



Bournemouth, Dorset and Poole – Mineral Sites Plan

Pre-Submission Consultation Draft

Sustainability Appraisal

November 2017 - **with revisions September 2018**

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# 1. Introduction

- 1.1. This report constitutes the Strategic Environmental Assessment (SEA) and Sustainability Appraisal (SA) for the Pre-Submission Consultation of the Bournemouth, Dorset and Poole Mineral Sites Plan.
- 1.2. The main aim of the Sustainability Appraisal/Strategic Environmental Assessment (SA/SEA) is to promote sustainable development through the integration of social, environmental and economic considerations into the preparation of a new Local Plan. This document incorporates the requirements of a SEA for the Local Plan as required by the Planning and Compulsory Purchase Act 2004 and the European Directive on SEA (2001).

## **Bournemouth, Dorset and Poole Mineral Sites Plan**

- 1.3. Dorset County Council, Bournemouth Borough Council and Poole Council are Mineral Planning Authorities (MPAs), the statutory planning authority for all minerals matters within their administrative areas. Under the Planning and Compulsory Purchase Act (PCPA) it was required to develop a Minerals and Waste Development Framework comprising a set of documents that would guide minerals and waste planning in their areas. This requirement was modified by the Localism Act of 2011 which removed the need to prepare a specific Framework but which maintains the need to provide a Minerals and Waste Local Plan.
- 1.4. The Minerals Local Plan for Bournemouth, Dorset and Poole will consist of two inter-linked documents, the Minerals Strategy (including development management policies - adopted 2014) and the Mineral Sites Plan, currently in preparation, identifying the spatial locations required to deliver the Minerals Strategy. Collectively these documents will:
  - Set out the strategy for mineral provision in Bournemouth, Dorset and Poole
  - Identify where minerals could be worked in Bournemouth, Dorset and Poole in order to meet society's needs, and
  - Show how this can be achieved without compromising the unique environment of Bournemouth, Dorset and Poole.
- 1.5. The Mineral Sites Plan (MSP) identifies and designates the specific sites and areas required to deliver the component mineral strategies of the Minerals Strategy. It will also include additional policies to facilitate the supply of minerals and restoration of sites, including an aggregates Area of Search, a Puddletown Road site management and restoration policy and development of the Minerals Strategy approach to safeguarding of mineral sites and infrastructure.
- 1.6. The following work has been undertaken as part of the preparation of the MSP:
  - The Mineral Sites Allocation Document (MSAD) was published in 2008, setting out the range of site nominations (site options) received in response to a 'call for sites' issued in 2006/7.
  - Work on the MSAD was then put on hold in order to focus resources on the Minerals Strategy document. Work on the MSAD (renamed the Mineral Sites Plan) resumed in Summer 2012. Information previously received was reviewed and a second call for sites 'refresh' exercise was undertaken in August 2012 in order to update the list of sites to be considered as potential options for allocation.
  - The Mineral Sites Plan Consultation Document 2013-2014 was published for consultation from December 2013 to February 2014. Given the break in the process to prepare the Minerals Strategy, this document again simply set out site options, derived from the MSAD, and the renewed call for sites. The Mineral Planning Authority (MPA) did not offer any views on which sites were considered more favourable. A final call for sites was issued in April 2014, to seek to ensure that as many site options as possible were put forward for consideration.
  - In Summer 2015, the Draft Mineral Sites Plan was published for consultation. This draft version of the MSP set out the MPA's preferred options for sites. It also included proposals for an aggregates Area of Search, the Puddletown Road Policy Area and safeguarding of existing minerals sites. Supporting documents, including a Draft Sustainability Appraisal and Habitat

Regulations Appraisal, were also prepared and consulted on.

- Another consultation, the Draft MSP Update 2016, was undertaken between February and March 2017. This was both an update of some aspects of the MSP and consultation on additional site options. Again a Draft Sustainability Appraisal and Habitat Regulations Appraisal were prepared and consulted on. The outcomes of these consultations together with the responses to the calls for sites have informed the final list of allocated sites and other proposals in this Pre-Submission Draft MSP document.

1.7. Sustainability appraisal is a key assessment that must be undertaken and this document comprises the Sustainability Appraisal of the Draft Mineral Sites Plan. All of the site nominations, as options, together with other options and policies, have been assessed against a series of sustainability objectives to identify potential impacts and the appropriate mitigation for these impacts.

## 2. The Appraisal Methodology

### What is the SA/SEA? Why does it need to be done?

- 2.1. The purpose of Sustainability Appraisal (SA) is to ensure that sustainability issues are considered during the preparation of plans. The SA is an iterative process which identifies the likely effects of the Mineral Sites Plan (MSP), and the extent to which the MSP achieves economic, environmental and social objectives.
- 2.2. The SA must also incorporate the requirements of the European Directive 2001/42/EC on the 'assessment of the effects of certain plans and programmes on the environment'<sup>1</sup>. This is commonly referred to as the Strategic Environmental Assessment or 'SEA' Directive. This was transposed into UK law by the Environmental Assessment of Plans and Programmes Regulations 2004 (the SEA Regulations). Under these requirements, plans that set out the framework for future development consent of projects must be subject to an environmental assessment to determine if the plan, in this case the Minerals and Waste Local Plan, will have any significant effects on the environment. This context is reiterated in paragraph 165 of the National Planning Policy Framework (NPPF)<sup>2</sup>.

*"A sustainability appraisal which meets the requirements of the European Directive on strategic environmental assessment should be an integral part of the plan preparation process, and should consider all the likely significant effects on the environment, economic and social factors".*

- 2.3. Further to the NPPF, the Planning and Compulsory Purchase Act 2004<sup>3</sup> requires an SA and SEA to be carried out for Local Plans. Both of these requirements can be carried out in one appraisal process. In order to avoid any confusion, the reference to SA throughout this document will refer to both the SA and the SEA.

### Stages to the SA/SEA

- 2.4. The SA is made up of a series of stages (A to E) which are detailed in the table below.

**Table 1: SA/SEA Stages**

Stage	Actions
Stage A	Setting the context and objectives, establishing the baseline and deciding the scope
Stage B	Developing and refining the options
Stage C	Appraising the effects of the Plan
Stage D	Consultation
Stage E	Monitoring the significant effects of implementing the Plan

- 2.5. This report accompanies the Pre-Submission Consultation version of the Mineral Sites Plan and contains the following:
- An outline of the contents, the methodology and description of the SA/SEA process and the specific SA/SEA tasks undertaken
  - A review of other plans and programmes and their relationship to Bournemouth, Dorset and

<sup>1</sup> European Parliament. (2001) "The Assessment of the Effects of Certain Plans and Programmes on the Environment", Directive 2001/42/EC of the European Parliament, Luxembourg, 2001 [http://europa.eu/legislation\\_summaries/environment/general\\_provisions/l28036\\_en.htm](http://europa.eu/legislation_summaries/environment/general_provisions/l28036_en.htm)

<sup>2</sup> National Planning Policy Framework: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/6077/2116950.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf)

<sup>3</sup> Planning and Compulsory Purchase Act 2004: <http://www.legislation.gov.uk/ukpga/2004/5/contents>

Poole (Sustainability Appraisal Scoping Report – see: <https://www.dorsetforyou.gov.uk/article/354652/Sustainability-appraisal---minerals-and-waste>)

- A description of the environmental and sustainability context (known as the baseline information) (Sustainability Appraisal Scoping Report – see: <https://www.dorsetforyou.gov.uk/article/354652/Sustainability-appraisal---minerals-and-waste>)
- A summary of key sustainability issues
- The SA/SEA Framework which sets out the SA/SEA objectives for assessing the Minerals and Waste Local Plan
- A review of the options considered and the preferred options selected

## **Previous Consultation**

- 2.6. Public involvement through consultation is a key element of the SA. During the development of the SA to date there have been several stages of consultation, both formal and informal and involving both the Scoping Report and the Draft Sustainability Appraisal itself.
- 2.7. The Scoping Report established the scope of the sustainability appraisal of the Development Plan Documents being prepared by Dorset, Bournemouth and Poole Councils. This included the range of information to be collected to form the evidence baseline, the range of other policy documents relevant to and impacting on minerals planning in Dorset and the coverage of sustainability objectives required to properly assess the sustainability and potential impacts of the emerging Mineral Sites Plan.
- 2.8. Three Scoping Reports have been produced. The original report was compiled and consulted on during 2006/2007. It was reviewed and updated during 2009/2010 and again in 2015 in order to ensure that the evidence base and sustainability objectives properly reflected current policy and issues relevant to minerals planning in Dorset. In both cases the scoping report was consulted on. See Sustainability Appraisal Scoping Report – see: <https://www.dorsetforyou.gov.uk/article/354652/Sustainability-appraisal--minerals-and-waste> for the current Scoping Report.

## **The Minerals Strategy 2014 – Sustainability Appraisal**

- 2.9. A Sustainability Appraisal was prepared in support of the 2014 Minerals Strategy. It assessed all relevant aspects of that Plan, including Vision, Objectives, Spatial Strategy, Options for provision of mineral and policies. It was submitted as evidence as part of the Examination of the Minerals Strategy in 2013<sup>4</sup>.
- 2.10. The Bournemouth, Dorset and Poole Mineral Sites Plan supports and is an integral part of the 2014 Minerals Strategy. It shares the Vision, Objectives, spatial strategies and policies of the Minerals Strategy, and is intended to identify the sites and areas to deliver those strategies and policies. The sustainability appraisal of the Mineral Sites Plan does not re-visit the higher-level issues covered in this document (e.g. Vision, Objectives, how much mineral to provide for, spatial strategies). It focuses on the proposals of the Mineral Sites Plan, particularly appraisal of options for mineral site allocation.
- 2.11. Draft versions of the Sustainability Appraisal of the DMSP were prepared and consulted on in 2015 and 2016. These are available here: <https://www.dorsetforyou.gov.uk/article/411960/Preparing-the-Mineral-Sites-Plan---Consultations-and-Responses>
- 2.12. Under the Town and Country Planning (Local Development ) England (Amendment) Regulations 2012 there is no formal requirement for a Preferred Options stage and the SA is now only required under Section 20 to be published for consultation when the proposed submission documents are published for consultation. However, the SA/SEA forms an important part of the site selection process, and therefore draft versions of the Sustainability Appraisal have been published as part of the two most recent consultations.

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<sup>4</sup> See: <https://www.dorsetforyou.com/mcs>



### 3. Background to the SA Report

#### Requirement for the Sustainability Appraisal (SA)

3.1. The Planning and Compulsory Purchase Act 2004 requires a Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) to be carried out for all strategic planning documents. The SA and the SEA requirements can be carried out in one appraisal process. Throughout this document, reference to the SA refers to both the SA and the SEA process.

#### Stages of the SA

3.2. The approach for carrying out the SA of the Draft Mineral Sites Plan is based on the following guidance:

- A Practical Guide to the SEA Directive (2005), ODPM,
- Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents (2005), ODPM
- Planning Practice Guidance, Strategic Environmental Assessment and Sustainability Appraisal [online] (last updated 2015), DCLG

3.3. Undertaken in parallel with plan preparation, the SA is an iterative process. The sustainability appraisal is made up of a series of stages (Stages A to E).

