

Minerals Topic Paper 1

Spatial Strategy

Version 2

January 2016



*Minerals Topic Paper 1 - Spatial Strategy
Version 2 – January 2016*

Version No.	Date	Nature of Updates
1	July 2015	Original version
2	January 2016	Adoption of Torbay Local Plan; consultation on Plymouth Plan and Devon Minerals Plan; recognition of commencement at Drakelands Mine

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1. INTRODUCTION

- 1.1 The separate mineral planning authorities [MPAs] within the county of Devon are undertaking separate development of minerals planning policy, either through specific Minerals Plans or as part of a wider Local Plan, with the current positions being:
- (a) Dartmoor National Park Authority [DNPA] had proposed to prepare a Minerals DPD, but is considering inclusion of minerals policies within a new Local Plan to replace its adopted Core Strategy and Development Management & Delivery DPD, on which work is due to commence in 2015;
 - (b) Devon County Council [DCC] is preparing a Minerals Plan, with pre-submission consultation undertaken in Autumn 2015 and submission anticipated in February 2016;
 - (c) Exmoor National Park Authority [ENPA] is preparing a Local Plan that includes minerals policies, and consulted on the Publication Draft in June/July 2015;
 - (d) Plymouth City Council [PCC] has commenced work on a new Plymouth Plan that will provide a single strategic plan, with consultation on a strategic framework (Part 1) in early 2015 and on toolkits for Part 2 in September 2015; and
 - (e) Torbay Council [TC] adopted its Local Plan, including minerals policies, in December 2015.
- 1.2 To enable full consideration of cross-boundary issues within Devon and achieve efficiency in the preparation of evidence to underpin their emerging Plans, DNPA, DCC, PCC and TC are undertaking joint working on evidence. Since ENPA has already developed evidence for its limited minerals issues, that authority is not included within the scope of this report, although account will be taken of its role in minerals planning.
- 1.3 It is important that planning for mineral working should be undertaken within the wider spatial planning context rather than being perceived as a technical exercise based largely on geological constraints. Minerals development is capable of making a positive contribution to the economy and environment, and ensuring strong links to Devon's development strategy, together with the characteristics of surrounding areas, can help in delivering these benefits.
- 1.4 However, the scope for choice in a spatial strategy is constrained by the limited occurrence of mineral resources, notably Devon's resources of national importance for which alternative locations are unavailable not only within Devon but elsewhere in the UK. Greater scope exists over locations for the working of other resources such as aggregates and building stone, where their relationship with sources of demand and transportation infrastructure can more readily influence spatial patterns.
- 1.5 The purpose of this paper is to provide the basis for the appraisal of the options for delivering the spatial strategy objective identified above by:

- ◆ reviewing the relevant policy guidance;
 - ◆ identifying the key influences on the spatial patterns of mineral development; and
 - ◆ outlining an approach to a spatial strategy for further development by DCC, DNPA, PCC and TC in their individual Plans.
- 1.6 This report should be read in conjunction with the accompanying reports on minerals of national importance, aggregates and local building materials as the patterns of supply of these minerals strongly influence the options for a spatial strategy.
- 1.7 For the purposes of this Topic Paper, the term ‘Devon’ refers to the whole of the historic county including Plymouth, Torbay, Dartmoor National Park and that part of Exmoor National Park within the county. That part of Devon for which Devon County Council is the mineral planning authority is referred to as ‘the DCC area’.

2. RELEVANT POLICY AND GUIDANCE

2.1. The **National Planning Policy Framework [NPPF]** recognises that “minerals...can only be worked where they are found” (142), but does not provide any minerals-specific guidance on the spatial pattern of mineral working. However, other parts of the NPPF provide more general guidance to inform a minerals spatial strategy:

- supporting a prosperous rural economy (28);
- supporting a pattern of development that facilitates the use of sustainable modes of transport (30) and working with neighbouring authorities on the provision of transport infrastructure to support development including rail freight interchanges and ports (31);
- ensuring that developments generating significant movement are located where the need to travel is minimised and the use of sustainable transport modes is maximised (34);
- plan for new development in locations and ways that reduce greenhouse gas emissions (95);
- direct development away from areas at risk of flooding (100);
- allocating land of least environmental or amenity value (110), and take into account the benefits of the best and most versatile agricultural land (112);
- give great weight to conserving landscape and scenic beauty in National Parks and Areas of Outstanding Natural Beauty, and refuse permission for major developments in these areas other than in exceptional circumstances and in the public interest;
- minimise impacts on biodiversity and geodiversity by planning at a landscape-scale across local authority boundaries, identifying ecological networks and considering Nature Improvement Areas (117), and protecting designated nature conservation sites and ancient woodland (118);
- assess the significance of heritage assets and their settings and minimise conflict between a proposal and the asset’s conservation (129), and regard substantial harm to or loss of designated heritage assets, including World Heritage Sites, as being exceptional (133);
- indicate broad locations for strategic development on a Local Plan key diagram and land-use designations on a proposals map, identify land where development would be inappropriate, and provide a clear strategy for enhancing the natural, built and historic environment (157); and
- work collaboratively with other bodies across administrative boundaries to ensure that strategic priorities are properly coordinated and clearly reflected in individual Local Plans (179).

- 2.2 The Government's **Planning Practice Guidance** for minerals reiterates the limited scope for mineral working and recognises that "location options for the economically viable and environmentally acceptable extraction of minerals may be limited". This Guidance also highlights the need to consider "the cumulative impact of proposals in an area".

3. KEY INFLUENCES ON THE SPATIAL STRATEGY: SETTLEMENTS, TRANSPORT AND ENVIRONMENT

3.1 Devon's Settlements

3.1.1 The county of Devon includes the unitary authorities of Plymouth and Torbay, together with Dartmoor National Park and part of Exmoor National Park. This area extends to 2,590 square miles and has a population of 1.15 million, and is predominantly rural with its largest settlements located on or close to its coastline. Plymouth's population is 259,200, with Torbay at 132,100, while Dartmoor National Parks' population is estimated at 34,000.

3.1.2 The area for which DCC is the mineral planning authority excludes the unitary authorities and National Parks. The major centre of population is Exeter (120,000), with the next largest towns being Exmouth (36,000), Newton Abbot (25,000) and Barnstaple (25,000). With the exception of the cluster of towns in northern Devon, the main settlements are broadly located within the M5/A38 corridor of eastern and southern Devon.

Devon Structure Plan 2001 to 2016

3.1.3 The Devon Structure Plan 2001 to 2016¹ was adopted in 2004 and covered Devon with the exception of Exmoor National Park. While the Structure Plan was formally revoked in May 2013 and no longer forms part of the development plan, its approach remains of interest as a basis for considering the spatial strategy for the emerging Minerals/Local Plans. Demand for aggregate minerals quarried in Devon is closely linked to the distribution of Devon's existing population and businesses and planned development.

3.1.4 The Structure Plan identified a Devon Strategy that had the following key elements:

Principal Urban Areas

Plymouth, Exeter and Torbay were identified as Principal Urban Areas (PUAs) to act as the primary focus for strategic development and provide for the bulk of Devon's new housing and economic development.

New Communities

Two new communities – one to the east of Plymouth and the other to the east of Exeter – were identified to contribute to meeting strategic development needs of those PUAs.

Sub Regional Centres

Barnstaple and Newton Abbot were defined as Sub Regional Centres (SRCs) with an important role in meeting strategic development needs in their areas.

¹ http://www.devon.gov.uk/structure_plan_2001_to_2016.htm

Area Centres

Area Centres were not individually identified in the Structure Plan, but they were regarded as being able to achieve a balance of development that promotes a high degree of self-containment and vitality and helping to meet the needs of the wider rural community.

