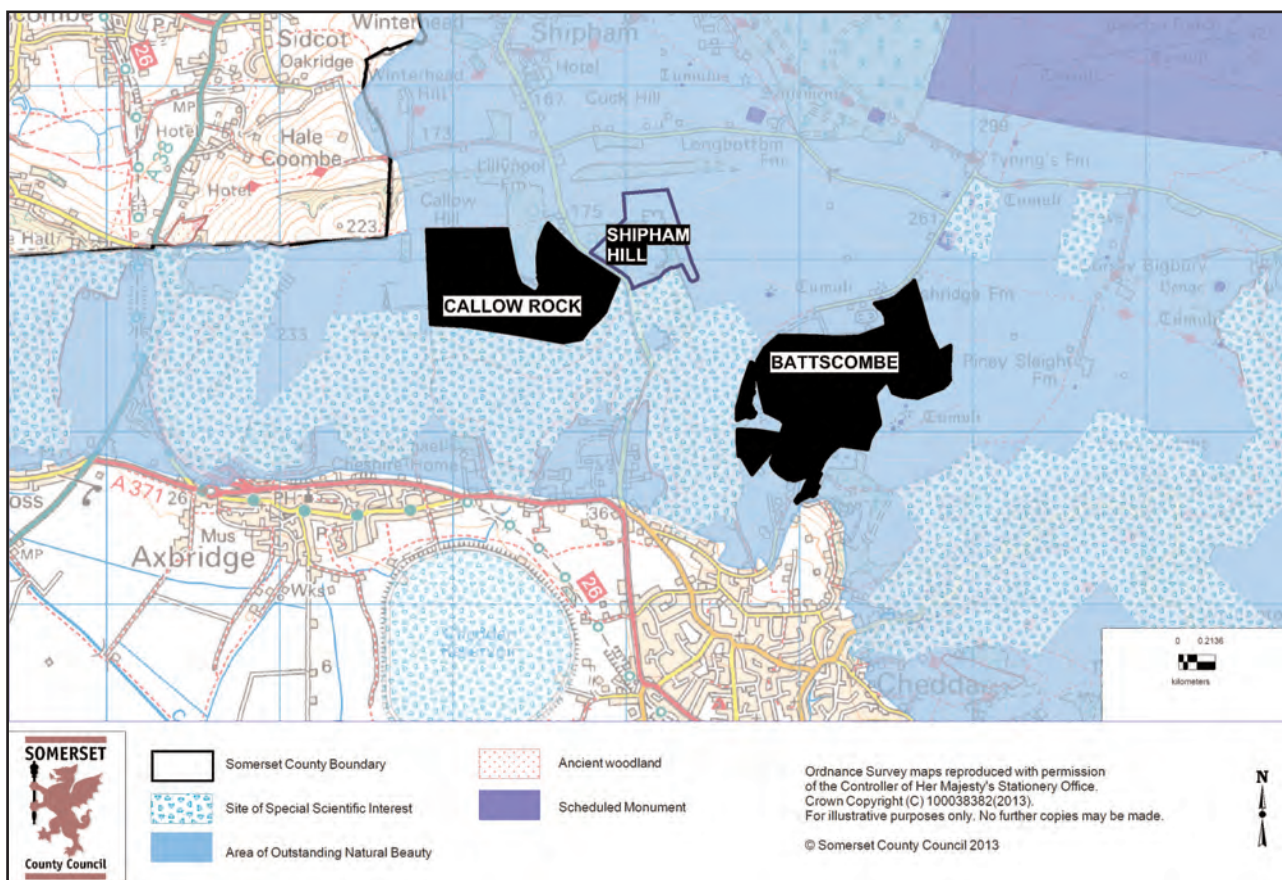
District	South Somerset
OS Grid reference	ST 711 194
Location	Henstridge
Planning Status	Active
Mineral	Jurassic Limestone – Forest Marble
Mineral Uses	Building, walling, roofing and paving stone
Area of permission	2.81 hectares
Operator	Stalbridge Quarries Ltd.
Permitted Output	2500 tonnes per annum
Permission End Date	09 June 2027



Appendix C: Site Profiles

Shipham Hill: this is an inactive aggregate site

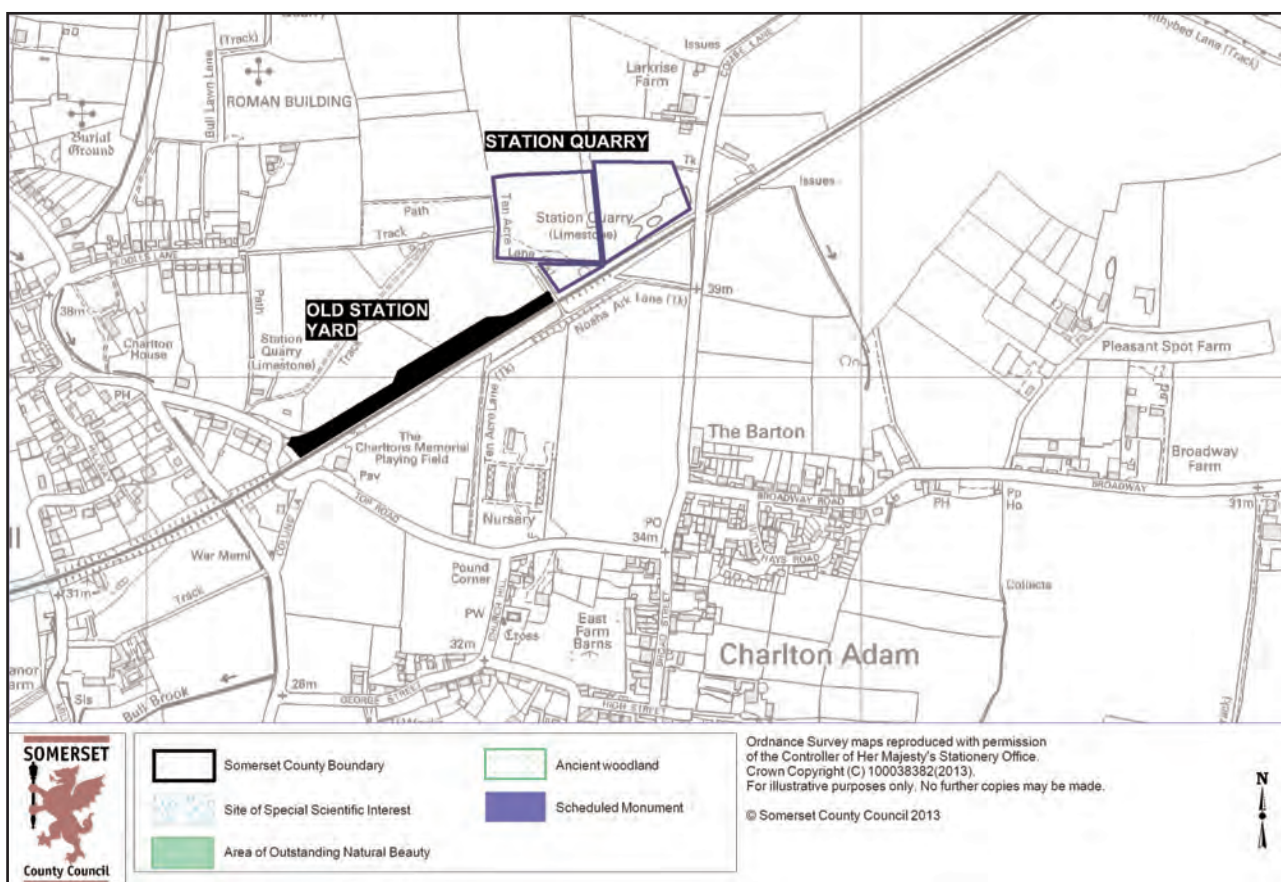
District	Mendip
OS Grid reference	ST 452 559
Location	1.5km south of Shipham
Planning Status	Inactive
Mineral	Carboniferous Limestone – Burrington Oolite
Mineral Uses	Aggregate
Area of permission	20.8 hectares
Operator	Aggregate Industries UK Ltd.
Permitted Output	Total output shall not exceed 1.25m tonnes over 60 calendar months
Permission End Date	21 February 2042