**Table 2: Stages of the SA Report**

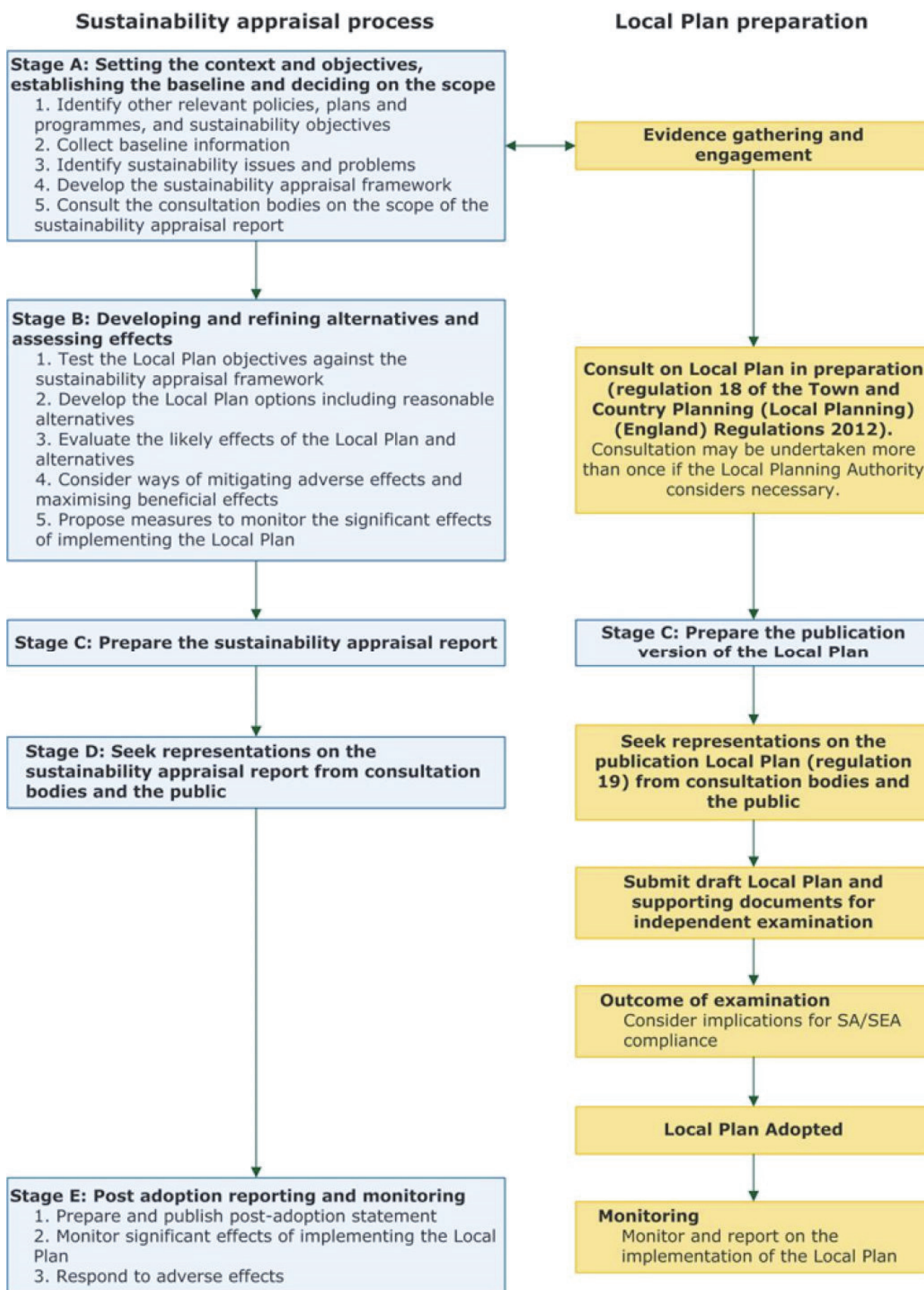
Table 2: Stages of the SA Report		
Plan Stage	SA/SEA Stage	
Pre-Production  COMPLETE	<b>A – Scoping</b>	<b>Setting the context and objectives, establishing the baseline and deciding on the scope.</b>
	A1	Identify other relevant policies, plans and programmes, and sustainability objectives
	A2	Collect baseline information
	A3	Identify sustainability issues and problems
	A4	Develop the SA framework
	A5	Consult on the scope of the SA
Production and Publication  IN PROGRESS	<b>B</b>	<b>Developing and refining options and assessing effects</b>
	B1	Test the Plan objectives against the SA framework
	B2	Develop the Plan options
	B3	Predict the effects of the Plan
	B4	Evaluate the effects of the Plan
	B5	Consider mitigation measures and ways to maximise beneficial effects
	B6	Propose measures to monitor the significant effects of implementing the Plan
<b>C</b>	<b>Preparing the SA Report</b>	

<b>Table 2: Stages of the SA Report</b>		
	<b>D</b>	<b>Consulting on the Draft Plan and SA Report</b>
	D1	Public participation on the draft Plan and SA Report
	D2 (i)	Appraise significant changes
<b>Submission and Examination</b>	D2 (ii)	Appraise significant changes resulting from representations
	D3	Make decisions and provide information
<b>Adoption and Monitoring</b>	<b>E</b>	<b>Monitoring the significant effects of implementing the Plan</b>
	E1	Finalise aims and methods for monitoring
	E2	Respond to adverse effects

- 3.4. The first stage (Stage A) is the production of the Scoping Report This is where the scope and overall level of detail of the SA is set out. As noted above, three Scoping Reports have been produced. The original report was compiled and consulted on during 2006/2007. It was reviewed and updated during 2009/2010 and again in 2015 in order to ensure that the evidence base and sustainability objectives properly reflected current policy and issues relevant to minerals planning in Dorset. In all cases the scoping report was consulted on.
- 3.5. The Scoping Report sets out the sustainability objectives and these will then be used to assess the Plan. The next stage (Stage B) is the stage where the options are developed and refined and the effects of the options are assessed. This stage is an iterative process where the options are tested against the SA objectives to predict and evaluate the effects of options in the Local Plan. Mitigation measures are identified where necessary and recommendations to changes of the options are made and the revised options reassessed where necessary.
- 3.6. The findings of Stage B are pulled together to produce the SA report (Stage C). Any further changes will be reassessed and updated where appropriate.



**Figure 1: SA and SEA and Plan Preparation Stages**



3.7. The SA Scoping Report can be seen at: <https://www.dorsetforyou.gov.uk/article/354652/Sustainability-appraisal---minerals-and-waste>

### **Compliance with the SEA Directive / Regulations**

- 3.8. The requirement to carry out a SA also incorporates the provision of the European Directive 2001/42/EC to include a SEA. The distinction between the two is that the SEA primarily focuses on environmental effects, whereas the SA expands this remit to incorporate economic and social sustainability. In line with the requirements of the European Directive, the SA report seeks to identify only likely significant effects of the Plan.

## 4. Links to other policies, plans and programmes

4.1. The Mineral Planning Authority must take account of relationships between the Draft Mineral Sites Plan and other relevant policies, plans, programmes and sustainability objectives. This is in addition to the need to take into account environmental protection objectives established at international, European and national levels. All of these may influence the options to be considered in the preparation of the Local Plan. By reviewing these, relationship inconsistencies and constraints can be addressed and potential synergies can be exploited.

### Review of relevant plans and programmes

- 4.2. Stage A1 of the SA process involves establishing the context in which the Site Locations Document is being prepared, namely the other plans and programmes and sustainability objectives that could influence its content and the opportunities and challenges they present. The SEA Directive specifically requires environmental objectives established at international, European Community or national levels to be taken into account in developing a Plan.
- 4.3. However, in order to facilitate a comprehensive approach, guidance on SA recommends that this should be widened to consider how the Plan can support the full range of other plans, policies and programmes that already exist, including at the regional and local levels, taking into account their economic and social as well as environmental objectives.
- 4.4. A review of relevant plans and programmes that may influence the Mineral Sites Plan and vice versa was undertaken. This detailed review is contained in the SA Scoping Report as a series of twelve separate topic papers. These include the topics identified in the SEA Directive, along with social and economic topics to fulfil the requirements of the sustainability appraisal guidance and the Planning and Compulsory Purchase Act 2004.
- 4.5. The Scoping Report published a list of relevant plans, policies and programmes and contained a detailed assessment of these plans and the key messages and implications of them for the Mineral Sites Plan. The Scoping Report, with the list of documents, can be seen here: Sustainability Appraisal Scoping Report – see: <https://www.dorsetforyou.gov.uk/article/354652/Sustainability-appraisal---minerals-and-waste>
- 4.6. A number of key messages emerged from this review of policies, plans and programmes. These are set out in Table 4 below, grouped by topics.

**Table 3: Key Sustainability Issues/Messages**

Table 3: Key Sustainability Issues/Messages	
Minerals	<ul style="list-style-type: none"> <li>• Striking a balance between meeting current needs for mineral resources (social progress and economic growth) while ensuring they are also conserved for the future generations (prudent use of natural resources and environmental protection).</li> <li>• Some ball clay reserves are located within the international designated areas.</li> <li>• Sterilisation of mineral resources by other forms of development.</li> <li>• The provision for the supply of sand and gravel at the appropriate rate if any shortfall occurs in the provision of the required supply in neighbouring authorities. This may require joint working with neighbouring authorities to secure the required supply of sand and gravel.</li> <li>• Selection of sites and formulation of policy to minimise or remove all negative impacts.</li> <li>• The need to safeguard mineral resources, including through increased use of secondary and recycled materials.</li> <li>• Ensuring Dorset makes an appropriate and justified contribution to local and national requirements - however this must take into account the quality of Dorset's environment and the implication of international and national biodiversity, landscape and cultural heritage designations.</li> </ul>

**Table 3: Key Sustainability Issues/Messages**

	<ul style="list-style-type: none"> <li>• The need to integrate minerals and waste planning (including waste infrastructure) to promote more sustainable development.</li> <li>• Protection and, where possible, enhancement of the environment both during mineral working and through high quality restoration and after-care.</li> <li>• Address past impacts of mineral operations.</li> <li>• Promote more sustainable transportation of minerals by rail and water and reduced mileage.</li> <li>• Encourage movement of aggregates by rail and/or water.</li> </ul>
Climate Change	<ul style="list-style-type: none"> <li>• Hotter drier summers and drought, increasing demand for water potentially effecting availability for minerals operations, also affecting building temperatures and demand for cooling.</li> <li>• Effects to ground and surface water levels and quality affecting vulnerability of these resources as well as abstraction Increased risk of flooding, creating a greater need for flood and surface water management and higher risk of surface and ground water pollution, as well as disruption to operations.</li> <li>• Increased windiness, potential affecting waste management on exposed landfill sites or changes to dust and pollution control within some minerals operations.</li> <li>• Increasing risk of coastal flooding sea level rise a consideration for the location, longevity and viability of minerals operations near the coast, requiring further vulnerability assessments.</li> <li>• Extreme events increasing disruption to supply chains, infrastructure and transport</li> </ul>
Biodiversity and Geodiversity	<ul style="list-style-type: none"> <li>• The provision of sites for waste management and/or mineral extraction has the potential to impact on Dorset’s biodiversity, flora and fauna, and geodiversity.</li> <li>• A strategic approach should be taken to the conservation and enhancement of biodiversity and geology with the Waste Plan and Mineral Sites Plan being informed by the larger functional scales of ecosystems, catchments and landscapes.</li> <li>• The precautionary principle should be applied to biodiversity issues and geodiversity features, but as far as possible policies should also be based upon up-to-date information.</li> <li>• The Waste Plan and Mineral Sites Plan must respect the primacy of European Natura 2000 sites both within and adjoining Dorset and comply with the requirements of Appropriate Assessment under the Habitats Directive.</li> <li>• The location of sand and ball clay quarries, some of which have been or are being restored through landfill of household waste, in close proximity to SACs and SPAs (mainly the Dorset Heathlands) has the potential for continued conflict between the conservation of important habitats and waste disposal.</li> <li>• Appropriate regard should be attached to international, national and locally important habitats and species, as well as the wider environment. Both the CRoW Act and NERC Act place duties on local authorities with respect to the conservation of biodiversity.</li> <li>• Net biodiversity gains should be sought through the restoration of waste sites, where appropriate, positive management and the creation of new habitats.</li> <li>• Conservation of geodiversity should be given significant weight and its interconnection with the biodiversity conservation taken into account.</li> <li>• Restoration by inert landfill of quarries may put geodiversity at risk through the loss or covering of exposures. It may also put biodiversity at risk where re-colonisation has</li> </ul>