- 3.1.5 Since the Structure Plan has been revoked and no longer forms part of the development plan for Devon, consideration should be had to the adopted and emerging Local Plans of the county's local planning authorities to establish the continuing of the Devon Strategy outlined above.

Unitary, National Park and District Local Plans

- 3.1.6 Following revocation of the Devon Structure Plan and the Regional Spatial Strategy, strategic planning is undertaken by the unitary, national park and district planning authorities preparing Local Plans in compliance with the Duty to Cooperate.

Plymouth

- 3.1.7 The emerging Plymouth Plan¹ has a strategic objective "to consolidate and strengthen Plymouth's role as the major regional city in the south west peninsula, enhancing its contribution to the economic and social wellbeing of the south west and providing the major commercial, service and employment centre". This objective will have the outcome of supporting an increased population of over 300,000 and economic growth by 2031.
- 3.1.8 Delivery of the housing requirement of at least 22,766 new dwellings by 2031 will be met through 15,500 of these being accommodated within the City and 5,180 within the Sherford new community, leaving a balance of 2,086 dwellings to be delivered in other urban fringe locations in adjoining districts.

Torbay

- 3.1.9 The adopted Torbay Local Plan² identifies the role of Torbay as "a main urban centre and premier resort" to be reinforced by new development amounting to 8,900 houses and 5,000-5,500 net additional jobs to 2030. The Plan anticipates that this level of growth can be accommodated within Torbay without reliance on adjoining areas, and eight 'strategic delivery areas' are shown.

Dartmoor National Park

- 3.1.10 The Dartmoor Core Strategy³ was adopted in June 2008, and identifies eight of its larger settlements (Ashburton, Buckfastleigh, Chagford, Horrabridge, Moretonhampstead, Princetown, South Brent and Yelverton) as local centres to accommodate appropriate development to serve their needs and those of their hinterlands.

¹ Available at http://www.plymouth.gov.uk/draft_plymouth_plan_part_1.pdf

² Available at <http://www.torbay.gov.uk/index/yourservices/planning/strategicplanning/newlocalplan.htm>

³ Available at http://www.dartmoor-npa.gov.uk/_data/assets/pdf_file/0012/43203/pl-core_strategy_adopted-2.pdf

- 3.1.11 The Development Management DPD adopted in July 2013 adds detailed development management policies and identifies areas for development in the Local Centres.
- 3.1.12 The level of development in the National Park reflects a locally derived need rather than strategic growth, an approach which reflects the 'great weight' given to National Parks in the NPPF, and the guidance of the English National Parks and the Broads UK Government Vision and Circular 2012.

Exmoor National Park

- 3.1.13 The Publication Draft Exmoor Local Plan¹ was published in June 2015, with consultation until 31st July 2015. Within that part of the National Park within Devon, identifies Lynton and Lynmouth as one of three local service centres within the Park as a whole. These centres provide the widest range of services and are therefore most suitable, in principle, for new development to consolidate employment and services.

East Devon

- 3.1.14 The spatial strategy for the submitted East Devon Local Plan² has the following elements:
- the district's West End will accommodate significant residential development and major employment development to attract strategic inward investment;
 - the seven main towns (Axminster, Budleigh Salterton, Exmouth, Honiton, Ottery St Mary, Seaton and Sidmouth) will form focal points for development to serve their own needs and those of surrounding rural areas; and
 - development in smaller towns, villages and rural areas will be geared to meeting local needs.

Exeter

- 3.1.15 The vision within the adopted Core Strategy³, adopted in 2012, states that Exeter "will embrace its role in the region as an area of growth" through provision of housing and employment, including through three urban extensions, and recognises that its strategic role will require significant new development within adjoining areas including a new settlement and urban extension to the east. Provision is made for 12,000 dwellings and around 60 hectares of employment land within Exeter during the period 2006-2026.

¹ Available at <http://www.exmoor-nationalpark.gov.uk/planning/planning-policy/new-local-plan/publication-draft-local-plan>

² Proposed Submission (Publication) version incorporating post-publication changes (July 2013) and further changes (April 2015), available at <http://eastdevon.gov.uk/media/1060693/psd2015a-local-plan-tracked-changes-consultation-apr-2015.pdf>

³ Available at <http://www.exeter.gov.uk/CHttpHandler.ashx?id=16913&p=0>

Mid Devon

- 3.1.16 The Mid Devon Core Strategy was adopted in 2007 and provides a spatial strategy that identifies the market towns, of Tiverton, Cullompton, Crediton and, with a more limited role, Bampton as the main foci for development in scale with their infrastructure, economy and constraints. Villages will see limited development to provide for local need.
- 3.1.17 Mid Devon District Council consulted on its Local Plan Review (2013-2033)¹ in 2015, with Cullompton identified as the strategic focus of new development for the medium to long term. Tiverton and Crediton are identified as the secondary focuses of new development, recognising their environmental constraints in comparison with Cullompton, together with a network of villages for limited development.

North Devon and Torridge

- 3.1.18 The emerging North Devon and Torridge Local Plan (for which consultation on main changes took place in March to May 2015 prior to submission)² proposes a spatial development strategy for the two districts based on a hierarchy of settlements:
- Barnstaple is identified as a sub-regional centre that will be the focus for future growth in northern Devon;
 - as a strategic centre, Bideford will provide a focus for housing and employment development; and
 - the six main centres (Braunton and Wrafton, Great Torrington, Holsworthy, Ilfracombe, Northam and South Molton) will support appropriate levels of growth to meet their needs and those of surrounding communities.

South Hams

- 3.1.19 The South Hams Core Strategy³ was adopted in 2006 prior to revocation of the Structure Plan, and identifies a spatial strategy consistent with the latter. This comprises five area centres (Dartmouth, Ivybridge, Kingsbridge, Sherford new community and Totnes), five local centres and a large number of villages, together with five locations for employment development (Langage, Lee Mill, Roborough, Torr Quarry and Wrangaton).

Teignbridge

- 3.1.20 The Teignbridge Local Plan⁴, adopted in May 2014, focuses new development on the Heart of Teignbridge, comprising Newton Abbot, Kingskerswell and Kingsteignton, as indicated in the following table.

¹ Available at https://new.middevon.gov.uk/media/114000/local_plan_proposed_submission.pdf

² Publication Draft version (June 2014) as amended by proposed main changes available at <http://consult.torridge.gov.uk/portal/planning/localplan/mainchanges>

³ Available at <http://www.southhams.gov.uk/CHttpHandler.ashx?id=3672&p=0>

⁴ Available at <http://www.teignbridge.gov.uk/localplan>

Settlement/Area	Distribution of Employment Development	Distribution of New House Building
Heart of Teignbridge	60%+	50%
South West Exeter	5%+	15%
Dawlish	3%+	10%
Bovey Tracey	3%+	5%
Chudleigh		5%
Teignmouth		5%

3.1.21 Newton Abbot is identified as the “business, educational, leisure and retail centre for South Devon.

West Devon

3.1.22 The West Devon Core Strategy¹, adopted in April 2011, identifies Okehampton and Tavistock as the main towns in which development will be concentrated. Four local centres are identified at Bere Alston, Hatherleigh, Lifton and North Tawton to accommodate limited development and provide services for their surrounding areas.