Appendix C: Site Profiles

Station Quarry: this is a dormant building stone site

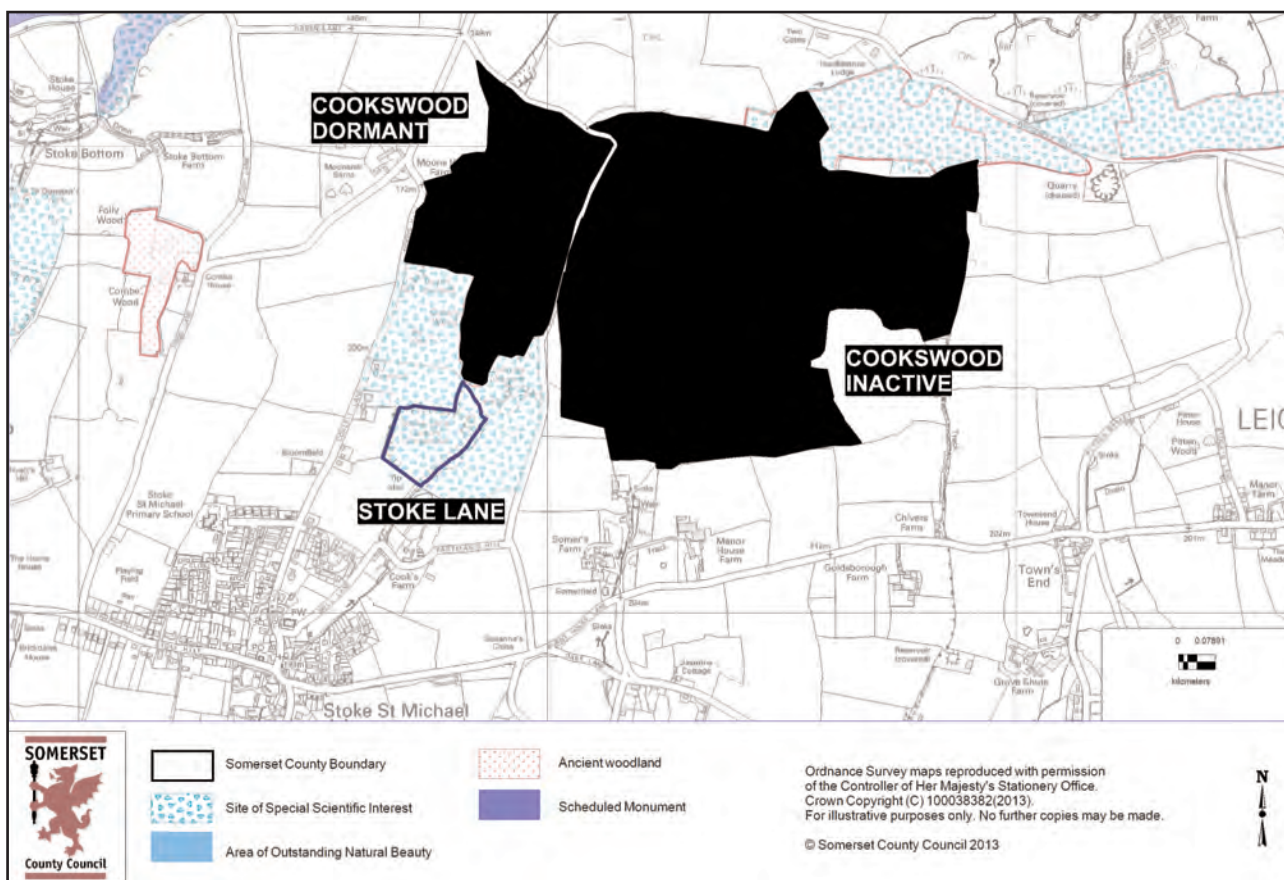
District	South Somerset
OS Grid reference	ST 536 292
Location	On the eastern edge of Charlton Mackrell
Planning Status	Dormant
Mineral	Jurassic Limestone – Blue Lias
Mineral Uses	Walling, building and paving
Area of permission	3.25 hectares
Operator	N/A
Permitted Output	N/A
Permission End Date	N/A



Appendix C: Site Profiles

Stoke Lane: this is an inactive aggregate site

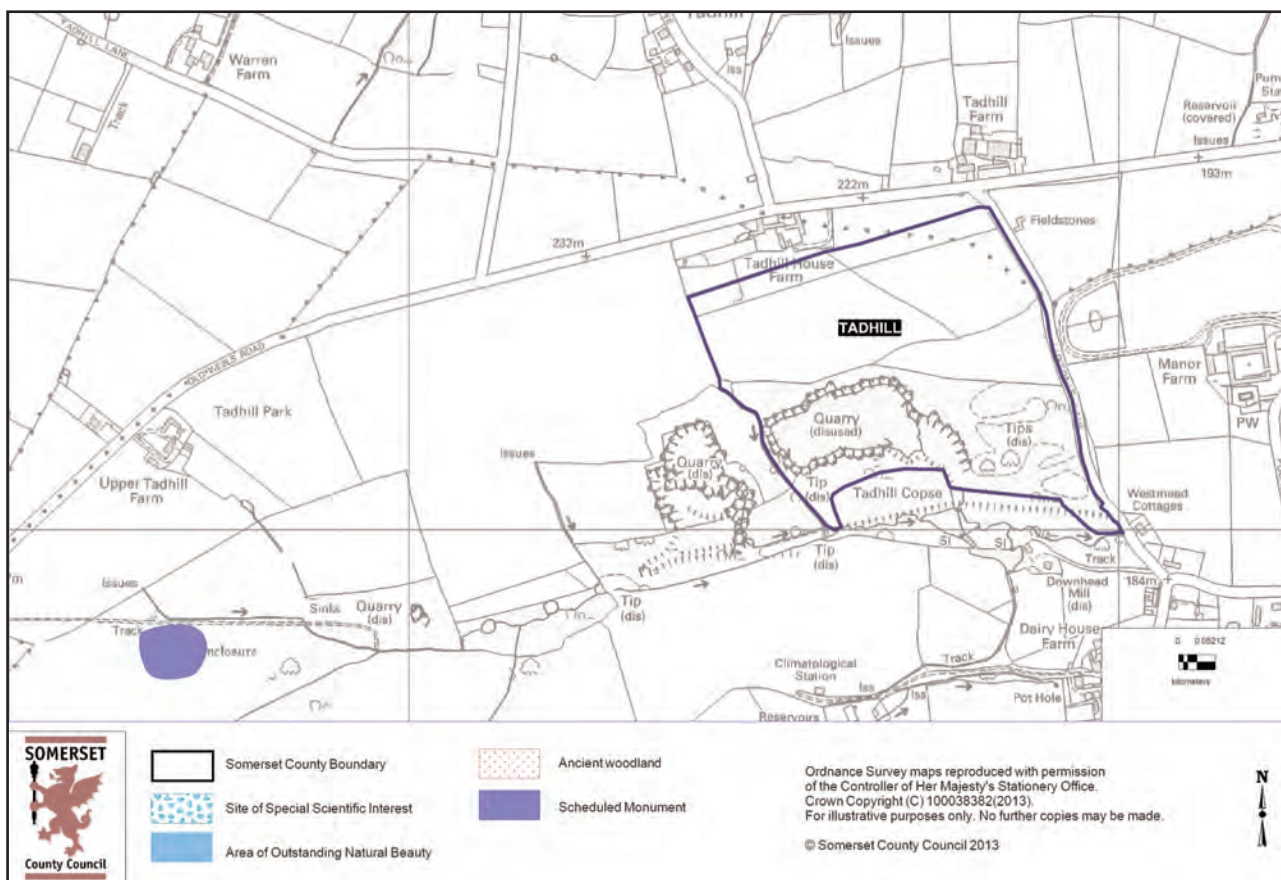
District	Mendip
OS Grid reference	ST 667 474
Location	5.5km NE of Shepton Mallet
Planning Status	Inactive
Mineral	Carboniferous Limestone
Mineral Uses	Aggregate
Area of permission	2.85 hectares
Operator	Individual
Permitted Output	35,000 tonnes per annum
Permission End Date	No condition