**Table 3: Key Sustainability Issues/Messages**

	<p>taken place.</p> <ul style="list-style-type: none"> <li>• Geodiversity gains should be sought through the creation of geological exposures and the positive management and afteruse of minerals and waste sites where appropriate.</li> <li>• Dorset has a rich geological resource, recognised by a range of designations, which should be protected and, where possible, enhanced.</li> <li>• The significance of the World Heritage Site should be respected.</li> <li>• The Waste Plan and Mineral Sites Plan should promote the geodiversity objectives of the World Heritage Site Management Plan and Local Geodiversity Action Plan.</li> </ul>
Water	<ul style="list-style-type: none"> <li>• Run-off water from sites may pollute water courses and soil.</li> <li>• Water and soil pollution can be controlled through careful design and location of site planning, infrastructure, management, restoration, mitigation and compensation with appropriate conditions and considerations.</li> <li>• If waste facilities or mineral extraction sites are in close proximity to the boundaries of the neighbouring authorities, their impact on water resources in the neighbouring areas may be an issue.</li> <li>• Waste facilities and mineral working must be carefully designed not to cause risk of increased flooding and to ensure that facilities are not at risk of flooding.</li> <li>• Proposed minerals developments must ensure they do not impede drainage in any way, and mineral processing plant is not at risk of flood damage. Opportunities to improve drainage, or minimise flood risk, should be taken where possible.</li> <li>• In some instances, surface water or groundwater may need to be abstracted from mineral development sites. This causes changes in groundwater level through discharging water from extraction sites. Mineral extraction sites may therefore cause changes in groundwater level.</li> <li>• Discharge of water into surface water courses from the site may cause flooding depending on the volume of water discharged. There may also be issues of silt deposition or turbidity.</li> <li>• Proposed developments should not result in a net increase in nitrogen load to Poole Harbour. This is particularly relevant to proposals for sewage treatment works.</li> <li>• Where proposed mineral sites can take land out of agricultural use this could provide a benefit in terms of reducing nitrate input into the harbour catchment.</li> </ul>
Historic Environment	<ul style="list-style-type: none"> <li>• An appropriate level of protection must be provided to designated historic assets, including those which are locally distinctive, valued and important.</li> <li>• The contribution of historic and cultural heritage (including minerals heritage) to the distinctiveness of Dorset’s landscapes must be recognised.</li> <li>• Quarrying (particularly of building stone) is an integral part of Dorset’s cultural heritage and industrial archaeology, which is very closely linked to the landscape quality in some parts of the county.</li> <li>• Heritage should be taken into account in the siting, design, management and restoration, where relevant, of waste and minerals sites.</li> <li>• Access to and enjoyment and understanding of the historic environment should be facilitated where possible.</li> <li>• Where waste or minerals development is proposed, it is essential that the impact on the historic environment is assessed and evaluated fully before a planning decision is made. Desk-based assessments and evaluation using various methods of survey and excavation</li> </ul>

**Table 3: Key Sustainability Issues/Messages**

	<p>of trial trenches are usually needed to provide sufficient information on the impact of extraction on the historic environment. Based on the results of these exercises, the appropriate mitigation for this impact can be determined. Particularly for designated sites such as Listed Buildings and Scheduled Monuments, not only direct physical impacts need to be considered, but also the impacts on the settings of these sites.</p> <ul style="list-style-type: none"> <li>• Many scheduled monuments lie in close proximity to current quarries and on mineral deposits. There is potential for such sites to be used as landfill in certain circumstances. There may be conflict therefore between the presence of scheduled monuments and potential landfill sites.</li> <li>• The use of quarries as landfill sites lengthens the time for restoration and therefore may increase impacts on the historic landscape or on the settings of historic assets.</li> <li>• The management of change in the historic landscape and the recording of its dynamic nature is important.</li> <li>• In addition, waste development or mineral extraction can fund additional (or directly carry out through restoration) works to benefit historic landscapes and features</li> </ul>
Landscape	<ul style="list-style-type: none"> <li>• Many mineral deposits and therefore current or potential landfill sites in Dorset lie close to the Areas of Outstanding Natural Beauty. Their protection and enhancement is therefore relevant to future minerals/waste development.</li> <li>• Minerals development and/or the development of waste facilities can be intrusive on the landscape and have the potential to cause damage to the designated and non-designated landscape areas.</li> <li>• The use of quarries as landfill (inert fill) sites lengthens the time for restoration and therefore increases landscape impacts.</li> <li>• The World Heritage Site was designated on the basis of its very high geological importance, which must be taken into consideration in planning for future minerals development/waste sites.</li> <li>• Cross boundary issues related to landscape may arise when potential minerals/waste developments are close to the boundaries of neighbouring authorities. This impact must be taken into consideration. The reverse is also true, requiring the establishment of a close working relationship between the neighbouring MPAs and Dorset MPA.</li> <li>• Increasingly, priority is placed on landscape protection and enhancement that is underpinned by analysis of local character and distinctiveness (physical, ecological, cultural and aesthetic).</li> <li>• There is increased recognition of the value of the wider countryside and coastal landscape, in addition to designated landscapes.</li> <li>• Landscape restoration and management opportunities should be maximised in relation to minerals/landfill operations and after-use.</li> <li>• Planning for good quality and inclusive site design and layout in new waste facilities and improvements to existing facilities.</li> <li>• There is the opportunity for mineral extraction/landfill sites to bring about landscape change in line with the opportunities identified in the National Character Area profiles and the emerging SE Dorset Green Infrastructure Strategy, and to create multi-functional landscapes</li> <li>• The interrelationship between landscape, biodiversity and cultural heritage needs to be recognised and taken into account</li> <li>• Development should be informed by the existing and ongoing assessment of Dorset's</li> </ul>



**Table 3: Key Sustainability Issues/Messages**

	<p>landscape character.</p> <ul style="list-style-type: none"> <li>• Historic mining activity can be an important part of landscape character and historic mining landscapes should be safeguarded.</li> <li>• Careful consideration of both the benefits and potential impacts of the development of waste facilities in a rural setting should be given, such as on farm anaerobic digestion.</li> <li>• Cumulative impacts on protected landscape where important mineral deposits occur, particularly in relation to ball clay and Purbeck Stone working.</li> <li>• Sites for new waste management facilities are difficult to find, particularly given the pressure from other developments. There may be limited options forcing the consideration of sites within the Green Belt</li> </ul>
Air Quality and Noise	<ul style="list-style-type: none"> <li>• The needs for waste management facilities, minerals operators and society's requirements for minerals to be reconciled with the need to protect human health, environmental quality and local amenity.</li> <li>• Contribute to meeting the requirements of the European Air Quality Framework Directive (96/62/EC) and its daughter directives, regarding specific atmospheric pollutants. Consider the interaction of air, water and land pollution when assessing waste and minerals operations.</li> <li>• Consider the impact of dust from minerals extraction, processing and waste sites and transportation as an air quality issue.</li> <li>• Consider noise as an issue in terms of health, environmental quality and local amenity.</li> <li>• Maintain and, where possible, improve air quality by limiting minerals and waste-related traffic growth and congestion, particularly road borne traffic and in AQMA's. The significance of minerals operations on air quality will depend on location. Transportation of minerals by road is increasingly likely to be an air quality issue due to congestion.</li> <li>• Air quality in Dorset is generally good, but specific areas face problems (principally traffic-related).</li> <li>• The distribution (number and location) of waste facilities throughout Dorset - significance of impacts can depend on location</li> <li>• Give consideration to decreasing the number and journey length of movements of waste and the use of sustainable transportation (rail, water etc)</li> <li>• Minerals development and waste sites should have regard to the contribution of tranquillity to local amenity and Dorset's distinctive environment. Waste and minerals planning should avoid eroding tranquillity in vulnerable or sensitive areas.</li> <li>• The impact of moving waste management up the waste hierarchy - diverting waste away from landfill</li> </ul>
Transport	<ul style="list-style-type: none"> <li>• Localised increases in HGV movements related to waste and mineral sites can create real and perceived safety issues that discourage the use of walking and cycling.</li> <li>• Waste and mineral sites located near to leisure trails can discourage their use due to air quality issues.</li> <li>• Localised congestion and delay can affect journey time reliability of bus services affecting patronage and thus financial viability.</li> <li>• Localised congestion and delay near to rail stations can affect people's decision to use this mode by increasing overall travel time.</li> <li>• Any increase in transportation movements related to waste using the Sandbanks Chain</li> </ul>

**Table 3: Key Sustainability Issues/Messages**

	<p>Ferry will exacerbate existing severe summertime delay.</p> <ul style="list-style-type: none"> <li>• Minerals and waste development may lead to changes in local travel patterns that may intensify existing issues such as congestion or road safety. Changes to travel patterns must be estimated and potential impacts mitigated.</li> <li>• Waste and minerals development may lead to increased congestion and delay on the identified Prime Transport Corridors making it more difficult to achieve the objectives of this key LTP policy. Waste and minerals developments are likely to increase HGV trips which can impact adversely on road safety, air quality and noise while increasing community severance – particularly in those towns and villages on the strategic road network. HGV movements on unsuitable rural roads can create severe road safety and delay issues whilst negatively impacting tranquillity through noise and air quality issues.</li> </ul>
<p>Economic Development and Employment</p>	<ul style="list-style-type: none"> <li>• Sufficient provision of waste management facilities in the county will be required to support economic growth and the envisaged population expansion.</li> <li>• A key economic issue relevant to waste planning is the legislative drive to divert waste from landfill, which is increasing the costs of disposing waste by landfill. The capacity of existing landfill sites is decreasing and other options need to be considered. The availability of alternative facilities for waste treatment in the county is key. If there are insufficient facilities within the county, there will be a cost implication for businesses and the public sector due to the need to transport waste to where facilities exist.</li> <li>• Economic performance varies significantly within Dorset with a need for both rural and urban regeneration. The waste industry provides a limited, yet significant, contribution to the county's economic performance, particularly in rural areas. The provision of new facilities has the potential to generate skilled and highly skilled jobs linked to both the waste and renewable energy sectors, depending on the types of facilities and technologies promoted. The distribution of waste management facilities also impacts on accessibility to employment.</li> <li>• There are opportunities for agricultural diversification through the provision of waste treatment facilities on farms. Anaerobic digestion is particularly suited to farm locations where a mix of crops and waste can be used as feedstock. Such technology provides the opportunity to generate renewable energy both for on-site use and for export. There are a small number of existing sites in Dorset which have taken up this opportunity.</li> <li>• The creation of jobs by mineral companies is limited and may be temporary.</li> <li>• An adequate supply of minerals will be required to support economic growth in key sectors and population expansion planned for.</li> <li>• The need to support minerals operations in Dorset as an important component of a sustainable Dorset economy, particularly in rural areas.</li> <li>• Minerals operations will need to be compatible with stated environmental objectives, recognising the contribution that the quality and distinctiveness of Dorset's environment can make as a long-term economic driver.</li> <li>• The Mineral Sites Plan should seek to contribute to a more sustainable transport network in order to benefit the growth of the overall Dorset economy.</li> <li>• Mineral working provides a limited, yet significant, contribution to the county's economic performance, particularly in specific rural areas where it is located.</li> </ul>
<p>Soil and Land</p>	<ul style="list-style-type: none"> <li>• Soils can be damaged by the extraction of minerals and there may be cases where waste facilities are located in former quarries. Soil is a valuable raw material to be protected through careful storage during the life of any operations and then to be used during restoration of mineral extractions. However damage may be exacerbated by extending the life of storage if landfill follows mineral working. Protection is therefore a significant</li> </ul>