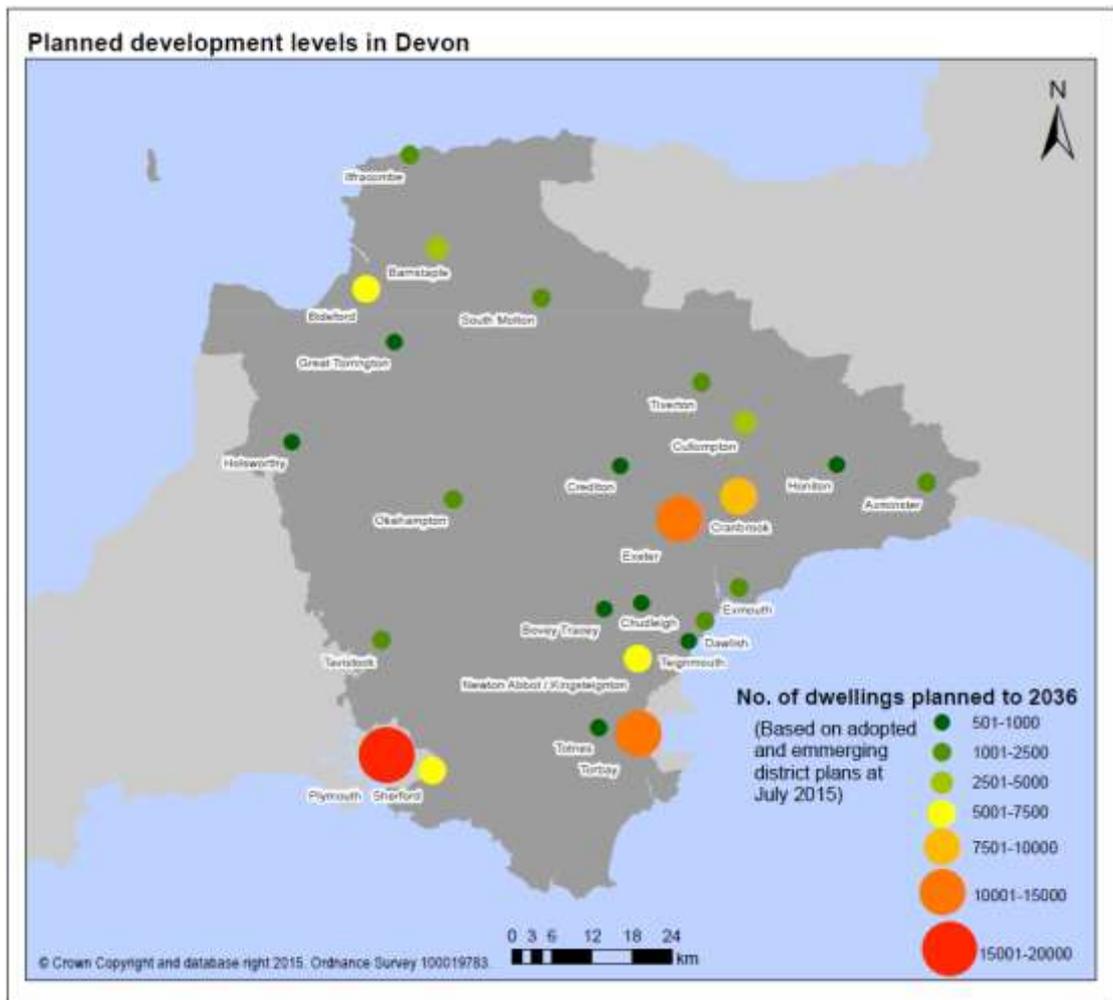


Figure 3.1: Planned Development Levels in Devon (excluding settlements with projected growth below 500 houses)

¹ Available at <http://www.westdevon.gov.uk/CHttpHandler.ashx?id=3745&p=0>

3.1.23 West Devon Borough Council consulted on the Publication Version¹ of the West Devon Plan in February 2015, and this maintains the same settlement classification as the Core Strategy.

Synthesis

3.1.24 The main elements of the settlement hierarchy proposed in the Structure Plan remain consistent with the Local Plans subsequently adopted or under preparation. As is illustrated in Figure 3.1, the three largest concentrations of future housing development in Devon are Plymouth (including Sherford), Exeter (including Cranbrook) and Torbay. Newton Abbot and Barnstaple, identified as Sub Regional Centres in the Structure Plan, retain that role in the relevant Local Plans and are planned to accommodate significant levels of growth.

3.1.25 The Structure Plan did not define the next level of the settlement hierarchy, Area Centres, with responsibility for this delegated to Local Plans. The preceding review of Devon’s adopted and emerging Local Plans indicates that those outside of Plymouth, Torbay and Exeter each define a hierarchy of their settlements that, while not wholly consistent in terminology, provide a robust basis for defining Devon’s settlement pattern, as outlined in Table 3.1 and illustrated in Figure 3.2.

Settlement Level	Settlement
Principal Urban Area	Exeter (including West End and South West Exeter)
	Plymouth (including Sherford)
	Torbay
Sub-regional Centre	Barnstaple
	Newton Abbot
Area Centre	Axminster
	Bideford
	Bovey Tracey
	Braunton and Wrafton
	Budleigh Salterton
	Chudleigh
	Crediton
	Cullompton
	Dartmouth
	Dawlish
	Exmouth
	Great Torrington
	Holsworthy
	Honiton
	Ilfracombe
	Ivybridge
	Kingsbridge
Kingskerswell	
Kingsteignton	
Northam	
Okehampton	

¹ Available at <http://www.westdevon.gov.uk/CHttpHandler.ashx?id=12825&p=0>

	Ottery St Mary
	Seaton
	Sidmouth
	South Molton
	Tavistock
	Teignmouth
	Tiverton
	Totnes