Appendix C: Site Profiles

Tadhill: this is a dormant aggregate site

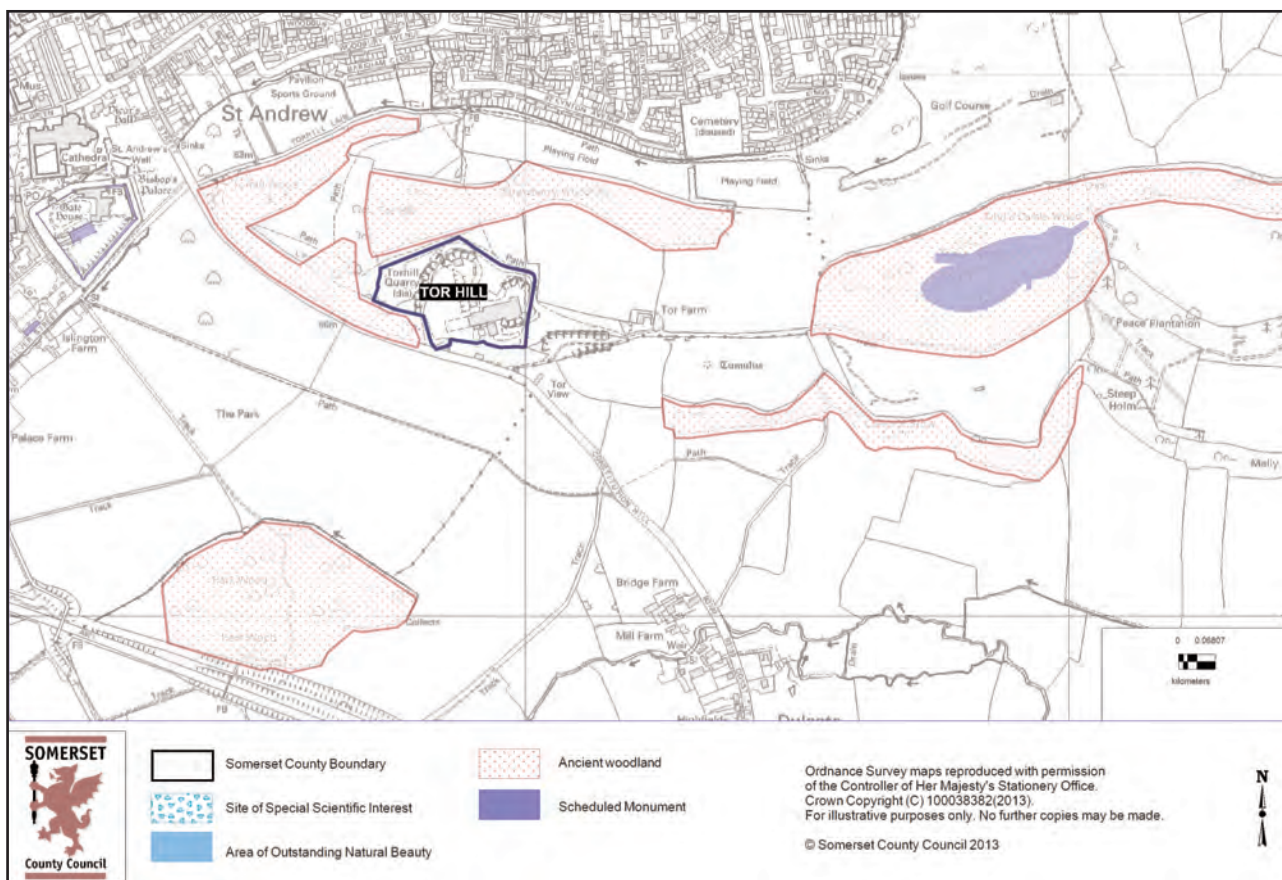
District	Mendip
OS Grid reference	ST 688 461
Location	7km NE of Shepton Mallet
Planning Status	Dormant
Mineral	Igneous – Silurian Andesite
Mineral Uses	Aggregate
Area of permission	16 hectares
Operator	N/A
Permitted Output	N/A
Permission End Date	N/A