**Table 3: Key Sustainability Issues/Messages**

	<p>issue.</p> <ul style="list-style-type: none"> <li>• Soils can contain valuable seedbanks - these are particularly useful for the restoration of heathland.</li> <li>• Due regard should be given to the diverse role of soils as a resource and the interaction of land, water and air pollution from minerals operations, waste sites and transportation.</li> <li>• The highest quality agricultural land should be safeguarded where possible.</li> <li>• Loss of soil and high quality land</li> <li>• Mineral extraction should not cause irreversible loss of land quality and reclamation should be given a high priority with an emphasis on returning high quality land to agricultural use.</li> <li>• Regard should be given to land instability during mining operations and reclamation.</li> <li>• The production and use of products from waste treatment for use on land</li> <li>• Additional landfill increases the chance of conflict with land of high value and soils</li> </ul>
<p>Population and Human Health</p>	<ul style="list-style-type: none"> <li>• Population is projected to grow by 11.9% by 2035 with new development concentrated in urban areas such as Bournemouth, Poole and surrounding areas as well as the main towns of the respective local authority areas. This has an implication for waste arisings, which will need to be taken account of in ensuring sufficient waste management capacity is planned for. In addition, minerals will be needed to meet the need for new built development, or repair/refurbishment of existing infrastructure including buildings.</li> <li>• Provision of waste management facilities to move up the waste hierarchy would be in the public interest.</li> <li>• There is an ageing population and a large rural population in Dorset, which may have implications in relation to access to public facilities such as household recycling centres.</li> <li>• Potential impacts on health, well-being and quality of life should be taken into account in identifying suitable sites for waste management facilities and in considering the potential impact of noise, dust, blasting, vibration, lighting and water pollution generated by minerals operations.</li> <li>• The Waste and Mineral Sites Plans should take account of the need to conserve green areas for informal and formal recreation, and to site development away from communities, where possible, in order to minimise amenity impacts on local communities.</li> <li>• Safer roads and improved air quality should be promoted through sensitive planning for waste and minerals transportation, including where appropriate the provision of necessary infrastructure to support additional operations.</li> <li>• To move up the waste hierarchy in the context of planned growth and development, consideration should be given to ensuring that waste management is integral to the design of a new development; securing on-site management of construction and demolition wastes; provision of reduction and/or recycling infrastructure in housing or retail development; and accommodating space for recycling within housing design.</li> <li>• Identification of the necessary number of new minerals sites to meet the need for minerals, without causing unacceptable impacts on local communities. While minerals operations can provide valuable employment opportunities, adverse impacts of dust, noise and vibration on communities should be avoided.</li> </ul>



## 5. Developing the SA Framework

- 5.1. SA is an objectives-based appraisal in which the impacts of a plan are assessed in relation to a series of aspirational objectives that promote sustainable development but which also reflect sustainability issues identified earlier in the assessment process in order to evaluate the extent to which policies will worsen or improve the current situation.
- 5.2. The final stage of Task A involves establishing a set of SA Objectives which reflect the key sustainability issues in order to assess the extent to which policies might worsen them or provide mechanisms for addressing them. The SA Objectives provide the framework for the subsequent assessment of initial policy alternatives, and for checking that any resulting refinements of the preferred policy positions are capable of delivering the most sustainable outcomes.
- 5.3. The Objectives must cover a wide range of issues and not be so numerous that the assessment becomes onerous so they are defined broadly by necessity. In order to provide an effective basis for assessment, a number of subsidiary criteria are defined for each Objective which provide a mechanism for judging whether a policy has a positive, negative or neutral impact.
- 5.4. Developing a SA framework provides a way in which sustainability effects can be described, analysed and compared and forms a central part of the SA process. A set of sustainability objectives and their indicators, which may be in the form of targets and are a way in which the achievement of the objectives can be measured, make up the SA framework. These objectives and indicators can also be used to monitor the implementation of the Local Plan

### Scoping the Sustainability Issues

- 5.5. Sustainability appraisal begins with the scoping process, designed to identify the sustainability objectives which will comprise the SA Framework. The sustainability objectives are the basis for the assessment of the site nominations. The scoping process was originally carried out in June 2010. It was revised, updated and broadened to include waste issues, then re-published in March 2015 to ensure that the SA process covers the current sustainability issues relevant to minerals and waste planning in Bournemouth, Dorset and Poole. The full Scoping Report 2015 is available online<sup>5</sup>.
- 5.6. In accordance with the SEA Directive requirements, a review of relevant plans and programmes that may influence the Waste Plan and vice versa was undertaken. This detailed review is contained in the SA Scoping Report as a series of twelve separate topic papers, organised by topics identified in European Directive 2001/42/EC 'on the assessment of the effects of certain plans and programmes on the environment' (commonly referred to as the SEA Directive) plus social and economic topics to fulfil the requirements of Government guidance on sustainability appraisal and the Planning and Compulsory Purchase Act 2004.
- 5.7. Sustainability issues were then identified and their implications assessed for minerals planning and the baseline information to be collected. Objectives were developed to address these sustainability issues, as well as reflecting international, national, regional and local objectives. Indicators were then developed to measure how well the emerging policies and strategies would perform and help to achieve sustainability objectives. These objectives cover a full range of environmental issues, including those specified in the SEA Directive. The sustainability objectives also include a broad range of social and economic issues.
- 5.8. Each sustainability objective has associated indicators, specific questions which assist in determining how and to what extent the objective could potentially be affected by the development of the nominated sites. Tables 5, 6 and 7 set out the relationships between the SEA topics in the SEA Directive, sustainability objectives with relevant indicators and the site assessment criteria set out in the Minerals Strategy 2014.
- 5.9. For reference, the Environmental Assessment of Plans and Programmes Regulations 2004 require consideration of 'the likely significant effects on the environment, including short, medium and long-term effects, permanent and temporary effects, positive and negative effects, and secondary,

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<sup>5</sup> See: <https://www.dorsetforyou.com/354652>

cumulative and synergistic effects, on issues such as a) biodiversity; (b) population; (c) human health; (d) fauna; (e) flora; (f) soil; (g) water; (h) air; (i) climatic factors; (j) material assets; (k) cultural heritage, including architectural and archaeological heritage; (l) landscape; and (m) the inter-relationship between the issues referred to in sub-paragraphs (a) to (l)<sup>6</sup>.

**Table 4 - SA Framework - Environmental Objectives/Indicators**

<b>Table 4 - SA Framework - Environmental Objectives/Indicators</b>		
<b>Sustainability Appraisal Objectives</b>	<b>Indicators</b> <i>To what extent does the strategy or policy...</i>	<b>Related SEA Directive Topics</b>
1. To move waste management up the waste hierarchy and promote net self-sufficiency	<ul style="list-style-type: none"> <li>• Assist in driving waste up the waste hierarchy?</li> <li>• Make provision for waste management facilities commensurate with the waste hierarchy?</li> <li>• Enable waste to be diverted from landfill?</li> <li>• Enable increased recycling or treatment of organic waste?</li> <li>• Enable waste to be managed locally, particularly within the local authority boundary</li> </ul>	Human health; Population; Social Considerations
2. To maintain, conserve and enhance biodiversity	<ul style="list-style-type: none"> <li>• Conserve, enhance or create natural and semi-natural habitats of recognised ecological value and/or the green corridors that link them?</li> <li>• Directly or indirectly affect internationally or nationally designated or recognised sites or UK BAP habitats?</li> <li>• Conserve or enhance species diversity and avoid harm to internationally and nationally protected, scarce and rare species (including UK BAP species)?</li> <li>• Provide for positive management of existing habitats?</li> <li>• Assist species to adapt to the anticipated effects of climate change (i.e. through connecting habitats and/or providing greenspace)?</li> <li>• Reflect the South West Nature Map?</li> <li>• Expand the spatial extent of BAP priority habitat within Dorset?</li> <li>• Contribute to an adverse cumulative impact of development on biodiversity?</li> </ul>	Biodiversity; Fauna; Flora; Soil
3. To maintain, conserve and enhance geodiversity.	<ul style="list-style-type: none"> <li>• Conserve or enhance the World Heritage Site and its setting?</li> <li>• Conserve or enhance geological SSSIs?</li> </ul>	Material Assets;

<sup>6</sup> 2004 No. 1633 Environmental Protection The Environmental Assessment of Plans and Programmes Regulations 2004

<b>Table 4 - SA Framework - Environmental Objectives/Indicators</b>		
<b>Sustainability Appraisal Objectives</b>	<b>Indicators</b> <i>To what extent does the strategy or policy...</i>	<b>Related SEA Directive Topics</b>
	<ul style="list-style-type: none"> <li>• Create, extend or enhance Local Geological Sites?</li> <li>• Allow access to geodiversity resources for study?</li> </ul>	
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	<ul style="list-style-type: none"> <li>• Protect or enhance the quantity and quality of ground, surface and sea waters?</li> <li>• Avoid adverse effects on existing patterns of groundwater flow and/or surface water flow?</li> <li>• Maintain water consumption within local carrying limits?</li> </ul>	Water; Human Health; Biodiversity; Climatic Factors
5. To reduce flood risk and improve flood management.	<ul style="list-style-type: none"> <li>• Minimise the risks and impacts of flooding having taken into account climate change?</li> <li>• Minimise the numbers of people and property at risk from flooding?</li> </ul>	Water; Human Health; Climatic Factors;
6. To maintain, conserve and enhance the historic environment (including conservation areas, historic parks and gardens and other locally distinctive features and their settings).	<ul style="list-style-type: none"> <li>• Cause a loss of, or harm to, the character and/or setting of historic assets?</li> <li>• Cause harm to the historic landscape?</li> <li>• Provide for the maintenance of the historic environment?</li> <li>• archaeological sites, historic buildings,</li> <li>• Provide new information on the historic environment, or improve education about and/or interpretation of the historic environment?</li> </ul>	Cultural Heritage (Architectural and Archaeological Heritage)
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	<ul style="list-style-type: none"> <li>• Conserve and enhance landscape character, quality and distinctiveness, paying particular regard to AONB and other designated areas of high landscape and/or historic sensitivity or value?</li> <li>• Minimise the landscape and visual intrusion of waste facilities on sensitive and/or distinctive landscapes?</li> <li>• Contribute to an adverse cumulative impact of development on protected landscapes?</li> <li>• Encourage development of land which is not sympathetic to the identified landscape</li> </ul>	Landscape;

<b>Table 4 - SA Framework - Environmental Objectives/Indicators</b>		
<b>Sustainability Appraisal Objectives</b>	<b>Indicators</b> <i>To what extent does the strategy or policy...</i>	<b>Related SEA Directive Topics</b>
	character of that location? <ul style="list-style-type: none"> <li>• Provide for the restoration of land to an appropriate after-use and landscape character through Landscape Restoration Strategies.</li> <li>• Protect the open character of the South East Dorset Green Belt from inappropriate development</li> </ul>	
8. To protect and improve air quality and reduce the impacts of noise	<ul style="list-style-type: none"> <li>• Adversely affect air quality, including through transportation, particularly in Air Quality Management Areas?</li> <li>• Increase the likelihood of higher levels of dust in the air?</li> <li>• Increase the likelihood of higher levels of noise and vibration and impact on sensitive receptors?</li> <li>• Increase the likelihood of higher levels of odour on sensitive receptors?</li> </ul>	Air; Human Health; Biodiversity; Flora; Fauna.
9. To maintain, conserve and enhance soil quality	<ul style="list-style-type: none"> <li>• Reduce the quantity or quality of the best and most versatile agricultural land?</li> <li>• Encourage the de-contamination and/or re-use of soils?</li> <li>• Conserve or enhance soil quality?</li> <li>• Reduce the capacity of the soil to hold carbon?</li> <li>• Increase land contamination?</li> </ul>	Soil; Flora; Fauna; Biodiversity;