Table 3.1: Devon's Settlement Hierarchy

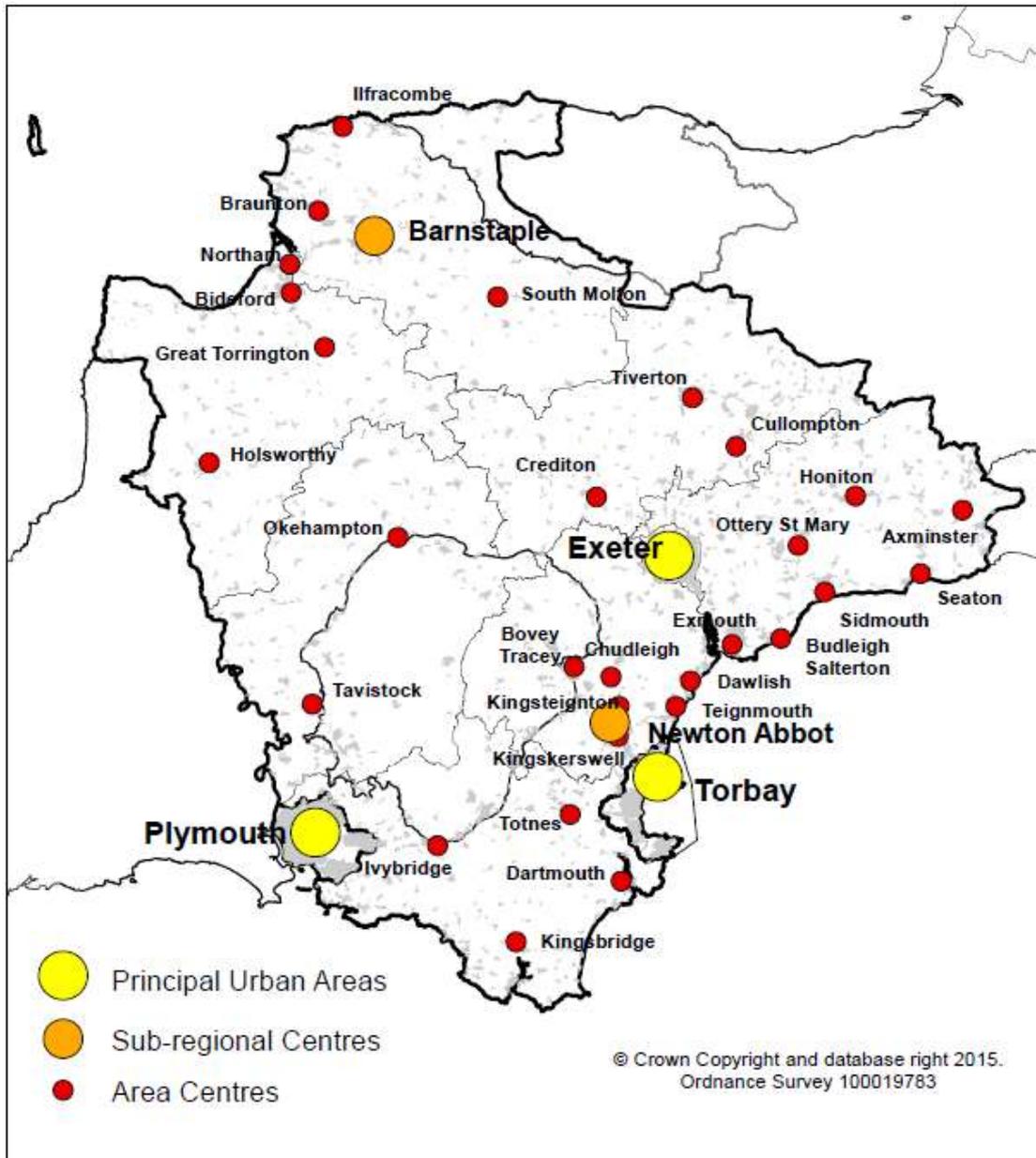


Figure 3.2: Devon's Settlement Hierarchy

3.2 Devon's Transport

3.2.1 The transportation of minerals produced in Devon to markets within and outside the county by road, rail and water creates a strong link between

spatial options for future mineral working and Devon's strategic transportation network.

- 3.2.2 As 85-90% of aggregates produced in Devon stay within the county, it is unsurprising that their transportation is almost wholly by road. Exceptions to this include the movement of a small proportion of the limestone from Moorcroft Quarry in Plymouth by sea.
- 3.2.3 In contrast, ball clay and china clay (and potentially tungsten) mainly serve markets outside the UK and transportation of these minerals is undertaken mainly by water from the ports of Plymouth, Bideford and Teignmouth within Devon and from Bristol and Southampton.

Devon and Torbay Local Transport Plan 3 2011-2026¹

- 3.2.4 The strategy within the Local Transport Plan [LTP] prepared by Devon County Council and Torbay Council has the following key objectives:
- deliver and support new development and economic growth;
 - make best use of the transport network and protect the existing transport asset by prioritising maintenance;
 - work with communities to provide safe, sustainable and low carbon transport choices;
 - strengthen and improve the public transport network; and
 - make Devon the 'Place to be naturally active'.
- 3.2.5 Minerals development can contribute to these objectives through its location in relation to accessibility to markets, use of rail and water transport modes in preference to road where feasible, having regard to impacts of mineral transportation on local communities, and provision of the materials necessary for the development and maintenance of Devon's transport infrastructure.
- 3.2.6 The LTP includes an illustration of Devon's strategic transport links, provided in Figure 3.5.

Plymouth Local Transport Plan 2011-2026²

- 3.2.7 Plymouth City Council's LTP has the following headline objectives:
- link communities together;
 - high quality transport standards for a vibrant city;
 - make walking, cycling and public transport the desirable choice;

¹ Available at http://www.devon.gov.uk/index/transportroads/devon_local_transport_plan/ltp3.htm

² Available at <http://www.plymouth.gov.uk/homepage/transportandroads/policyandplanning/ltp/ltp2011-2026.htm>

- maximise the transport contribution to Plymouth's carbon reduction target (60% reduction by 2020); and
- use transport to drive the local economy.

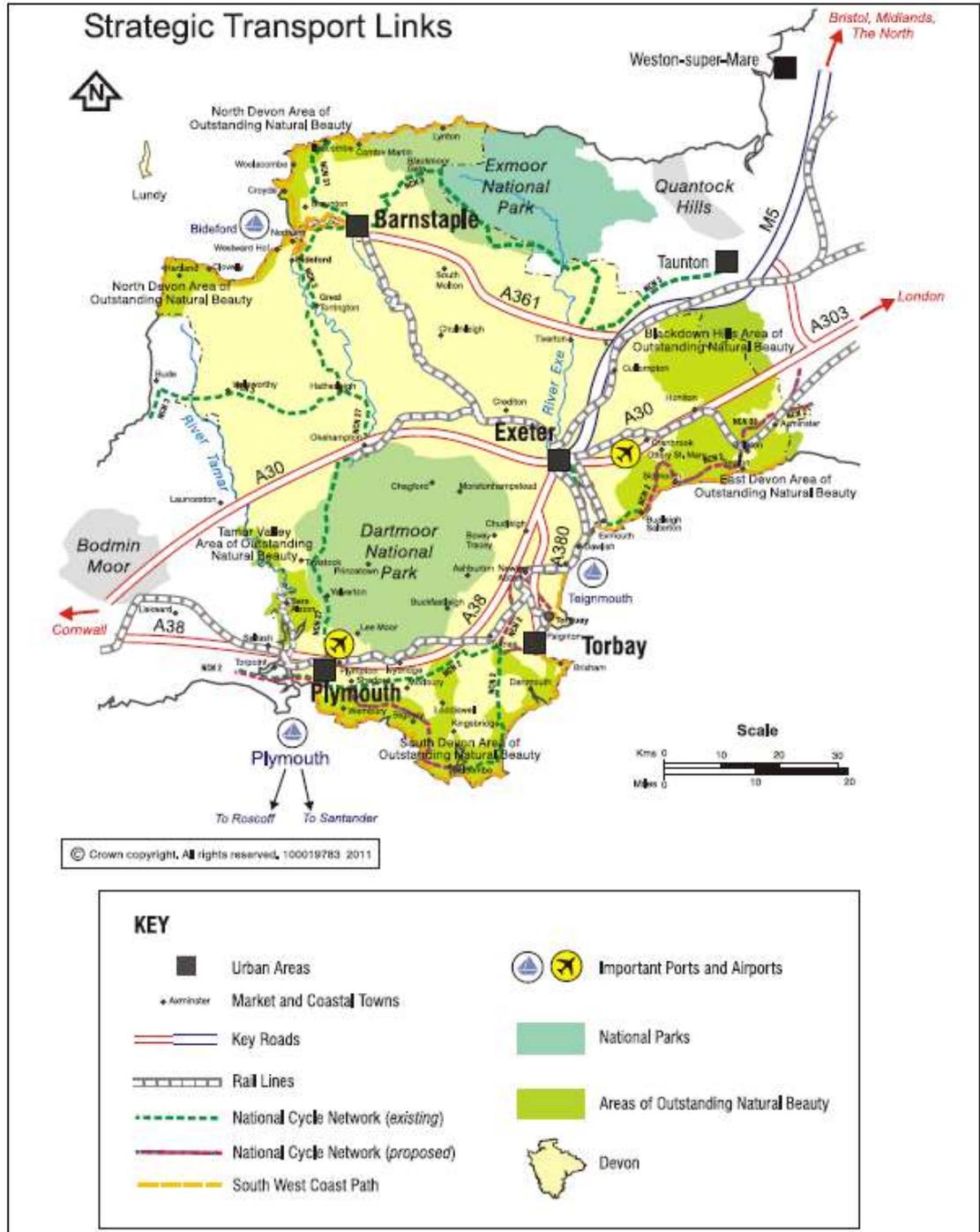


Figure 3.3: Devon's Strategic Transport Links

3.2.8 Plymouth provides an important role in enabling the movement of minerals from within and outside the city by sea, thereby supporting the wider area's economy.