Appendix C: Site Profiles

Tor Hill: this is a dormant aggregate site

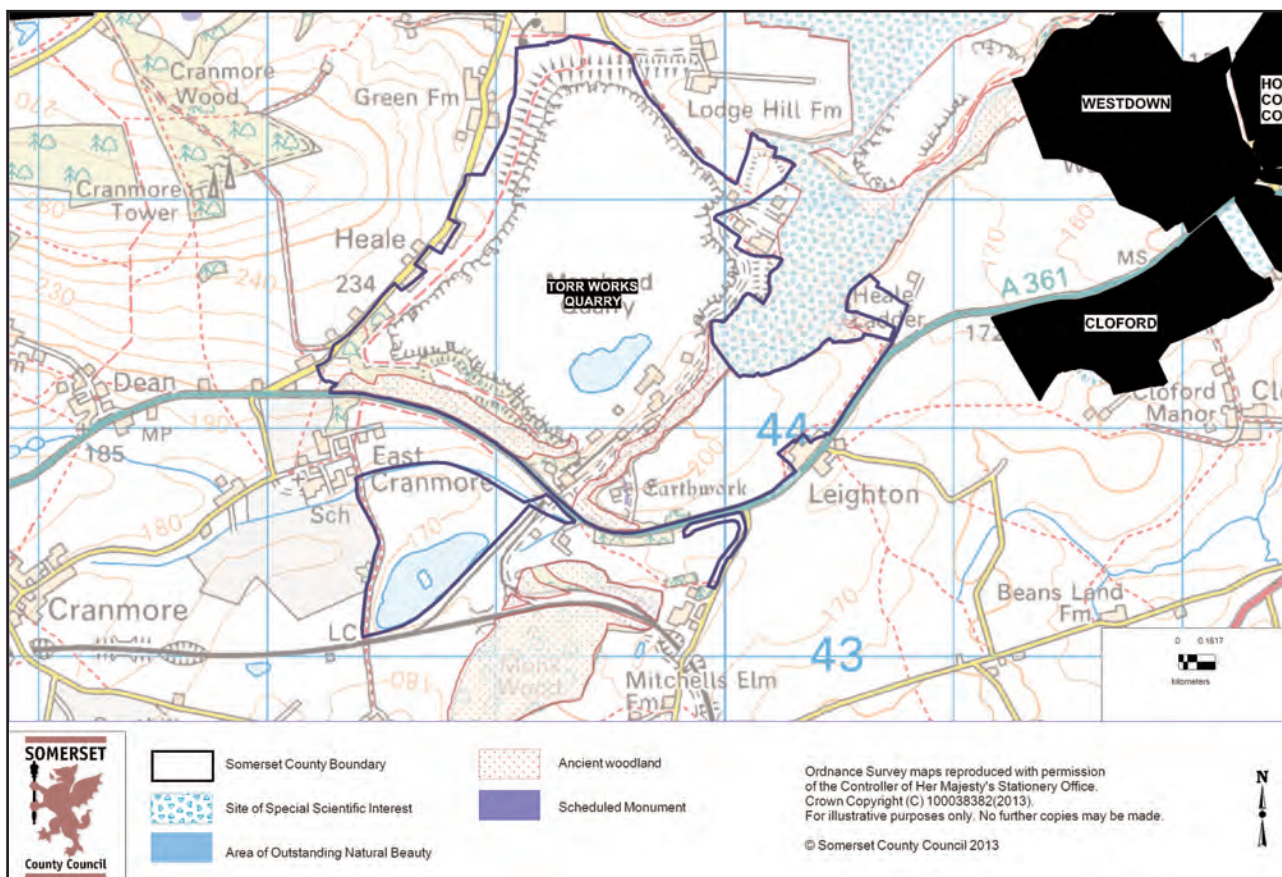
District	Mendip
OS Grid reference	ST 558 455
Location	On the SE outskirts of Wells
Planning Status	Dormant
Mineral	Carboniferous Limestone
Mineral Uses	Aggregate
Area of permission	6.4 hectares
Operator	N/A
Permitted Output	N/A
Permission End Date	N/A



Appendix C: Site Profiles

Torr Works: this is an active aggregate stone site

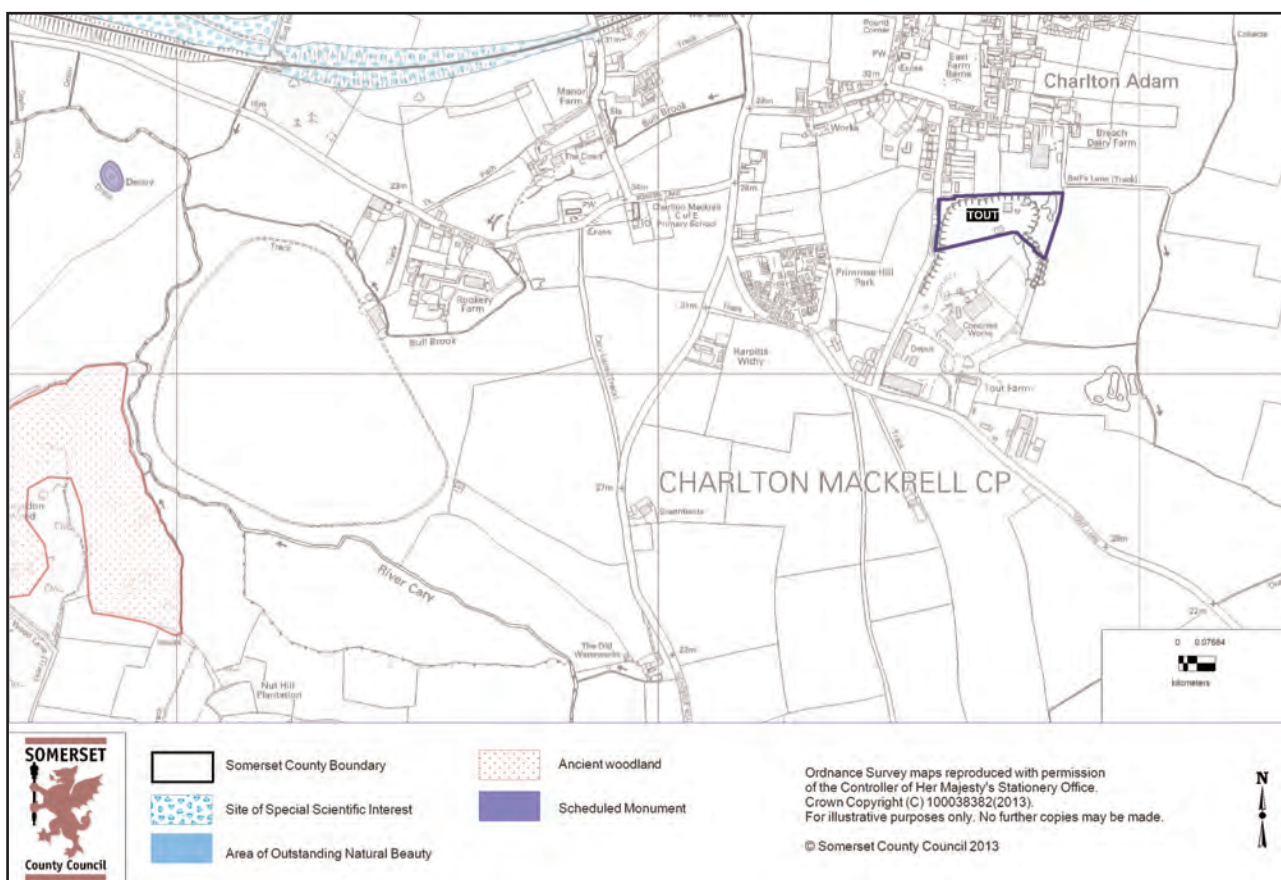
District	Mendip
OS Grid reference	ST 695 446
Location	7km E of Shepton Mallet
Planning Status	Active
Mineral	Carboniferous Limestone
Mineral Uses	Aggregate
Area of permission	Torr Works comprises two distinct quarrying areas. The main quarry extends to approximately 202 hectares of which approximately 141 hectares are permitted for mineral extraction. The Leighton extension area extends to approximately 47 hectares of which 28 hectares are permitted for mineral extraction
Operator	Aggregate Industries UK Ltd.
Permitted Output	8 million tonnes per annum
Permission End Date	31 December 2040