**Table 5 - SA Framework - Economic Objectives/Indicators**

<b>Table 5 - SA Framework - Economic Objectives/Indicators</b>		
<b>Sustainability Appraisal Objectives</b>	<b>Indicators</b> <i>To what extent does the strategy or policy...</i>	<b>Related SEA Directive Topics</b>
10. To conserve and safeguard mineral resources.	<ul style="list-style-type: none"> <li>• Safeguard mineral resources from loss by permanent sterilisation?</li> <li>• Encourage/promote the most efficient use of mineral resources?</li> </ul>	Material Assets;
11. To promote the use of alternative	<ul style="list-style-type: none"> <li>• Encourage/promote the production and/or use of recycled or secondary aggregates?</li> </ul>	Material Assets;

<b>Table 5 - SA Framework - Economic Objectives/Indicators</b>		
<b>Sustainability Appraisal Objectives</b>	<b>Indicators</b> <i>To what extent does the strategy or policy...</i>	<b>Related SEA Directive Topics</b>
materials.		
12. To provide an adequate supply of minerals to meet society's needs.	<ul style="list-style-type: none"> <li>Contribute, in a sustainable way, to the supply of materials for new built development, or repair of existing built development, or to meet other needs for the mineral concerned?</li> <li>Contribute to the provision of a sustainable supply of minerals?</li> </ul>	Material Assets; Social Considerations; Human Health
13. To encourage sustainable economic growth.	<ul style="list-style-type: none"> <li>Provide for waste management facilities in the county at an acceptable cost?</li> <li>Maintain or increase employment?</li> <li>Maintain and enhance skills levels, particularly through the provision of highly skilled jobs?</li> <li>Ensure that waste facilities and mineral sites, including the transportation of materials, do not prejudice the development of the local economy in Dorset?</li> </ul>	Social Considerations; Human Health;

**Table 6 - SA Framework - Social Objectives and Indicators**

<b>Table 6 - SA Framework - Social Objectives and Indicators</b>		
<b>Sustainability Appraisal Objectives</b>	<b>Indicators</b> <i>To what extent does the strategy or policy...</i>	<b>Related SEA Directive Topics</b>
14. To adapt to and mitigate the impacts of climate change.	<ul style="list-style-type: none"> <li>Ensure new development minimises vulnerability and provides resilience to climate change?</li> <li>Minimise emissions of greenhouse gases from operations, ensuring the efficient use of energy, and maximising opportunities for the generation of renewable energy?</li> </ul>	Climatic Factors; Human Health; Social Considerations.
15. To minimise the negative impacts of waste and minerals transport on the transport network, mitigating any residual impacts.	<ul style="list-style-type: none"> <li>Reduce the negative impacts associated with minerals and waste transportation on the transport network as a whole?</li> <li>Reduce the impact of road traffic, in particular HGV trips, on local communities?</li> <li>Reduce the vehicle kilometres travelled for the transportation of minerals and waste?</li> <li>Support and encourage the use of sustainable modes of transport?</li> </ul>	Climatic Factors; Human Health; Social Considerations.

<b>Table 6 - SA Framework - Social Objectives and Indicators</b>		
<b>Sustainability Appraisal Objectives</b>	<b>Indicators</b> <i>To what extent does the strategy or policy...</i>	<b>Related SEA Directive Topics</b>
	<ul style="list-style-type: none"> <li>• Support and encourage the use of low emission vehicles for the transportation of waste and minerals?</li> <li>• Support the carbon reduction targets set at the international, national and local level?</li> <li>• Support the road casualty reduction indicators set at the international, national and local level?</li> </ul>	
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	<ul style="list-style-type: none"> <li>• Facilitate the use of rail or waterborne freight for the purpose of transporting waste and minerals?</li> <li>• Accommodate the efficient movement of people, goods and services thus supporting sustainable economic growth in the Bournemouth, Poole and Dorset area?</li> </ul>	Population; Material Assets; Human Health; Climatic Factors; Air
17. To sustain the health and quality of life of the population	<ul style="list-style-type: none"> <li>• Contribute to quality of life through the provision of a network of accessible facilities to move waste up the hierarchy?</li> <li>• Ensure access for all to public facilities?</li> <li>• Impact on the quality of life of local communities (including through factors such as noise, artificial light, odour and vermin )?</li> <li>• Cause a cumulative impact on certain communities (i.e. through permitting further development in an area, or extending the life of an existing permission)?</li> </ul>	Human Health;
18. To enable safe access to countryside and open spaces.	<ul style="list-style-type: none"> <li>• Promote linkages between open spaces, and enable/improve access to the countryside ?</li> <li>• Provide an opportunity for Suitable Alternative Natural Greenspace?</li> <li>• Reduce impacts on recreational and open spaces, Green Infrastructure and other land take issues including through the use of previously developed land?</li> </ul>	Human Health; Social Considerations

### **Sustainability Objectives and Site Assessment Criteria**

5.10. Having identified the sustainability objectives, the sustainability appraisal would normally be carried out by assessing each site nomination against all the objectives. This includes taking into account



timescales, considering the short, medium and long term impacts or in mineral planning terms, possible impacts/benefits at the site preparation, working and restoration/aftercare stages.

- 5.11. In order to make the SA process more relevant to mineral site assessment and selection, the MPA has prepared a series of site selection criteria which are based on the sustainability objectives and can be applied to any nominated site.
- 5.12. The criteria, along with commentary on their use and application, are set out in Appendix 1 of the Bournemouth, Dorset and Poole Minerals Strategy 2014. The criteria relate directly to both the SEA Directive Issues and the sustainability objectives. They provide a standardised approach to assessing mineral site nominations and a clear audit trail to demonstrate how assessments have been undertaken.
- 5.13. They include both a subjective assessment of likely impacts and according to the level of impact, the assignment of a colour. The results of the criteria assessment provide a visual impression of the suitability of any site nomination. If there is a predominance of red/orange scores for any site assessment, this indicates that if the site is to progress it will likely need a higher level of mitigation than another site that records more greens.
- 5.14. All the sites have undergone this assessment. An earlier version of the Stage 1 Assessments can be seen here: <https://www.dorsetforyou.gov.uk/article/421323/Site-Appraisals-for-Draft-Mineral-Sites-Plan> along with a list of more detailed assessment of the proposed allocations.

**Table 7 - Site Selection Criteria and relationship to SEA Directive Issues**

<b>Table 7 - Site Selection Criteria and relationship to SEA Directive Issues</b>	
<b>Relevant SEA Directive Issues</b>	<b>Site Selection Criteria</b>
<ul style="list-style-type: none"> <li>• Biodiversity/Geodiversity</li> <li>• Fauna</li> <li>• Flora</li> </ul>	Site Selection Criterion C1: Does the proposal have any impact on international/European nature conservation designations?
	Site Selection Criterion C2: Does the proposal have an impact on areas used by Annex 1 Bird Species?
	Site Selection Criterion C3: Does the proposal have any impact on national designations for nature conservation?
	Site Selection Criterion C4: Does the proposal have any impact on protected species?
	Site Selection Criterion C5: Does the proposal have any impact on local recognitions/designations, including ancient woodland and veteran trees?
	Site Selection Criterion C6: Does the proposal have any impact on geodiversity?
	Site Selection Criterion C7:

**Table 7 - Site Selection Criteria and relationship to SEA Directive Issues**

Relevant SEA Directive Issues	Site Selection Criteria
<ul style="list-style-type: none"> <li>• Landscape</li> <li>• Cultural heritage, including architectural and archaeological heritage</li> </ul>	Does the proposal have any impact on designated landscapes?
	Site Selection Criterion C8: What is the landscape capacity to accommodate the site?
	Site Selection Criterion C9: Does the proposal have any impact on historic landscapes?
<ul style="list-style-type: none"> <li>• Cultural heritage, including architectural and archaeological heritage</li> </ul>	Site Selection Criterion C10: Does the proposal have any impact on historic buildings?
	Site Selection Criterion C11: Does the proposal have any impact on archaeology?
<ul style="list-style-type: none"> <li>• Water</li> <li>• Human Health</li> <li>• Biodiversity, Fauna, Flora</li> </ul>	Site Selection Criterion C12: Does the proposal have any impact on hydrogeology or groundwater?
	Site Selection Criterion C13: Does the proposal have any impact on surface waters?
	Site Selection Criterion C14: Does the proposal have any impact on flooding or coastal stability?
<ul style="list-style-type: none"> <li>• Air</li> <li>• Climatic Factors</li> <li>• Human Health</li> </ul>	Site Selection Criterion C16: Does the proposal have any impact on Air Quality Management Areas (AQMAS)?
<ul style="list-style-type: none"> <li>• Material Assets</li> </ul>	Site Selection Criterion C17: What are the relevant economic considerations?
<ul style="list-style-type: none"> <li>• Human Health</li> <li>• Population</li> </ul>	Site Selection Criterion C18: Does the proposal have any impact on Sensitive Human Receptors?
	Site Selection Criterion C19: Does the proposal have any impact on existing settlements?
	Site Selection Criterion C20: Does the proposal have any impact on airport safety?
<ul style="list-style-type: none"> <li>• <i>All</i></li> </ul>	Site Selection Criterion C21: Does the proposal have any effect on cumulative impacts?

<b>Table 7 - Site Selection Criteria and relationship to SEA Directive Issues</b>	
<b>Relevant SEA Directive Issues</b>	<b>Site Selection Criteria</b>
<ul style="list-style-type: none"> <li>• Air</li> <li>• Climatic Factors</li> <li>• Human Health/Population</li> <li>• Biodiversity</li> </ul>	<p>Site Selection Criterion C22: Does the proposal have any impact on carbon emissions?</p>
<ul style="list-style-type: none"> <li>• Human Health</li> <li>• Population</li> <li>• Biodiversity</li> <li>• Air/Climatic Factors</li> </ul>	<p>Site Selection Criterion C23: Does the proposal have any impact on recreational land?</p>
	<p>Site Selection Criterion C24: Does the proposal have any impact on public rights of way?</p>
	<p>Site Selection Criterion C25: Are the access proposals acceptable?</p>

5.15. Table 7 shows the relationship between SEA Directive Issues, the sustainability objectives and the site criteria, demonstrating the level of inter-relationship between them.

**Table 8 - Relationship between SEA Directive Issues, Sustainability Appraisal Objectives and Site Selection Criteria**

Table 8 - Relationship between SEA Directive Issues, Sustainability Appraisal Objectives and Site Selection Criteria		
SEA Directive Issues <sup>7</sup> →	→ Sustainability Appraisal Objectives <sup>8</sup> →	→ Site Assessment Criteria
ENVIRONMENTAL  Human Health; Population	SA1: To move waste management up the waste hierarchy and promote net self-sufficiency  SA17: To sustain the health and quality of life of the population	SA1: N/A to minerals  SA17: C18 - Sensitive Human Receptors C19 - Existing Settlements C20 - Airport Safety C21 - Cumulative Impacts C22 - Carbon Emissions C23 - Recreational Land C24 - Public Rights of Way C25 - 'Are access proposals acceptable?'