3.3 Devon's Environment

- 3.3.1 As well as yielding a wide range of mineral resources, Devon's geology has played a strong role in creating its outstanding landscape including its protected areas. The county also has a rich cultural heritage and biodiversity that are recognised through statutory and other designations.
- 3.3.2 Development of a spatial strategy for minerals in Devon clearly needs to take account of the constraints on development arising from the presence of protected landscapes and other cultural and natural assets. However, it is considered that the broad pattern of mineral development should be most strongly influenced by environmental designations of national and international origin and of an extent capable of steering this broad pattern, rather than taking into account all designations of smaller extent – such as listed buildings and small Sites of Special Scientific Interest. The key designations to be taken into account in developing a spatial strategy – National Parks, AONBs, World Heritage Sites, UNESCO Biosphere Reserve and Natura 2000 sites – are illustrated in Figure 3.6.
- 3.3.3 While some of these designations appear to be of limited extent in Figure 3.6, their influence on development can be greater than suggested. A notable example is the South Hams Special Area of Conservation which consists of a number of small sites in South Devon that accommodate the roosts of Greater Horseshoe Bats. The wider influence of this SAC is indicated by the identification of sustenance zones of a 4km radius around each of the component roosts of the SAC (and a key undesignated roost in the Avon Valley), together with strategic flyways connecting the roosts and sustenance zones.
- 3.3.4 While avoidance of harm to environmental assets is clearly of major importance, the scope for positive benefits from the development and management of mineral sites should not be overlooked. All mineral sites are capable of providing enhanced biodiversity through their restoration, together with access for public recreation and recording and interpretation of archaeological features. The potential for such benefits is stronger with larger mineral sites or networks of sites, where a landscape-scale approach to green infrastructure provision is feasible.
- 3.3.5 Devon's minerals of national importance offer particular opportunities for coordinated provision of ecological enhancement (coinciding with Strategic Nature Areas of the Devon Nature Map¹) and other green infrastructure:
- within the Bovey Basin, where management of ball clay sites should be undertaken in coordination with other strategic development, informed by the Devon and Heart of Teignbridge Green Infrastructure Strategies;
 - in the Petrockstowe Basin, building on the recent development of Meeth Quarry as a nature reserve; and
 - in the Lee Moor and Drakelands area, informed by the Devon and Plymouth Green Infrastructure Strategies.

¹ Available at <http://www.dbr.org.uk/rebuilding-devons-nature-map/>

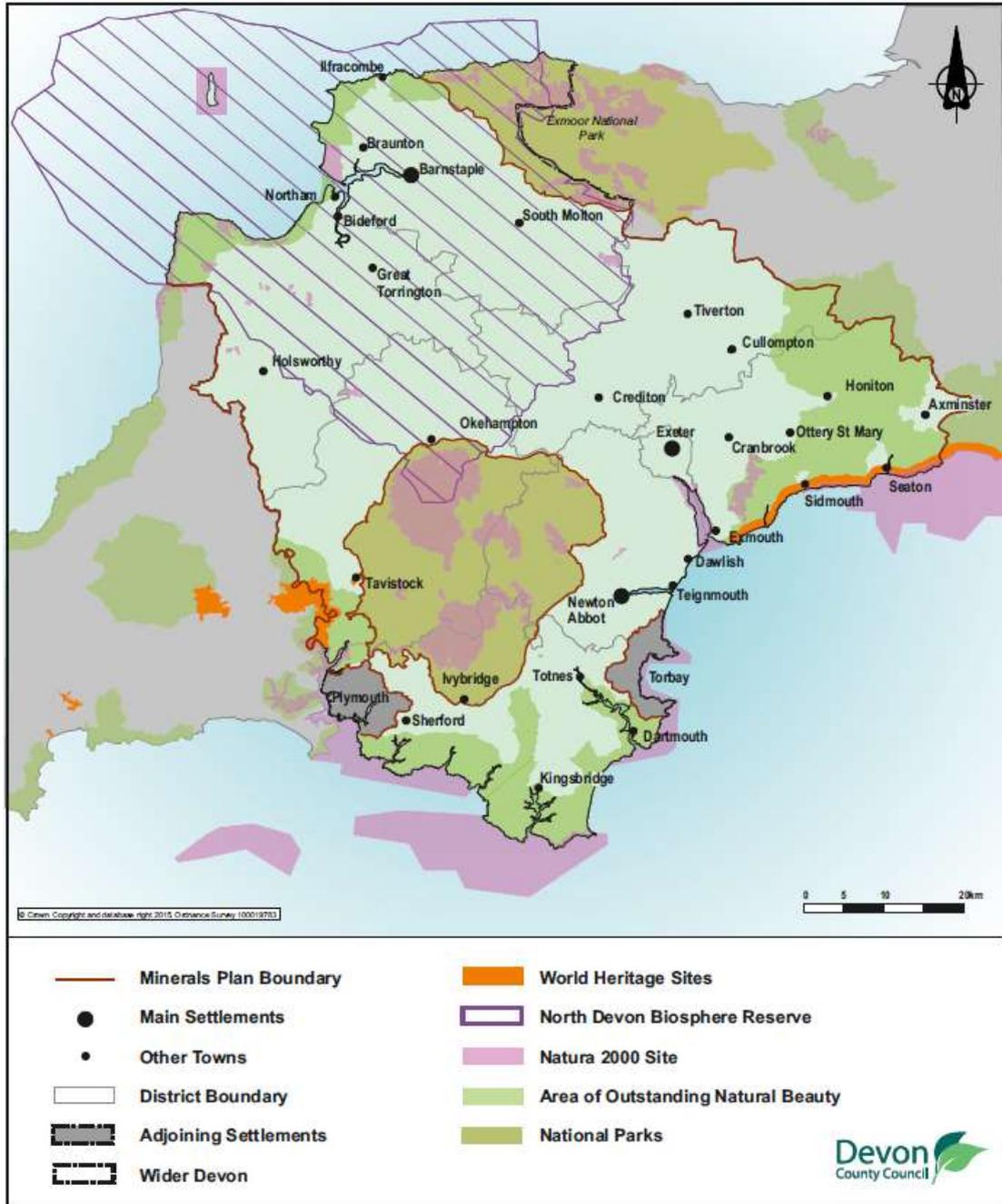


Figure 3.4: Key Environmental Designations

4. KEY INFLUENCES ON THE SPATIAL STRATEGY: MINERAL RESOURCES

4.0.1 While the previous chapter identified a number of factors that will contribute to a minerals spatial strategy for Devon, the location of the county's strategic mineral resources will clearly continue to have a strong influence. The long-established truism that minerals can only be worked where they occur remains, but there is an opportunity to develop a spatial strategy that allows choices to be made on the location of future mineral working and infrastructure for the processing and transportation of minerals, but also recognises the constraints and opportunities arising from the wider influences described in Chapter 3.