Appendix C: Site Profiles

Tout: this is an active building stone site

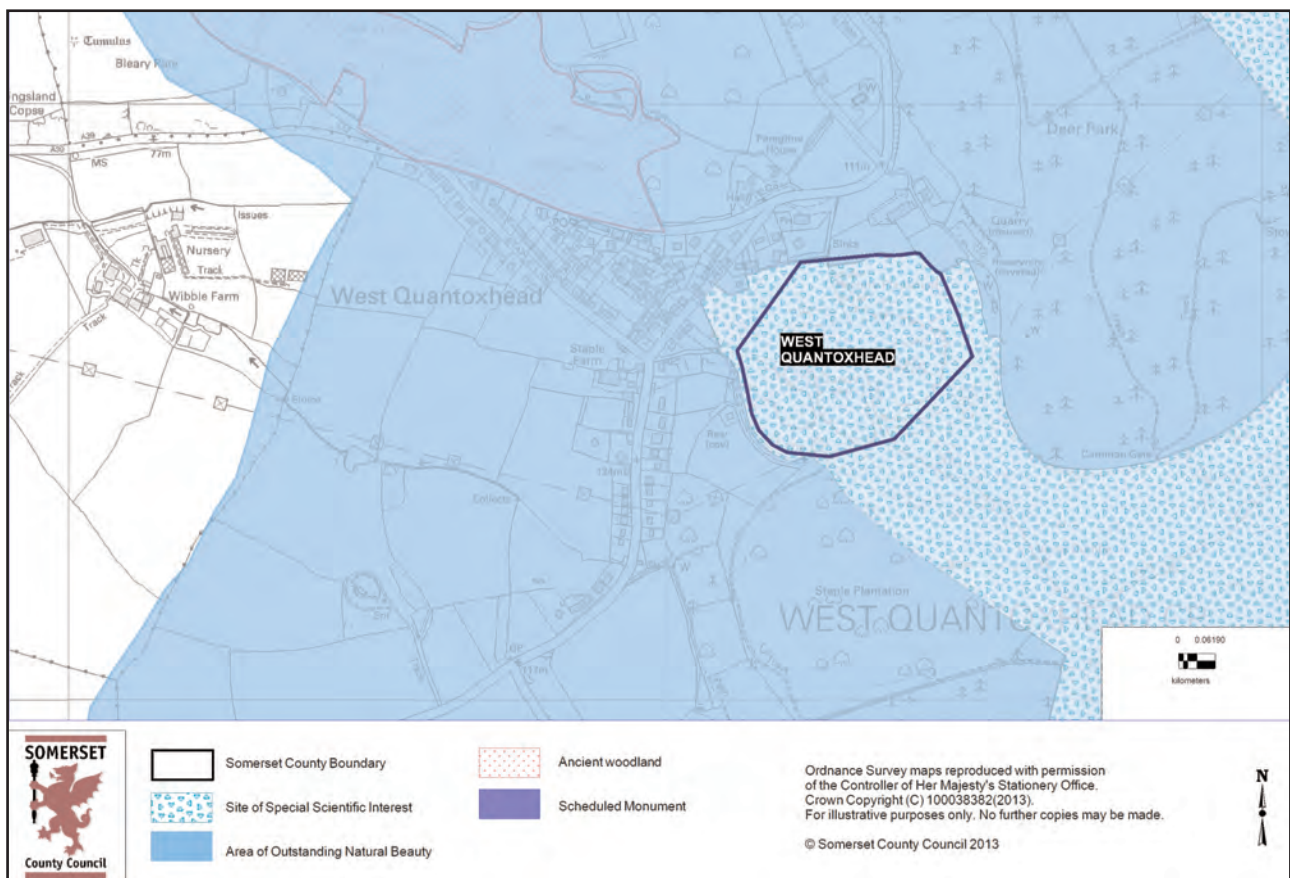
District	South Somerset
OS Grid reference	ST 536 281
Location	On the southern boundary of Charlton Adam
Planning Status	Active
Mineral	Jurassic Limestone – Blue Lias
Mineral Uses	Building or dimension stone
Area of permission	Ham & Doultong Stone Company Ltd.
Operator	2400 tonnes per annum
Permitted Output	2.24 hectares
Permission End Date	05 April 2018



Appendix C: Site Profiles

West Quantoxhead/Vinnicombe: this is a dormant aggregate site

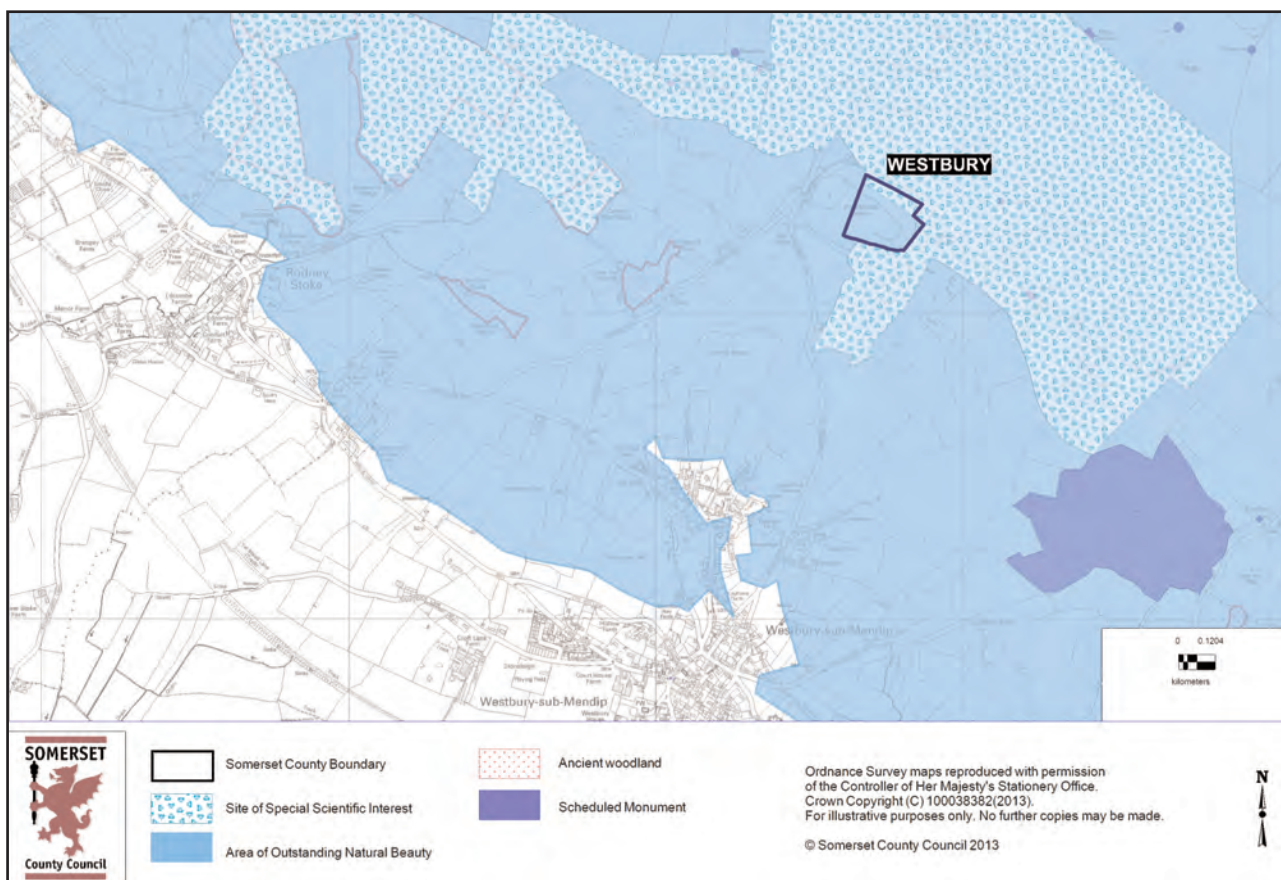
District	West Somerset
OS Grid reference	ST 113 415
Location	East of West Quantoxhead
Planning Status	Dormant
Mineral	Devonian Sandstone
Mineral Uses	Aggregate, with relatively high Polished Stone Value allowing use as roadstone
Area of permission	9.4 hectares
Operator	N/A
Permitted Output	N/A
Permission End Date	N/A