<sup>7</sup> From SI 2004 No. 1633 The Environmental Assessment of Plans and Programmes Regulations 2004

<sup>8</sup> See 'Minerals and Waste Sustainability Appraisal Scoping Report 2015': <https://www.dorsetforyou.gov.uk/354652>

**Table 8 - Relationship between SEA Directive Issues, Sustainability Appraisal Objectives and Site Selection Criteria**

SEA Directive Issues <sup>7</sup> →	→ Sustainability Appraisal Objectives <sup>8</sup> →	→ Site Assessment Criteria
Biodiversity; Flora; Fauna	SA2: To maintain, conserve and enhance biodiversity.	<p>“Does the proposal have any impact on...”</p> <p>C1 - International/European nature conservation designations                      C2 - Areas used by Annex 1 Bird Species                      C3 - National designations for nature conservation                      C4 - Protected Species                      C5 - Local Recognitions/Designations, including Ancient Woodland and Veteran trees                      C12 - Hydrogeology or Groundwater                      C13 - Surface Waters                      C21 - Cumulative Impacts</p>
Material Assets	SA3: To maintain, conserve and enhance geodiversity.	C6 – Geodiversity
Landscape	SA7: To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	C7 - Designated Landscapes C8 - Landscape Capacity to accommodate the site C9 - Historic Landscapes

**Table 8 - Relationship between SEA Directive Issues, Sustainability Appraisal Objectives and Site Selection Criteria**

SEA Directive Issues <sup>7</sup> →	→ Sustainability Appraisal Objectives <sup>8</sup> →	→ Site Assessment Criteria "Does the proposal have any impact on..."
Cultural Heritage (Architectural and Archaeological Heritage)	SA6: To maintain, conserve and enhance the historic environment (including conservation areas, historic parks and gardens and other locally distinctive features and their settings).	C9 - Historic Landscapes C10 - Historic Buildings C11 - Archaeology
Water	SA4: To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	C12 - Hydrogeology or Groundwater C21 - Cumulative Impacts
	SA5: To reduce flood risk and improve flood management.	C13 - Surface Waters C14 - Flooding or Coastal Stability C21 - Cumulative Impacts
Soil.	SA9: To maintain, conserve and enhance soil quality	C15 - Existing Soils or Land Type C21 - Cumulative Impacts
Air.	SA8: To protect and improve air quality and reduce the impacts of noise	C16 - Air Quality Management Areas (AQMAs) C21 - Cumulative Impacts

**Table 8 - Relationship between SEA Directive Issues, Sustainability Appraisal Objectives and Site Selection Criteria**

SEA Directive Issues <sup>7</sup> →	→ Sustainability Appraisal Objectives <sup>8</sup> →	→ Site Assessment Criteria  "Does the proposal have any impact on..."
ECONOMIC	Material Assets	SA3: To maintain, conserve and enhance geodiversity. SA10: To conserve and safeguard mineral resources. SA11: To promote the use of alternative materials. SA12: To provide an adequate supply of minerals to meet society's needs. SA13: To encourage sustainable economic growth.
		C6 - Geodiversity C17 - Economic Development C17 - Economic Development C16 - Air Quality Management Areas (AQMAs) C21 - Cumulative Impacts C22 - Carbon Emissions
SOCIAL	Social Considerations.	C25 - 'Are access proposals acceptable?'

**Table 8 - Relationship between SEA Directive Issues, Sustainability Appraisal Objectives and Site Selection Criteria**

SEA Directive Issues <sup>7</sup> →	→ Sustainability Appraisal Objectives <sup>8</sup> →	→ Site Assessment Criteria "Does the proposal have any impact on..."
	SA16: To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.	
	SA17: To sustain the health and quality of life of the population	C18 - Sensitive Human Receptors C19 - Existing Settlements C20 - Airport Safety C21 - Cumulative Impacts
	SA18: To enable safe access to countryside and open spaces	C23 - Recreational Land C24 - Public Rights of Way



## 6. Developing and Refining Options and Assessing Effects

### Introduction

- 6.1. Stage B of the Sustainability Appraisal is the development and refinement of options and policies and an assessment of their effects. Assessment of alternatives, and their effects, is central to the SA/SEA process and is a particularly important element of policy development. This chapter summarises how it applies to assessing sites and areas, including consideration of any mitigation measures and ways to maximise beneficial effects along the way.
- 6.2. The effects of the various options, including site options, have been tested against the SA objectives that were set out in the Scoping Report. The aim of the appraisal is to identify any significant conflicts or combined effects between the options and the SA objectives.

### Relationship between Minerals Strategy and Mineral Sites Plan

- 6.3. As noted earlier, the Minerals Local Plan for Bournemouth, Dorset and Poole will consist of the Minerals Strategy (including development management policies - adopted 2014) and the Mineral Sites Plan, identifying the spatial locations required to deliver the Minerals Strategy. Collectively these documents will:
  - Establish the strategy for mineral provision in Bournemouth, Dorset and Poole, including the development management policies that will be used to determine applications for mineral development
  - Identify specific locations where minerals could be worked in Bournemouth, Dorset and Poole in order to meet society's needs, and
  - Show how this can be achieved without compromising the unique environment of Bournemouth, Dorset and Poole.
- 6.4. The Minerals Strategy was adopted in 2014. As part of its preparation a SA/SEA was prepared. This assessed the proposed mineral strategies and the effects of the development management policies. It formed part of the Examination into the Minerals Strategy, and can be seen at: <https://www.dorsetforyou.gov.uk/media/180591/MSSD03---Sustainability-Appraisal-Report-2012/pdf/MSSD03 - Sustainability Appraisal Report 2012.pdf>
- 6.5. **The Sustainability Appraisal of the Mineral Sites Plan does not re-appraise the overall strategic approaches of the Minerals Strategy.** The Mineral Sites Plan (MSP) identifies and designates the specific sites and areas required to deliver the component mineral strategies of the Minerals Strategy. It also includes additional policies to facilitate the supply of minerals and restoration of sites, including an aggregates Area of Search, a Puddletown Road site management and restoration policy and safeguarding of mineral sites and infrastructure.

### Options Appraised in the Mineral Sites Plan Sustainability Appraisal

- 6.6. The Mineral Sites Plan sustainability appraisal has considered and appraised:
  - Options for **numbers of site allocations** to include in the Plan, and;
  - Options for **site allocations** to be included, and;
  - **Policies** (apart from site allocation policies) included in the Mineral Sites Plan.
- 6.7. In terms of location, options for the location of mineral sites are restricted since minerals can only be worked where they are found. In addition, the site selection process is based on the approach that sites are favoured if they have a willing promoter/backer. Although this identifies sites that are more like to be deliverable, it also has the effect of further restricting site location options.
- 6.8. Appraisal of spatial location has taken place through the separate assessment of each site nomination that has been carried out and the results of these assessments are presented in Appendices A to C. Assessments of current, proposed allocations are in Appendix A; assessment of

sites not included in the Draft Mineral Sites Plan, but not actually withdrawn, are in Appendix B. Assessments of withdrawn/permitted and/or unacceptable sites are in Appendix C.

- 6.9. In terms of options, the numbers of sites to be identified in the Plan is related to the level of provision of various minerals to be identified through the Plan.
- 6.10. The Mineral Sites Plan covers a range of minerals - aggregates (both sand and gravel and crushed rock), ball clay, Purbeck Stone, and other building stone (not Purbeck Stone or Portland Stone). Of these, sand and gravel and Purbeck Stone have had the greatest number of site nominations. The other mineral types have had far fewer.
- 6.11. In the interest of ensuring adequate provision of minerals, options for the numbers of site nominations for ball clay, crushed rock and other building stone to be included have not been separately assessed.
- 6.12. Ball clay is a nationally important mineral and it is important to ensure an ongoing supply, provided the impacts can be appropriately mitigated. Only one site allocation, BC-04 Trigon Hill Extension, is being promoted. There is no need to carry out any assessment of options, apart from assessment of the site itself (see Appendix A).
- 6.13. Three other building stone allocations are proposed. All are small sites, producing low levels of stone and generally for a quite local market. It is considered appropriate to include all three nominated sites, without specific justification for the number selected.
- 6.14. Sand and gravel and Purbeck Stone were different, given the number of site nominations received for these minerals. Sand and gravel, of the minerals produced in Dorset, generally require the largest sites and as such are likely to generally have greater impacts. Sand and gravel and Purbeck Stone are the only minerals where there is an annual production figure, even if only (for Purbeck Stone) a guideline figure.

### **Crushed rock**

- 6.15. The Bournemouth, Dorset and Poole Minerals Strategy notes (paragraph 7.61) that it is expected that existing crushed rock reserves, primarily on Portland, will be adequate to maintain supply during the Plan period. Paragraph 7.62 goes on to note that there may be exceptional circumstances where it may be appropriate to grant permission for a new crushed rock quarry. Policy AS3 establishes this approach.
- 6.16. ~~Only one~~ site allocation - Swanworth Quarry Extension PK16 - has been put forward for future provision of crushed rock (see Appendix A). Given its location in an Area of Outstanding Natural Beauty, it's possible inclusion in the Plan will require detailed justification and to demonstrate that in this case exceptional circumstances apply. ~~There is no need to carry out any assessment of options, apart from assessment of the site itself.~~
- 6.17. The main markets for aggregate, including crushed rock, in Bournemouth, Dorset and Poole can be taken to be Weymouth/Dorset and surrounding villages in the west; and the eastern Dorset/Bournemouth and Poole/Christchurch conurbation in the east. The former is already supplied by the Portland quarries and the latter by the existing Swanworth Quarry.
- 6.18. The type of rock - Portland limestone - produced in the two locations is the same, and it is put to similar uses. There is therefore no inherent difference in rock produced, or in the qualities/uses of the output of each area. Further information about the uses of the rock and the potential for substituting other types of aggregate are set out in Appendix E of this document.
- 6.19. Table 9 below compares the location of the proposed Swanworth Quarry allocation, within Purbeck, against the alternative locational options. One of the options is sourcing crushed rock from the Mendips/Somerset, imported by road and rail. The other option is sourcing local land-won crushed rock entirely from Portland, distributed by road. Primarily on transport sustainability grounds, the preferred option is to maintain a source of crushed rock within Purbeck - although it is recognised that this has landscape and other implications.
- 6.20. On the assessment of locations, as may be expected the Purbeck location performs well on transport

sustainability grounds for supply to the east Dorset/Bournemouth/Poole markets. However the location in Purbeck does have landscape impacts which must be addressed. The Mineral Planning Authority is taking the position that the transport/sustainability benefits associated with a location in Purbeck justify the consideration of the Swanworth Extension through the plan allocation process of the Draft Mineral Sites Plan.

- 6.21. The fact that the current Swanworth Quarry maintains an output approximately equal to the output from Portland quarries indicates the viability of the current Swanworth quarry, and the need for a source of crushed rock in this area. It is expected that the proposed extension would maintain this viability, subject to other factors such as the need for and merits of maintaining an additional source of crushed rock outside Portland; where the likely market is going to be; the uses of the crushed rock; and whether alternative sources of aggregate could be substituted.
- 6.22. There are benefits in maintaining an alternative source of crushed rock outside of Portland, particularly one which supplies the Bournemouth/Poole/eastern Dorset market. The geology of the county would require that such a quarry be located in Purbeck. The fact there is already a quarry in this area supplying crushed rock and wishing to extend is also beneficial, providing the landscape impacts that would result can be satisfactorily addressed.