4.1 Current Pattern of Mineral Working in Devon

4.1.1 Based on levels of production in recent years, strategic mineral sites in Devon (i.e. those producing minerals of national importance or making a significant contribution to delivering the sub-regional aggregates apportionment) comprise the following (within DCC Area unless indicated otherwise):

Ball Clay	Bovey Basin Petrockstowe Basin
China Clay	Lee Moor Complex
Tungsten and Tin	Drakelands Mine
Limestone	Westleigh Stoneycombe Linhay Hill (Dartmoor National Park) Moorcroft (Plymouth)
Sandstone	Bray Valley
Igneous Rock mothballed	Meldon (Dartmoor National Park) – currently
Sand and Gravel	Whiteball Hillhead ¹ Blackhill area ²

4.1.2 Production of sand and gravel also currently occurs on a smaller scale at Babcombe Copse/Sands Copse and Zig Zag, both near Newton Abbot. Several small sandstone quarries operate in north-west Devon, mainly supplying lower grade aggregates to local markets.

¹ Production at Hillhead has currently ceased, but material has been sold from stockpiles and substantial reserves remain

² Including Rockbeare Quarry and Venn Ottery from which materials have been transported to Blackhill for processing

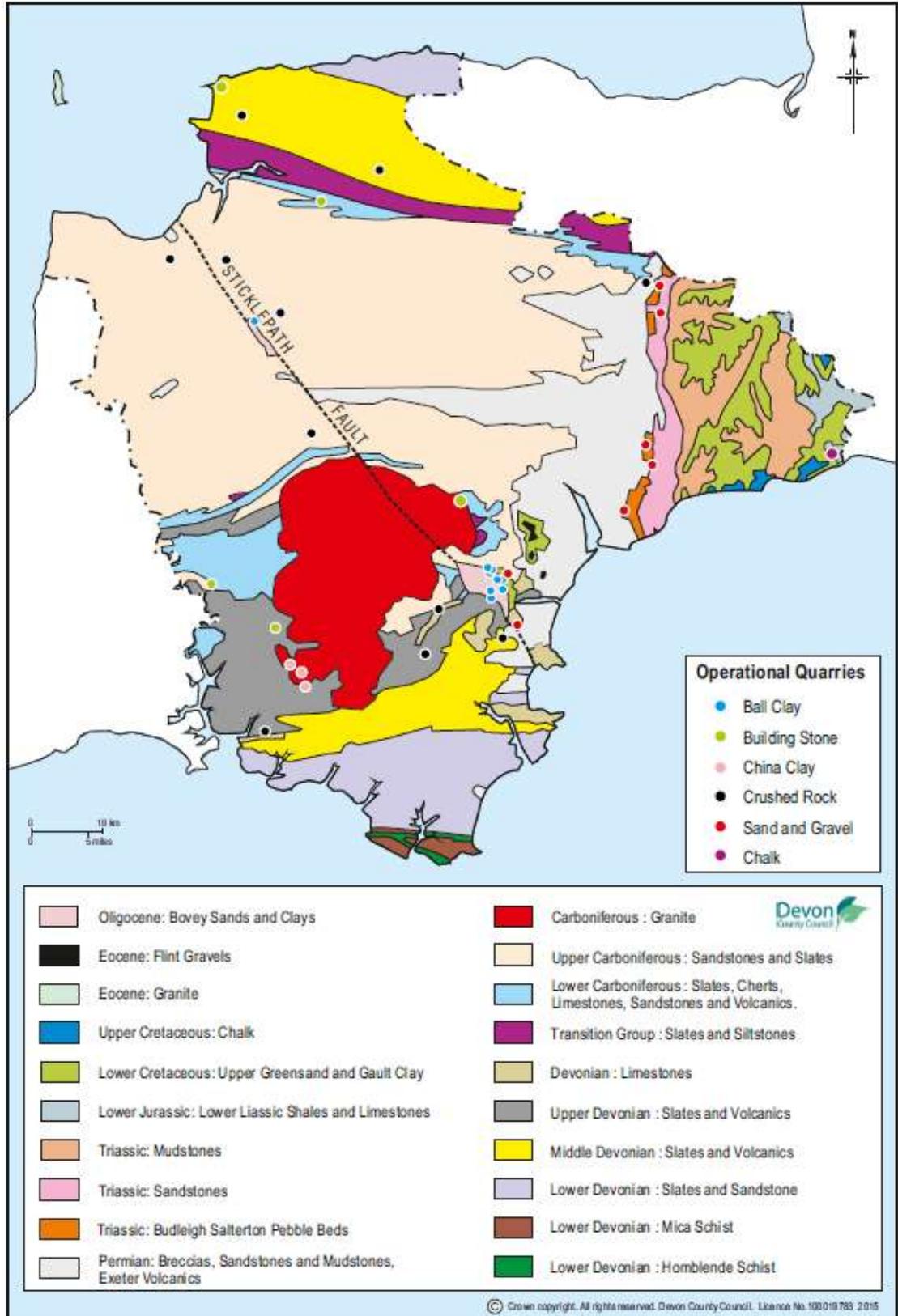


Figure 4.1: Devon's Geology and Quarries

4.1.4 On a smaller scale, building stone is produced at several quarries in Devon, with these being located predominantly in northern and western Devon.

- 4.1.5 Devon's two brick clay quarries have ceased production and their associated brickworks closed, and it is assumed that there is no scope for future production.

4.2 Potential Strategic Mineral Resources for Future Working

Industrial Minerals

- 4.2.1 Devon's industrial mineral resources of national importance occur in well-defined locations with no scope for the development of alternative locations other than on a localised scale. Ball clay resources within Devon are found in the Bovey and Petrockstowe Basins, which both contain extensive areas of permitted reserves together with further unpermitted resources. China clay is worked in the Lee Moor area on the south west margin of Dartmoor and, while working briefly occurred at Red Lake on Dartmoor in the early 20th century, it is considered that further working outside of the current working areas would not be viable.
- 4.2.2 Working of metalliferous minerals has taken place extensively in Devon in the past, particularly within and on the fringes of Dartmoor and in the Tamar Valley. However, the only site with a current planning permission for metalliferous mining is Drakelands near Plymouth, where extraction of tungsten and tin recommenced in 2015. The British Geological Survey¹ has stated that, although the South West "remains prospective for the discovery of high-grade tin and copper vein-style deposits...it is likely that any new discoveries would be at considerable depth which would require a substantial exploration investment". It is therefore considered that further metalliferous mineral extraction in Devon is unlikely to be economically viable other than at Drakelands during the timescale of the adopted and emerging Minerals/Local Plans of the Devon MPAs.

Aggregate Minerals

- 4.2.3 The assessment of aggregate mineral resources commissioned by Devon County Council² provides guidance on the resources that have potential to be of economic value in the future. A more detailed discussion of the assessment's conclusions is provided in the Topic Paper for aggregates, but the key findings of relevance to the spatial strategy are:
- ♦ the sand and gravel resource with best potential is the Budleigh Salterton Pebble Beds in eastern Devon, which reflects the recent pattern of production outlined above. While the southern extent of the Pebble Beds resource is constrained by European nature conservation designations and the Area of Outstanding Natural Beauty, there are significant outcrops outside of these designations (including two areas that were put forward in response to the Council's 'call for sites' for aggregate resources³);
 - ♦ other resources have moderate or moderate-good potential, including the currently-worked formations of Upper Greensand and Aller Gravels,

¹ Mineral Planning Factsheet: Metals (2007)

² Jacobs (2010) 'Assessment of Sand & Gravel, Crushed Rock and Secondary Aggregate Resources in the County of Devon'

³ Report available at: <http://www.devon.gov.uk/mcs-callforaggregatessites.pdf>

together with the Dawlish Sandstone and Otter Sandstone (with the 'call for sites' resulting in two sites being proposed in the Dawlish Sandstone, two in the Upper Greensand near Kingsteignton and one in the Aller Gravels);

- ◆ superficial deposits in the form of river terrace gravels, alluvium and estuarine deposits were considered to have low to moderate potential, and this is reflected in the absence of any sites yielding these resources being submitted in response to the 'call for sites';
- ◆ Devon's limestone resources have good potential, although the Devonian deposits in the south of the county are structurally complex and should be further assessed through exploration, while the Westleigh limestone has a restricted outcrop;
- ◆ of the wide range of sandstone resources, the Crackington Formation has the best potential for high-specification materials, together with parts of the Bude Formation. Some of the Devonian sandstones to the north of Barnstaple also have good potential, subject to the proportion of interbedded shales and siltstone;
- ◆ the Dartmoor granite and its metamorphic aureole have good potential but are heavily constrained by the National Park designation. Of the remaining igneous rocks, dolerite offers the best potential but is often affected by weathering and would therefore need evaluation on an individual site basis;
- ◆ of the secondary aggregate resources, china clay waste offers the greatest potential, and waste from future tungsten working could yield substantial volumes of secondary aggregates.