Appendix C: Site Profiles

Westbury: this is an inactive aggregate site

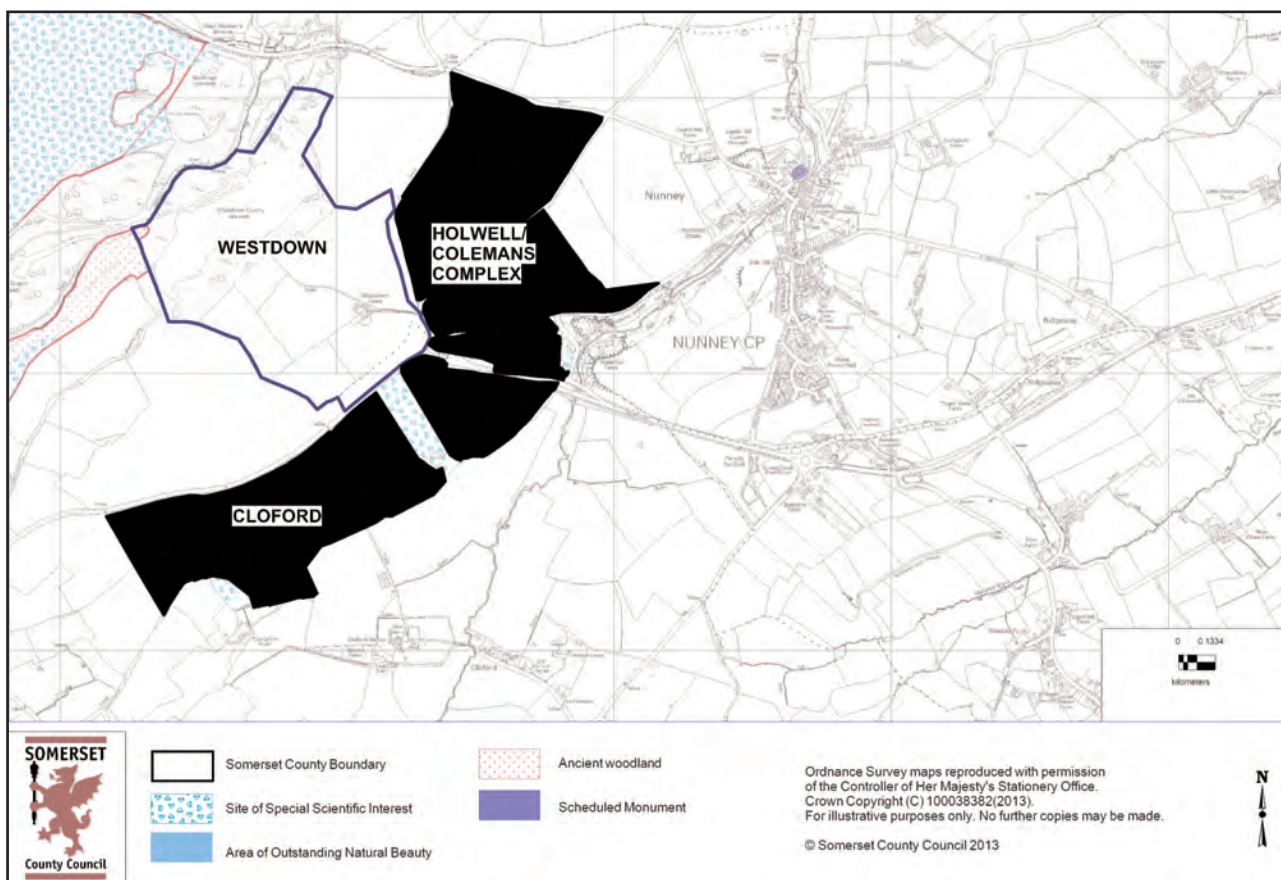
District	Mendip
OS Grid reference	ST 505 503
Location	6km NW of Wells
Planning Status	Inactive
Mineral	Carboniferous Limestone – Clifton Down Limestone
Mineral Uses	Aggregate
Area of permission	4.8 hectares
Operator	Alford Technologies
Permitted Output	60,000 tonnes per annum
Permission End Date	31 December 2015



Appendix C: Site Profiles

Westdown: this is a dormant aggregate site

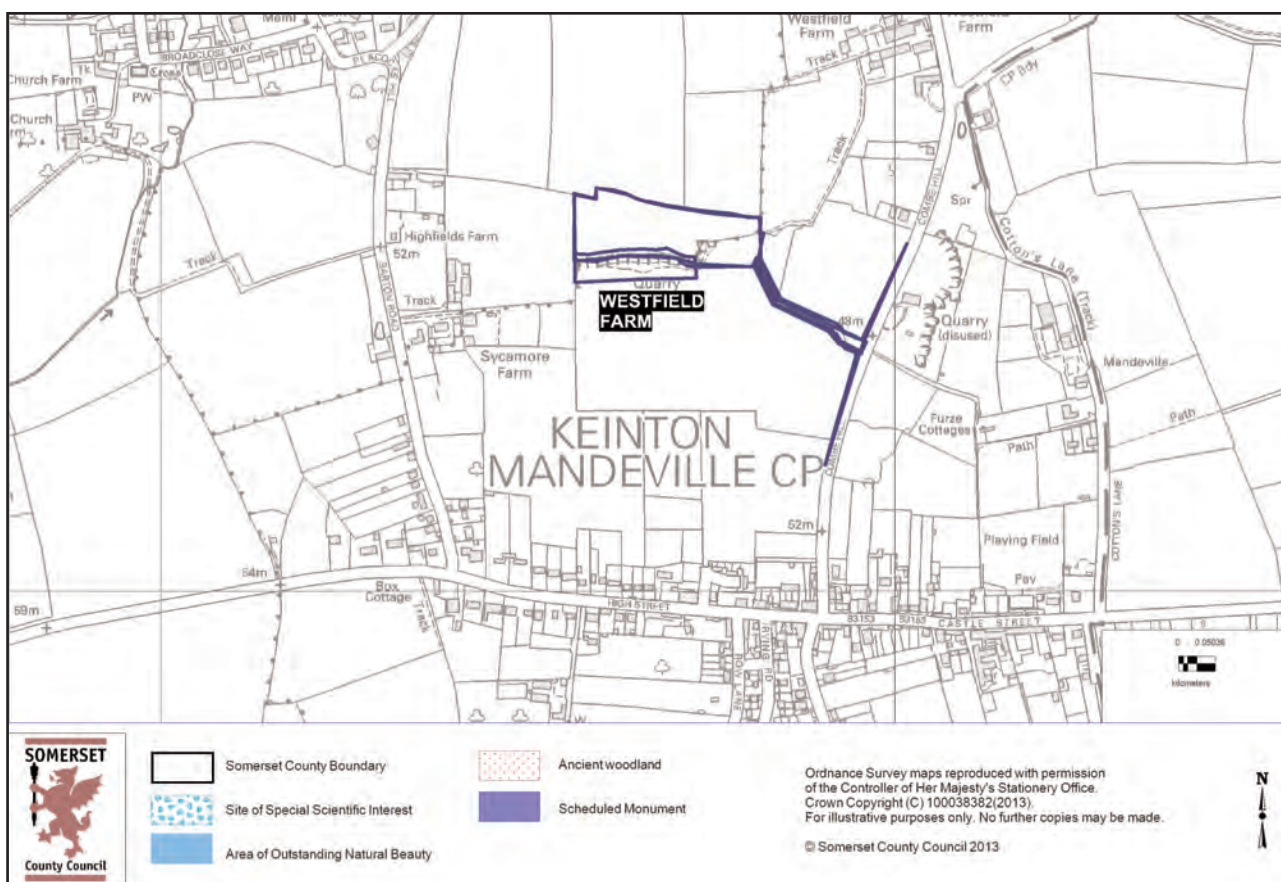
District	Mendip
OS Grid reference	ST 719 461
Location	5km SW of Frome
Planning Status	Dormant
Mineral	Carboniferous Limestone
Mineral Uses	Aggregate
Area of permission	67.4 hectares
Operator	N/A
Permitted Output	N/A
Permission End Date	N/A