**Table 9 - Sustainability appraisal of options for a supply of crushed rock - outside of Portland**

<b>Table 9A - Sustainability appraisal of options for a supply of crushed rock - outside of Portland</b>				
<b>Sustainability Objectives</b>	<b>Isle of Portland</b>	<b>Mendips/Somerset</b>	<b>PK16 Swanworth Quarry Extension</b>	
1. <u>To move waste management up the waste hierarchy and promote net self sufficiency</u>	<u>Not relevant to this policy.</u>	<u>Not relevant to this policy.</u>	<u>Not relevant to this policy.</u>	
2. <u>To maintain, conserve and enhance biodiversity</u>	<u>Possible impacts on biodiversity during working</u> <u>Impacts due to transport of rock - for serving Bournemouth and Poole market, Portland has greater impacts than Swanworth Extension</u>	<u>Possible impacts on biodiversity during working</u> <u>Impacts due to transport of crushed rock - for serving Bournemouth and Poole market, Somerset has greater impacts than Swanworth Extension or increased Portland output</u>	<u>Possible impacts on biodiversity during working</u> <u>Impacts due to transport of crushed rock - best option for serving Bournemouth and Poole market.</u>	--
	<u>Possible benefits to biodiversity as part of restoration and after-use</u>	<u>Possible benefits to biodiversity as part of restoration and after-use</u>	<u>Possible benefits to biodiversity as part of restoration and after-use</u>	±
3. <u>To maintain, conserve and enhance geodiversity.</u>	<u>Impacts on geodiversity due to quarrying</u>	<u>Impacts on geodiversity due to quarrying</u>	<u>Impacts on geodiversity due to quarrying</u>	-
	<u>Restoration can leave exposed faces for future use/study</u>	<u>Restoration can leave exposed faces for future use/study</u>	<u>Restoration can leave exposed faces for future use/study</u>	±

**Table 9A - Sustainability appraisal of options for a supply of crushed rock - outside of Portland**

<b>Sustainability Objectives</b>	<b>Isle of Portland</b>	<b>Mendips/Somerset</b>	<b>PK16 Swanworth Quarry Extension</b>
<p>4. <u>To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.</u></p>	<p>Potential impacts on <u>surface/groundwater during working. These will be managed through planning and other controls.</u></p> <p><u>Levels of water consumption also controlled through planning/other controls.</u></p> <p>-?</p>	<p>Potential impacts on <u>surface/groundwater during working. These will be managed through planning and other controls.</u></p> <p><u>Levels of water consumption also controlled through planning/other controls.</u></p> <p>-?</p>	<p>Potential impacts on <u>surface/groundwater during working. These will be managed through planning and other controls.</u></p> <p><u>Levels of water consumption also controlled through planning/other controls.</u></p> <p>-?</p>
<p>5. <u>To reduce flood risk and improve flood management.</u></p>	<p><u>Any risk of flooding, together with required improvements to flood management, to be managed through planning controls.</u></p> <p><u>If risks are unacceptable site will not be developed.</u></p> <p>-?</p>	<p><u>Any risk of flooding, together with required improvements to flood management, to be managed through planning controls.</u></p> <p><u>If risks are unacceptable site will not be developed.</u></p> <p>-?</p>	<p><u>Any risk of flooding, together with required improvements to flood management, to be managed through planning controls.</u></p> <p><u>If risks are unacceptable site will not be developed.</u></p> <p>-?</p>
<p>6. <u>To maintain, conserve and enhance the historic environment (including archaeological sites, historic buildings, conservation areas, historic parks and gardens and other locally distinctive features and their settings).</u></p>	<p><u>Any potential risks of impacts to the historic environment will be managed through planning controls, or the site cannot be developed.</u></p> <p><u>Possible restoration benefits?</u></p> <p>-? ± ?</p>	<p><u>Any potential risks of impacts to the historic environment will be managed through planning controls, or the site cannot be developed.</u></p> <p><u>Possible restoration benefits?</u></p> <p>-? +?</p>	<p><u>Any potential risks of impacts to the historic environment will be managed through planning controls, or the site cannot be developed.</u></p> <p><u>Possible restoration benefits?</u></p> <p>-? +?</p>

**Table 9A - Sustainability appraisal of options for a supply of crushed rock - outside of Portland**

Sustainability Objectives	Isle of Portland	Mendips/Somerset	PK16 Swanworth Quarry Extension
<p>7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.</p>	<p>-? <u>Any potential risks of impacts to landscape will be managed through planning controls, or the site cannot be developed.</u> +? <u>Possible benefits in restoration...</u></p>	<p>-? <u>Any potential risks of impacts to landscape will be managed through planning controls, or the site cannot be developed.</u> +? <u>Possible benefits in restoration...</u></p>	<p>-? <u>Potential for impacts during working, including impacts on national landscape designations (Area of Outstanding Natural Beauty and Heritage Coast) - impacts can be reduced through planning controls</u> +? <u>Possible benefits in restoration...</u></p>
<p>8. To protect and improve air quality and reduce the impacts of noise.</p>	<p>-? <u>Any potential risks of loss of air quality or noise impacts will be managed through planning controls, or the site cannot be developed.</u></p>	<p>-? <u>Any potential risks of loss of air quality or noise impacts will be managed through planning controls, or the site cannot be developed.</u></p>	<p>-? <u>Any potential risks of loss of air quality or noise impacts will be managed through planning controls, or the site cannot be developed.</u></p>
<p>9. To maintain, conserve and enhance soil quality.</p>	<p>-? <u>Any potential risks of long-term impacts/damage to soil quality to be managed through planning controls.</u></p>	<p>-? <u>Any potential risks of long-term impacts/damage to soil quality to be managed through planning controls.</u></p>	<p>-? <u>Any potential risks of long-term impacts/damage to soil quality to be managed through planning controls.</u></p>
<p>10. To conserve and safeguard mineral resources.</p>	<p>± <u>It is expected that development of any site will contribute to achieving the best and most efficient use of mineral resources.</u> <u>Planning controls will be used where appropriate to contribute to this.</u></p>	<p>± <u>It is expected that development of any site will contribute to achieving the best and most efficient use of mineral resources.</u> <u>Planning controls will be used where appropriate to contribute to this.</u></p>	<p>± <u>It is expected that development of any site will contribute to achieving the best and most efficient use of mineral resources.</u> <u>Planning controls will be used where appropriate to contribute to this.</u></p>

**Table 9A - Sustainability appraisal of options for a supply of crushed rock - outside of Portland**

Sustainability Objectives	Isle of Portland	± ?	Mendips/Somerset	+? ±	PK16 Swanworth Quarry Extension
11. To promote the use of alternative materials.	All locations have the potential to incorporate recycling facilities, and promote supply of recycled aggregate. Planning controls will be used where appropriate to contribute to this.	± ?	All locations have the potential to incorporate recycling facilities, and promote supply of recycled aggregate. Planning controls will be used where appropriate to contribute to this.	+?	All locations have the potential to incorporate recycling facilities, and promote supply of recycled aggregate. Planning controls will be used where appropriate to contribute to this.
12. To provide an adequate supply of minerals to meet society's needs.	All locations have the potential to achieve this. Planning controls will be used where appropriate to contribute to this.	±	All locations have the potential to achieve this. Planning controls will be used where appropriate to contribute to this.	±	All locations have the potential to achieve this. Planning controls will be used where appropriate to contribute to this.
13. To encourage sustainable economic growth	All locations have the potential to achieve this. Planning controls will be used where appropriate to contribute to this.	±	All locations have the potential to achieve this. Planning controls will be used where appropriate to contribute to this.	±	All locations have the potential to achieve this. Planning controls will be used where appropriate to contribute to this.
14. To adapt to and mitigate the impacts of climate change.	All locations have the potential to achieve this. Planning controls will be used where appropriate to contribute to this.	±	All locations have the potential to achieve this. Planning controls will be used where appropriate to contribute to this.	±	All locations have the potential to achieve this. Planning controls will be used where appropriate to contribute to this.
15. To minimise the negative impacts of waste and minerals development on the	All locations will have impacts. The closer the site/location to the market, the less the transport-related impacts.	--	All locations will have impacts. The closer the site/location to the market, the less the transport-related impacts.	--	All locations will have impacts. The closer the site/location to the market, the less the transport-related impacts.



**Table 9A - Sustainability appraisal of options for a supply of crushed rock - outside of Portland**

<b>Sustainability Objectives</b>	<b>Isle of Portland</b>	<b>Mendips/Somerset</b>	<b>PK16 Swanworth Quarry Extension</b>
<p>transport network, mitigating any residual impacts.</p>	<p>In all cases planning controls can assist in minimising impacts. To provide a crushed rock supply to the eastern Dorset/Bournemouth and Poole market, impacts from Portland will be higher than Swanworth but not as high as supply from Somerset.</p>	<p>In all cases planning controls can assist in minimising impacts. To provide a crushed rock supply to the eastern Dorset/Bournemouth and Poole market, impacts from Somerset will be higher than Portland and even higher than supply from Swanworth.</p>	<p>In all cases planning controls can assist in minimising impacts. To provide a crushed rock supply to the eastern Dorset/Bournemouth and Poole market, impacts from Swanworth will be the lowest of the three options.</p>
<p>16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.</p>	<p>Road transport is used to take the crushed rock off Portland</p>	<p>Road transport is used to bring crushed rock into Dorset from Somerset - such a long route would lead to impacts. There is the opportunity to use lorries that have taken sand to Somerset, to bring crushed rock back to Dorset - and vice versa. Crushed rock is also imported into Poole by rail - a more sustainable option.</p>	<p>Road transport is used to take the crushed rock out of Purbeck - but the quarry is well placed to serve eastern Dorset and Bournemouth and Poole.</p>
<p>17. To sustain the health and quality of life of the population.</p>	<p>All locations/sites have the potential to affect health/quality of life of local residents. Planning controls will be used where appropriate to mitigate impacts to an acceptable level and protect residents.</p>	<p>All locations/sites have the potential to affect health/quality of life of local residents. Planning controls are used to mitigate impacts to an acceptable level and protect residents.</p>	<p>All locations/sites have the potential to affect health/quality of life of local residents. Planning controls are used to mitigate impacts to an acceptable level and protect residents.</p>



**Table 9A - Sustainability appraisal of options for a supply of crushed rock - outside of Portland**

Sustainability Objectives	Isle of Portland	Mendips/Somerset	PK16 Swanworth Quarry Extension
<p>18. <u>To enable safe access to countryside and open spaces.</u></p>	<p>All locations have the potential to affect access to the countryside, either positively or negatively. Where appropriate planning controls will be used to either improve it or mitigate impacts.</p> <p style="text-align: center;">- / +</p>	<p>All locations have the potential to affect access to the countryside, either positively or negatively. Where appropriate planning controls will be used to either improve it or mitigate impacts.</p> <p style="text-align: center;">- / +</p>	<p>All locations have the potential to affect access to the countryside, either positively or negatively. Where appropriate planning controls will be used to either improve it or mitigate impacts.</p> <p style="text-align: center;">- / +</p>
<p><b><u>Conclusions</u></b></p>	<p>This assessment is of potential locations for crushed rock supply, as opposed to specific sites.</p> <p>All three locations perform similarly over most of the Sustainability Objectives - the real difference is on transport, or on transport related impacts. Swanworth Quarry also shows significant impacts on landscape and visual impacts.</p> <p>If it is considered beneficial to have an alternative source of supply of crushed rock apart from Portland, and if it is considered that Portland can reasonably serve the Weymouth/Dorchester market and if the remaining significant market is considered to be eastern Dorset/Bournemouth and Poole - then the closer the location to this market the better.</p> <p>Swanworth is best located to serve the eastern Dorset market, whereas Portland is not as well located for this.</p> <p>Quarries in the Mendips lead to transport impacts if they use road transport to supply crushed rock - although there is potential to use back-haulage i.e. transport loads each way. There is also the option to use rail, importing crushed rock into Poole. However, it appears that significant quantities are being imported, likely more than can be imported by rail only.</p> <p>This indicates there is a sustainability benefit in maintaining a source of crushed rock to serve eastern Dorset/Bournemouth and Poole apart from Portland. This could be Swanworth or the Mendips - and although there are more sustainable options for bringing the crushed rock from Somerset, where road transport is used the impacts are higher than for a local source.</p> <p>Other issues to take into consideration are the uses of the crushed rock, and the potential to substitute other types of aggregate (i.e. sand and gravel) for the Swanworth crushed rock.</p> <p>Further information is provided in Appendix E of this document.</p>		

## Purbeck Stone

- 6.23. The Minerals Strategy, through Policy PK1, commits to providing for the production of some 20,000 tonnes per annum (tpa) of saleable stone. A number of Purbeck Stone sites have been nominated and the Mineral Planning Authority had to decide how many of these should be included in the Plan.
- 6.24. Unlike sand and gravel, it is more difficult to assess with any certainty the amount of saleable Purbeck Stone contained within a site nomination. Furthermore, there is a wide range of types (beds) of Purbeck Stone demanded by the market, and not every site will necessarily have a full range of beds/types. However, since the market demands a full range of Purbeck Stone types, operators/site nominees will ideally want access to a range of sites to provide a range of stone types. In addition, Purbeck Stone quarries are generally quite small with lower impacts.
- 6.25. For these reasons, it was considered appropriate to include all site nominations provided the individual site assessment of each site has not identified any impacts not capable of mitigation.