4.2.4 Taking account of these findings, it is likely that:

- (a) future supply of sand and gravel will continue to be predominantly from the Budleigh Salterton Pebble Beds, with the potential for smaller-scale supply from other resources around Exeter and Newton Abbot;
- (b) the need for future crushed rock resources will centre upon the Devonian and Carboniferous limestone resources currently worked, together with smaller-scale working of igneous/metamorphic and sandstone resources and the potential for high-specification aggregates in certain sandstone resources of northern Devon; and
- (c) secondary aggregate production will continue to be centred on the area to the north east of Plymouth.

4.2.5 Recycled aggregates will continue to be produced from Devon's arisings of construction and demolition waste, and it is likely that sites for processing will continue to be located close to the urban areas that are the main sources of the waste materials.

5. KEY INFLUENCES ON THE SPATIAL STRATEGY: CROSS BORDER ISSUES

- 5.0.1 While containing mineral resources such as ball clay and china clay that serve markets elsewhere in Britain and overseas, Devon is broadly self-sufficient in aggregate minerals, with most output of primary aggregates used within the county¹ and relatively little need for aggregates to be brought in from elsewhere in the UK (the main exception being high-PSV materials).
- 5.0.2 To inform preparation of the emerging Minerals/Local Plans, Devon County Council has published a Cross-boundary Minerals Issues Scoping Report² that reviews the adopted and emerging minerals policies of the MPAs within and adjoining Devon and identifies the relevant cross-boundary issues.
- 5.0.3 While reference should be made to the Scoping Report for a fuller account of the cross-boundary issues, the following provides a summary:

Intra-Devon Issues

- the safeguarding of: mineral resources (limestone, china clay and ball clay) that straddle MPA boundaries; building stone resources that may be required in another MPA's area; quarries adjacent to another MPA's boundary; and infrastructure for the transportation or processing of minerals originating in another MPA's area;
- the relationship between the potential extension of tungsten extraction at Drakelands, development on the Plymouth fringe and impact upon Dartmoor National Park;
- planning for the maintenance of mineral landbanks, as far as is practical, from outside the National Parks; and
- formalisation of the relinquishment of permissions for china clay extraction and tipping within that part of the Lee Moor operations within Dartmoor National Park.

Issues Between Devon and Other Counties

- the safeguarding of mineral resources and existing quarries that abut the Devon's boundaries, and a consistent approach to safeguarding;
 - maintenance of a sub-regional sand and gravel landbank;
 - consistency in approaches to supply of ball clay and building stone.
- 5.0.4 Cooperation by the individual Devon MPAs with each other and with adjoining counties will need to be undertaken to ensure compatibility of Minerals/Local Plans. However, the issues identified in 5.0.3 are considered not to have significant implications for a Devon minerals spatial strategy other than

¹ In 2009, 90% of sand and gravel and secondary aggregates and 85% of crushed rock produced in Devon were sold for use within the county

² Available within Evidence Base at <https://new.devon.gov.uk/planning/planning-policies/minerals-and-waste-policy/devon-minerals-plan>

avoiding replenishment of landbanks from within the National Parks and the safeguarding of transportation infrastructure.

6. Developing a Spatial Strategy

6.1 Factors Influencing Development of a Spatial Strategy

6.1.1 The preceding three chapters have considered a range of factors capable of influencing a spatial strategy for the development of mineral resources in Devon, including the location of mineral resources, patterns of future housing and economic growth, transportation, environmental assets and the influence of adjoining areas. There are several key factors that either limit the scope or strongly influence the direction of a spatial strategy, and these are listed below:

- the main foci for housing and commercial growth in and around Devon will be the PUAs of Plymouth, Torbay and Exeter and the SRCs of Newton Abbot and Barnstaple, and these are therefore likely to be the key markets for aggregates produced in Devon;
- outside of the PUAs and SRCs, new development will be more limited, but still significant in towns such as Bideford;
- areas with potential for conflict between mineral resources and strategic non-mineral development include the Newton Abbot area where development is proposed in proximity to ball clay and sand and gravel resources, and the Plymouth fringe near Hemerdon;
- the NPPF presumes against major mineral development in National Parks and Areas of Outstanding Natural Beauty and, as far as is practical, against the maintenance of landbanks from within those areas together with World Heritage Sites, Scheduled Monuments and Conservation Areas;
- economic minerals of national importance are likely to be limited to those locations that are currently worked, and these are capable of yielding considerable volumes of secondary aggregates;
- the pattern of strategic crushed rock aggregate production shows a trend towards concentration at the limestone quarries located close to the M5 and A38 routes, with working outside these areas largely being limited to quarries producing materials for uses which limestone is unsuitable;
- strategic sand and gravel production from primary sources is likely to remain restricted to the Budleigh Salterton Pebble Bed deposits of eastern Devon, with more limited production for local markets from other resources around Newton Abbot;
- significant volumes of secondary aggregates will continue to be available from the mineral waste arising in the Lee Moor area, the Bovey Basin and (potentially) Drakelands, while recycled aggregates are likely to continue to be produced at larger quarries and at waste recycling facilities located close to the main settlements; and

- building stone production is concentrated in northern and western Devon, with large areas of eastern and southern Devon having no sources of locally-distinctive stone.
- 6.1.2 Taking account of the above considerations, it is considered that a minerals spatial strategy for Devon should be capable of achieving three key aims:
- the delivery of mineral resources with minimal transportation by road (i.e. through the location of mineral working close to markets and/or through the transportation of minerals by rail or water);
 - the protection of Devon's key environmental assets (i.e. areas and sites that are subject to national or international designations); and
 - contributing to Devon's economy (i.e. through the steady and adequate supply of mineral resources, the provision of employment and supporting the county's strategic non-mineral development requirements).
- 6.1.3 Given the factors listed above and the restricted distribution of Devon's strategic mineral resources, it is considered that there is limited scope to develop options for a minerals spatial strategy.
- 6.1.4 A key feature of Devon that runs as a thread through these various influences and which is capable of providing a strong framework around which to develop a spatial strategy is the M5/A38 corridor. As well as providing the main road route through the county, this corridor performs a number of other functions:
- it links Devon's three main urban areas and one of its sub-regional centres, together with a number of other main towns and the locations for the two new communities;
 - it contains the county's main rail route and its two major ports;
 - it contains the four limestone quarries that contribute 85% of Devon's crushed rock aggregates, together with the quarries that produce virtually all of the county's sand and gravel;
 - it contains the major part of Devon's resources of the minerals of national importance and associated secondary aggregates; and
 - it links Devon with its adjoining counties and much of the remainder of the UK.
- 6.1.5 The extent of the M5/A38 corridor should not be narrowly defined, but should include nearby urban and rural areas outside of the National Parks and Areas of Outstanding Natural Beauty that are within reasonable proximity to these routes.
- 6.1.6 Concentration of strategic minerals development within the M5/A38 corridor would meet the three key aims identified above, subject to avoidance of Dartmoor National Park and the AONBs that lie close to the routes and other key environmental assets (while recognising that these areas contain

operational quarries that currently supply aggregates). However, consideration will need to be given to the approach to minerals development to be taken in the areas outside of the M5/A38 corridor.