Appendix C: Site Profiles

Westfield Farm: this is an active building stone site

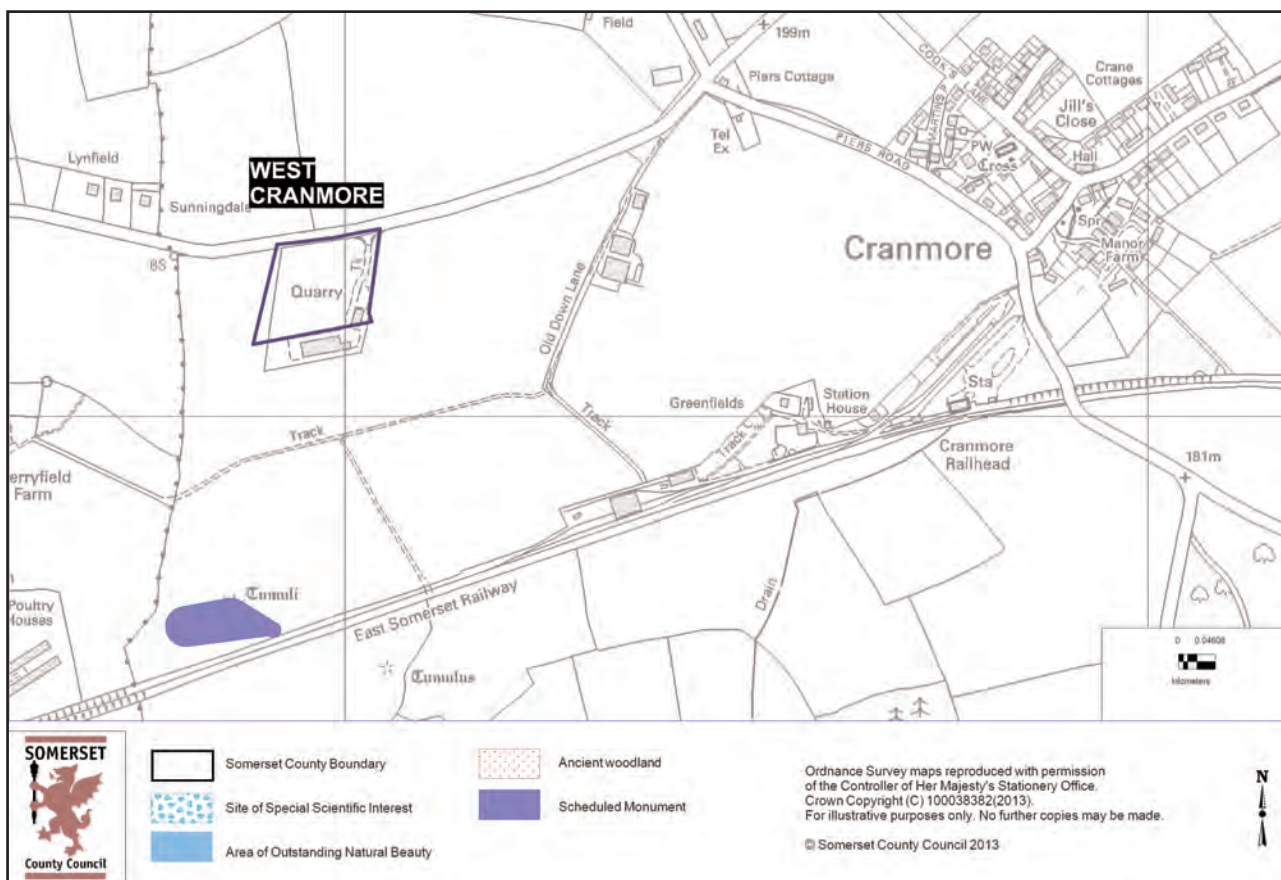
District	South Somerset
OS Grid reference	ST 547 314
Location	Keinton Mandeville
Planning Status	Active
Mineral	Blue Lias
Mineral Uses	Building, walling and roofing
Area of permission	2.2 hectares
Operator	Ham & Douling Stone Company Ltd.
Permitted Output	2000 tonnes per annum
Permission End Date	30 April 2040



Appendix C: Site Profiles

West Cranmore: this is an active building stone site

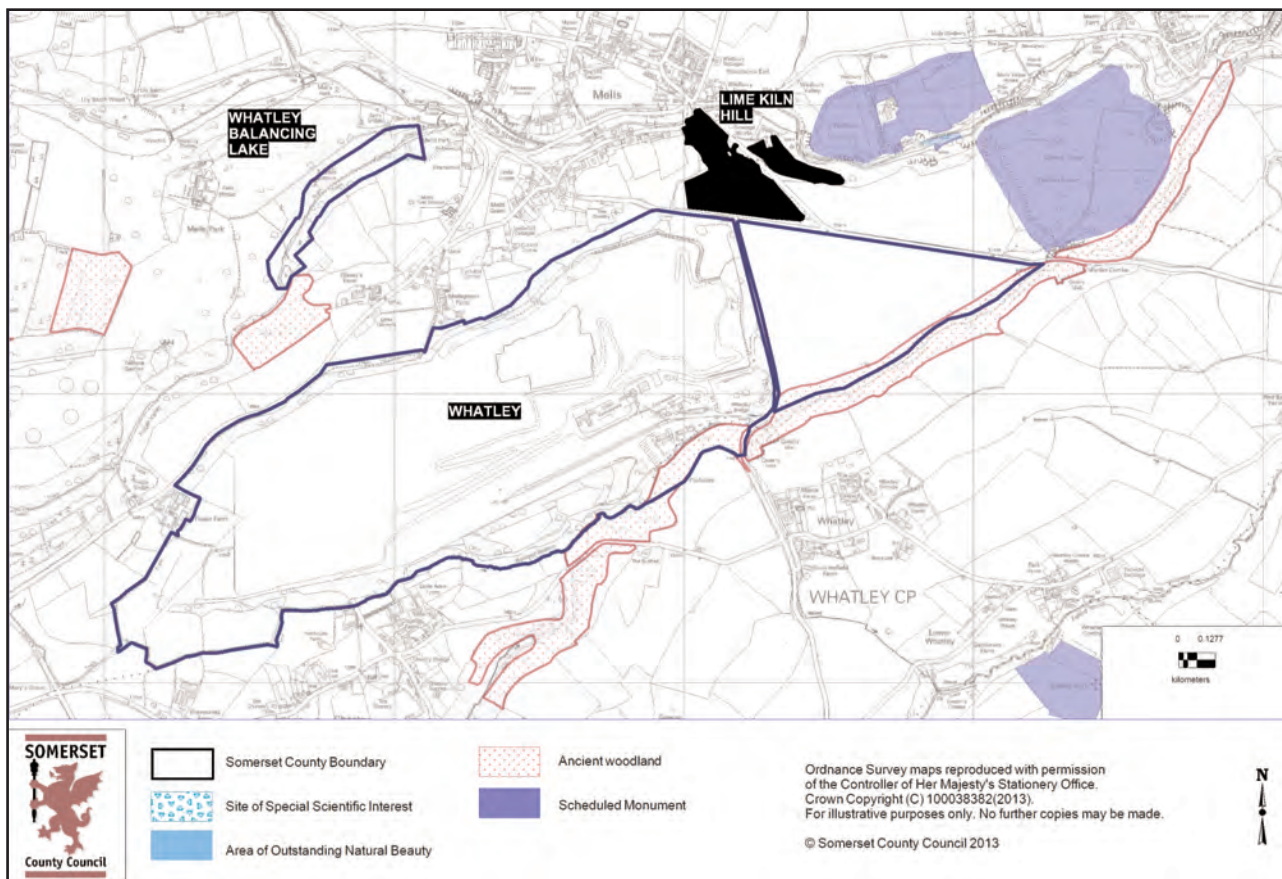
District	Mendip
OS Grid reference	ST 659 431
Location	4km E of Shepton Mallet
Planning Status	Active
Mineral	Jurassic Limestone – Oolite Limestone
Mineral Uses	Building stone and aggregate
Area of permission	1.53 hectares
Operator	Wolff Stone Ltd.
Permitted Output	6000 tonnes per annum
Permission End Date	05 April 2048