- 6.1.7 The main scope for variation of the spatial strategy is the extent of mineral development within the large area of northern and western Devon that falls outside of the National Parks and AONBs. While ball clay, sandstone and building stone resources exist within this area, accessibility to the main urban areas (with the exception of Barnstaple) and main transport corridors is of a lower level than within the M5/A38 corridor. This lower level of accessibility suggests that maintenance of the current smaller-scale provision of aggregates could be encouraged to minimise the need to transport materials from the M5/A38 corridor.
- 6.1.8 A further factor is the opportunity for any working on a small-scale within Devon's National Parks and AONBs. National policy rules out any new major mineral working in these areas, but the provision of new sources of local building materials could help to maintain the distinctive characters of these areas.

6.2 Assumptions Underpinning the Spatial Strategy

6.2.1 The following assumptions for the period to 2033 have been made in the development of a spatial strategy:

- the industrial minerals of national importance will continue to be worked in the Bovey Basin, Lee Moor/Drakelands area and Petrockstowe Basin, and will continue to provide a source of secondary aggregates from 'as dug' or tipped materials that will assist in diverting materials from surface tipping;
- the existing strategic crushed rock quarries (including those within Plymouth and Dartmoor National Park) will continue working, but there is no presumption of planning permission for further working within the National Park beyond existing permissions;
- the remaining reserves of sand and gravel will continue to be worked, with any new resources obtained from within the A38/M5 corridor and outside of any nationally or internationally designated environmental areas;
- existing non-strategic quarries will continue working for the duration of their planning permission;
- no new strategic resources will be developed within the AONBs;
- capacity for the processing of construction and demolition waste to produce recycled aggregates will be maintained in and around Devon's PUAs and SRCs; and
- existing wharf and railhead facilities for the transportation of aggregates will be retained.

6.3 The Devon Minerals Spatial Strategy

6.3.1 Taking account of the factors and assumptions outlined above, the following approach is proposed for consideration by the individual Devon MPAs in developing their minerals policies:

Sustainable mineral development in Devon will be achieved through a spatial pattern of mineral development that:

- (a) *minimises the distances and impacts of mineral transportation by road by:*
- *maintaining the concentration of strategic mineral working within the M5/A38 corridor that contains Devon's main urban areas and provides access by rail and water to markets outside the county;*
 - *allowing for the supply of high-value minerals that are unavailable within the M5/A38 corridor provided that any new sites are well-located in relation to other strategic transportation corridors; and*
 - *maintaining the availability of infrastructure for the movement of minerals by rail and water to/from locations outside Devon.*
- (b) *supports the county's economy by:*
- *ensuring the efficient supply of minerals to Devon's main urban areas and industrial sectors;*
 - *maintaining the contribution of the minerals industry to Devon's employment; and*
 - *avoiding constraint on the delivery of strategic non-mineral development and infrastructure unless there is an over-riding need for the mineral resource.*
- (c) *conserves and enhances the county's character and environment by:*
- *avoiding harm to the integrity, setting and special qualities of Devon's World Heritage Sites, National Parks and Areas of Outstanding Natural Beauty other than in exceptional circumstances and where development is in the public interest;*
 - *enhancing the supply, through small scale working, of locally-distinctive building stones from across Devon to maintain and strengthen the county's character; and*
 - *delivering large-scale green infrastructure and habitat re-creation where working of Devon's minerals of national importance coincide with Strategic Nature Areas and key green infrastructure opportunities.*

The supply of Devon's minerals of national importance will be maintained through continued working within the M5/A38 corridor at Lee Moor, Hemerdon

and the Bovey Basin, together with the Petrockstowe Basin in north west Devon.

Devon's requirements for aggregate minerals will be met through:

- maintenance of a network of facilities for production of recycled aggregates at or close to the county's main urban areas and strategic transportation corridors;*
- continued and optimised supply of secondary aggregates from within the M5/A38 corridor;*
- continued production at Devon's strategic crushed rock quarries, together with supply from quarries in north west Devon for local markets; and*
- maintenance of strategic sand and gravel production from within the Budleigh Salterton Pebble Beds, together with supply from quarries and/or prior extraction close to the main urban areas for local markets.*

7. Implications for Individual Mineral Planning Authorities

7.0.1 The uneven size of the individual Devon MPAs and distribution of mineral resources and infrastructure result in the spatial strategy proposed in the previous chapter having varying implications for each MPA. The following table therefore identifies the MPA(s) with responsibility for each element of the spatial strategy.

Element of Spatial Strategy	Relevant MPA(s)
Maintaining the concentration of strategic mineral working within the M5/A38 corridor that contains Devon's main urban areas and provides access by rail and water to markets outside the county	Dartmoor NPA Devon CC Plymouth CC
Allowing for the supply of high-value minerals that are unavailable within the M5/A38 corridor provided that any new sites are well-located in relation to other strategic transportation corridors	Devon CC
Maintaining the availability of infrastructure for the movement of minerals by rail and water to/from locations outside Devon	Dartmoor NPA Devon CC Plymouth CC
Ensuring the efficient supply of minerals to Devon's main urban areas and industrial sectors	Dartmoor NPA Devon CC Plymouth CC
Maintaining the contribution of the minerals industry to Devon's employment	Dartmoor NPA Devon CC Plymouth CC
Avoiding constraint on the delivery of strategic non-mineral development and infrastructure unless there is an over-riding need for the mineral resource	Dartmoor NPA Devon CC Plymouth CC
Avoiding harm to the integrity, setting and special qualities of Devon's World Heritage Sites, National Parks and Areas of Outstanding Natural Beauty other than in exceptional circumstances and where development is in the public interest	Dartmoor NPA Devon CC Torbay C
Enhancing the supply, through small scale working, of locally-distinctive building stones from across Devon to maintain and strengthen the county's character	Dartmoor NPA Devon CC Exmoor NPA Plymouth CC Torbay C
Delivering large-scale green infrastructure and habitat re-creation where working of Devon's minerals of national importance coincide with Strategic Nature Areas and key green infrastructure opportunities	Devon CC Plymouth CC
The supply of Devon's industrial minerals of national importance will be maintained through continued working within the M5/A38 corridor at Lee Moor, Drakelands and the Bovey Basin, together with the Petrockstowe Basin in north west Devon	Devon CC
Maintenance of a network of facilities for production of recycled aggregates at or close to the county's main urban areas and strategic transportation	Dartmoor NPA Devon CC Plymouth CC

corridors	Torbay C
Continued supply of secondary aggregates from within the M5/A38 corridor	Devon CC
Continued production at Devon’s strategic crushed rock quarries, together with supply from quarries in north west Devon for local markets	Dartmoor NPA Devon CC Plymouth CC
Maintenance of strategic sand and gravel production from within the northern and southern areas of the Budleigh Salterton Pebble Beds, together with supply from quarries and/or prior extraction close to the main urban areas for local markets	Devon CC

Table 7.1: Relationship of Spatial Strategy to Individual Devon MPAs