Appendix C: Site Profiles

Whatley: this is an active aggregate site

District	Mendip
OS Grid reference	ST 722 480
Location	4km W of Frome
Planning Status	Active
Mineral	Carboniferous Limestone – Black Limestone, Vallis Limestone and Burrington Oolite
Mineral Uses	Aggregate
Area of permission	180 hectares
Operator	Hanson Quarry Products Europe Ltd.
Permitted Output	24 million tonnes over any successive 3 calendar years
Permission End Date	31 December 2030



Appendix D: Revoked/cancelled policies

Minerals Local Plan (adopted 2004)

The Secretary of State issued a Direction on the 20 September 2007 to “save” selected policies contained in the Somerset Minerals Local Plan (adopted 2004). This Direction was issued under paragraph 1(3) of Schedule 8 to the Planning and Compulsory Purchase Act 2004. You can view this Direction in the evidence base available via www.somerset.gov.uk/mineralsandwaste

Policies contained in the Somerset Mineral Local Plan (detailed in Table D1 below) will be cancelled once this Minerals Plan is adopted. The text in Table D1 that describes the policies has been shortened in some cases. To read the full text, please refer to the Minerals Local Plan (adopted 2004).

Somerset & Exmoor National Park Joint Structure Plan

All policies contained in the Somerset & Exmoor National Park Joint Structure Plan Review 1991 – 2011 were revoked on 20 May 2013 except for the direction made in September 2007 in respect of the Somerset & Exmoor National Park Joint Structure Plan Alteration 1991 - 2011 so far as it preserves policy 6 (Bristol/Bath Green Belt).

South West Regional Strategy

The Regional Strategy for the South West – comprising the regional spatial strategy for the region and the regional economic strategy for the region – was revoked on 20 May 2013.

Table D1: Mineral Local Plan (adopted 2004) policies that will be cancelled on adoption of the Somerset Minerals Plan

Policy no.	Policy Name
M1	Proposals for mineral development with Areas of Outstanding Natural Beauty
M2	Proposals for mineral development outside Areas of Outstanding Natural Beauty
M5	Proposals for mineral development which are likely to result in significant harm to a County Wildlife Site
M6	Proposals for mineral development outside designated nature conservation areas
M8	Proposals for mineral development which will cause significant harm to nationally important archaeological remains
M9	Proposals for mineral development which will cause significant harm to regionally or locally important archaeological remains
M10	Where proposals for mineral development are within Areas of High Archaeological Potential
M12	Proposals for mineral development will only be permitted where they would not cause significant harm to the historic character
M13	Proposals for mineral development will only be permitted where they will not have a harmful effect on the quality or quantity of any ground or surface water resource

Appendix D: Revoked/cancelled policies

Policy no.	Policy Name
M14	Proposals for mineral development will only be permitted where it does not adversely impact in flooding terms
M15	Proposals for mineral development on land classified as best as most versatile agricultural land
M16	Proposals for mineral development which will have significant harm on the rights of way network will not be permitted
M17	Proposals for mineral development will only be permitted if they are accompanied by satisfactory reclamation and afteruse proposals
M19	Proposals for mineral development will only be permitted where the applicant provides satisfactory information on the financial budget
M20	Proposals for both new mineral development and the determination of new conditions on review shall be accompanied by an assessment of the impact
M21	Proposals for mineral development involving the provision of outdoor lighting
M22	Proposals for mineral development that have significant transport implications
M23	Proposals for mineral development will only be permitted where the access roads to the proposed site, including any parts of the public highway which serve such a site, are adequate
M24	Proposals for mineral development shall be accompanied, where necessary, by a background noise survey together with an assessment of the impact of the proposal on the existing noise climate
M25	When considering the conditions which should be attached to planning permissions the exceptionally quiet rural environment of many quarrying area in Somerset will justify application of strict noise conditions in order to preserve amenity
M26	Proposals for mineral development will not be permitted unless blasting vibration can be kept within acceptable limits
M27	Proposals for mineral development will need to demonstrate that the operation of the site will not have a harmful effect on the stability of neighbouring land or properties
M28	Sites for the disposal of mineral wastes will only permitted where
M29	The cumulative impact of a proposal on the community and the environment
M30	Planning obligations will be sought where they are necessary to safeguard the environment or local communities
M31	Mineral resources of economic importance will be safeguarded from sterilisation
M32	Development proposals, outside AONB's, for the sorting, transfer, treatment or recycling of materials for the production of secondary aggregates

Appendix D: Revoked/cancelled policies

Policy no.	Policy Name
M33	Proposals for the development of facilities at existing active quarries to maximise the value of the stone produced at that quarry will be supported provided that
M34	For the period 1997-2011 Somerset will make provision for the supply of 225 million tonnes of crushed rock
M36	Where there are extant permissions at dormant sites which nonetheless cannot comply with the policies of this Plan or are considered unlikely to resume working, the Mineral Planning Authority will seek to secure their relinquishment and reclamation
M37	Schemes of planning conditions will include production limits where this is considered necessary and appropriate to prevent any significant harm from the operation
M38	Proposals for the extraction of crushed rock from below the water table will only be permitted
M39	When determining reclamation proposals within East Mendip Area
M40	Proposals for peat extraction should be within the Peat Production Zones or Areas of Search
M41	The Areas of Search, as shown on Inset Plan 3, will be monitored annually and amended if necessary
M42	Proposals for the development of facilities for the processing or storage of peat or peat alternatives
M43	Proposals for the placement or deposition of inert material
M44	When considering proposals for the restoration, aftercare and afteruse of former peat workings
M45	Proposals for the extraction of peat
M46	Proposals for new building stone quarries or to extend existing quarries will be permitted
M47	Acceptable after use proposals will be prerequisite for the granting of planning permission for building stone quarries
M48	The MPA will agree production limits at building stone quarries with operators
M50	Land at Whiteball has been identified as a Preferred Area and an Area of Search for sand and gravel extraction
M51	Proposals for borrow pits will only be permitted