## Sand and gravel

- 6.26. For sand and gravel, the current planned provision varies annually, but to date the figure of the average of the past ten years of sales - currently 1.51 million tonnes per annum (mtpa) - has been used to determine the current landbank.
- 6.27. If all the sand and gravel site nominations were included in the DMSP, this would be an over-provision in relation to predicted demand. The Mineral Planning Authority has options – to over-provide at the plan allocation stage, or to provide an amount that is relatively close to the predicted requirement over the Plan period. Both options have been tested in [Table 9A](#) below:
- **Option 1:** publish the DMSP with just enough sites to meet expected demand, assuming that all sites will be found acceptable following Examination – this reduces the risk of environmental impacts but increases the risk of the Plan being found unsound on grounds of insufficient provision.
  - **Option 2:** publish the DMSP with an over-provision of supply (i.e. more sites than needed to just meet demand), with the expectation that some sites will be rejected following the Examination – this reduces the risk that the Plan could be found unsound for inadequate provision of aggregate, but potentially increasing impacts on amenity and the environment.
- 6.28. Both of these options assume the Aggregates Area of Search will be included, providing additional flexibility should any of the allocated sites in the adopted MSP be found unacceptable at planning application stage, or should there be an increase in demand that cannot be met in the short term by the allocated sites.
- 6.29. Following the appraisal of these options, it was determined that including more rather than less sand and gravel sites in the Draft Mineral Sites Plan prior to Examination is preferable, on the basis that this provides more flexibility and greater certainty that, should some of the sites be rejected at Examination, the Plan would still be able to meet sand and gravel demand.
- 6.30. Including an over-provision in the Mineral Sites Plan is also considered beneficial on the

**Table 9A - Sustainability Appraisal of Options for Number of Sand and Gravel Sites to Allocate (both options assume the existence of the Aggregates Area of Search)**

Table 9A - Sustainability Appraisal of Options for Number of Sand and Gravel Sites to Allocate (both options assume the existence of the Aggregates Area of Search)		
Sustainability Objectives	Option 1 Identifying More Sand And Gravel Sites in the Draft Mineral Sites Plan	Option 2 Identifying Less Sand and Gravel Sites in the Draft Mineral Sites Plan
1. To move waste management up the waste hierarchy and promote net self sufficiency	Not relevant.	
2. To maintain, conserve and enhance biodiversity	<ul style="list-style-type: none"> <li>All site options can be expected to have some level of impact, and the greater the number of sites identified, the greater the level of impact that can be expected across the Plan area.</li> <li>Identifying more sites will reduce the risk that the Plan will be found unsound for inadequate provision for aggregates.</li> </ul>	<ul style="list-style-type: none"> <li>All options can be expected to have some level of impact, and the less the number of sites identified, the less the level of impact that can be expected across the Plan area.</li> <li>Identifying less sites will increase the risk that the Plan will be found unsound for inadequate provision for aggregates.</li> </ul>
3. To maintain, conserve and enhance geodiversity.	<ul style="list-style-type: none"> <li>Sand and gravel sites are not expected to have any particular impacts, either positive or negative, on geodiversity.</li> </ul>	
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the	<ul style="list-style-type: none"> <li>All options can be expected to have some level of impact, and the greater the number of sites identified, the greater the level of impact that can be expected across the Plan area.</li> </ul>	<ul style="list-style-type: none"> <li>All options can be expected to have some level of impact, and the less the number of sites identified, the less the level of impact that can be expected across the Plan area.</li> </ul>

**Table 9A - Sustainability Appraisal of Options for Number of Sand and Gravel Sites to Allocate (both options assume the existence of the Aggregates Area of Search)**

Option 1 Identifying More Sand And Gravel Sites in the Draft Mineral Sites Plan			Option 2 Identifying Less Sand and Gravel Sites in the Draft Mineral Sites Plan		
Sustainability Objectives					
consumption of water in a sustainable way.	<ul style="list-style-type: none"> <li>Identifying more sites will reduce the risk that the Plan will be found unsound for inadequate provision for aggregates.</li> </ul>	+	<ul style="list-style-type: none"> <li>Identifying less sites will increase the risk that the Plan will be found unsound for inadequate provision for aggregates.</li> </ul>	-	
5. To reduce flood risk and improve flood management.	<ul style="list-style-type: none"> <li>More sites can provide greater benefits of flood water storage and will also reduce the risk that the Plan will be found unsound for inadequate provision for aggregates.</li> </ul>	+	<ul style="list-style-type: none"> <li>Identifying less sites will increase the risk that the Plan will be found unsound for inadequate provision for aggregates.</li> </ul>	-	
6. To maintain, conserve and enhance the historic environment (including archaeological sites, historic buildings, conservation areas, historic parks and gardens and other locally distinctive features and their settings).	<ul style="list-style-type: none"> <li>The greater the number of sites identified, the greater the likelihood that there will be some impacts across the Plan area.</li> </ul>	-	<ul style="list-style-type: none"> <li>The less the number of sites identified, the less the likelihood that there will be some impacts across the Plan area.</li> </ul>	+	
	<ul style="list-style-type: none"> <li>The greater the number of sites identified, the less the risk that the Plan will be found unsound for inadequate provision for aggregates.</li> </ul>	+	<ul style="list-style-type: none"> <li>The lower the number of sites identified, the greater the risk that the Plan will be found unsound for inadequate provision for aggregates.</li> </ul>	-	

**Table 9A - Sustainability Appraisal of Options for Number of Sand and Gravel Sites to Allocate (both options assume the existence of the Aggregates Area of Search)**

Sustainability Objectives		Option 1 Identifying More Sand And Gravel Sites in the Draft Mineral Sites Plan	Option 2 Identifying Less Sand and Gravel Sites in the Draft Mineral Sites Plan
<p>7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.</p>		<ul style="list-style-type: none"> <li>All site proposals are likely to have some landscape/visual impacts, and the greater the number of sites identified, the greater the level of expected impact across the Plan area.</li> </ul>	<ul style="list-style-type: none"> <li>All site proposals are likely to have some landscape/visual impacts. If fewer sites are identified, this could be expected to lead to a reduced impact across the Plan area.</li> </ul>
		<ul style="list-style-type: none"> <li>Identifying potentially more sites that might actually be needed is expected to reduce the risk that the Plan will be found unsound on grounds of inadequate provision for aggregates supply.</li> </ul>	<ul style="list-style-type: none"> <li>Identifying less sites than might actually be needed could increase the risk that the Plan will be found unsound in not providing for adequate aggregates provision.</li> </ul>
<p>8. To protect and improve air quality and reduce the impacts of noise.</p>		<ul style="list-style-type: none"> <li>Quarrying aggregates is likely to have some impacts on air quality, and will result in some noise.</li> <li>The greater the number of sites identified, the greater the level of expected impact across the Plan area.</li> </ul>	<ul style="list-style-type: none"> <li>Quarrying aggregates is likely to have some impacts on air quality, and will result in some noise.</li> <li>The less the number of sites identified, the less the level of expected impact across the Plan area.</li> </ul>
		<ul style="list-style-type: none"> <li>Identifying potentially more sites that might actually be needed is expected to reduce the risk that the Plan will be found unsound on grounds of inadequate provision for aggregates supply.</li> </ul>	<ul style="list-style-type: none"> <li>Identifying potentially fewer sites that might actually be needed is expected to increase the risk that the Plan will be found unsound on grounds of inadequate provision for aggregates supply.</li> </ul>

**Table 9A - Sustainability Appraisal of Options for Number of Sand and Gravel Sites to Allocate (both options assume the existence of the Aggregates Area of Search)**

Option 1 Identifying More Sand And Gravel Sites in the Draft Mineral Sites Plan		Option 2 Identifying Less Sand and Gravel Sites in the Draft Mineral Sites Plan	
<b>Sustainability Objectives</b>			
9. To maintain, conserve and enhance soil quality.	<ul style="list-style-type: none"> <li>Although soils can be removed prior to quarrying and re-spread later, it is expected that there will be some impacts, even if only temporary.</li> <li>The greater the number of quarries identified and developed, the greater the impacts on soils/soil quality.</li> </ul>	-	<ul style="list-style-type: none"> <li>The less the number of quarries identified and developed, the less the likely impacts on soils/soil quality across the Plan area.</li> </ul> <p style="text-align: center;">+</p>
	<ul style="list-style-type: none"> <li>Identifying potentially more sites that might actually be needed is expected to reduce the risk that the Plan will be found unsound on grounds of inadequate provision for aggregates supply.</li> </ul>	+	<ul style="list-style-type: none"> <li>Identifying fewer site increases the risks that the Plan will be found unsound on grounds of inadequate provision for aggregates supply.</li> </ul> <p style="text-align: center;">-</p>
10. To conserve and safeguard mineral resources.	<ul style="list-style-type: none"> <li>Identifying and allocating more sites will ensure the protection and safeguarding of more mineral.</li> <li>It will give greater certainty and security of supply, should one or more of the proposed sites be found unsuitable, either at the allocation stage or at the planning application stage.</li> <li>Identifying potentially more sites that might actually be needed is expected to reduce the risk that the Plan will be found unsound on grounds of inadequate provision for aggregates supply.</li> </ul>	+	<ul style="list-style-type: none"> <li>Identifying less sites will secure/protect less mineral.</li> <li>Identifying fewer site increases the risks that the Plan will be found unsound on grounds of inadequate provision for aggregates supply.</li> </ul> <p style="text-align: center;">-</p>



**Table 9A - Sustainability Appraisal of Options for Number of Sand and Gravel Sites to Allocate (both options assume the existence of the Aggregates Area of Search)**

Table 9A - Sustainability Appraisal of Options for Number of Sand and Gravel Sites to Allocate (both options assume the existence of the Aggregates Area of Search)		
Sustainability Objectives	Option 1 Identifying More Sand And Gravel Sites in the Draft Mineral Sites Plan	Option 2 Identifying Less Sand and Gravel Sites in the Draft Mineral Sites Plan
	<ul style="list-style-type: none"> <li>• However the more sites that are developed, the greater the level of impacts which could be experienced across the Plan area.</li> </ul>	<ul style="list-style-type: none"> <li>• The fewer the number of sites identified, the less the level of impacts that could be experienced across the Plan area.</li> </ul>
11. To promote the use of alternative materials.	<ul style="list-style-type: none"> <li>• Greater numbers of sand and gravel sites could have a negative impact on production of alternatives to land-won sand and gravel.</li> </ul>	<ul style="list-style-type: none"> <li>• The fewer the number of sites identified, the less the level of impacts that could be experienced across the Plan area.</li> </ul>
12. To provide an adequate supply of minerals to meet society's needs.	<ul style="list-style-type: none"> <li>• Identifying a higher number of sites will contribute to ensuring an adequate supply of minerals.</li> <li>• It will also reduce the risk that the Plan will be found unsound on grounds of inadequate provision for aggregates supply.</li> </ul>	<ul style="list-style-type: none"> <li>• Identifying a fewer number of sites could make the adequate supply of minerals less certain.</li> <li>• It would also increase the risks that the Plan will be found unsound on grounds of inadequate provision for aggregates supply.</li> </ul>
	<ul style="list-style-type: none"> <li>• However the more sites that are developed, the greater the level of impacts which could be experienced across the Plan area.</li> </ul>	<ul style="list-style-type: none"> <li>• The fewer the number of sites identified, the less the level of impacts that could be experienced across the Plan area.</li> </ul>
13. To encourage sustainable economic growth	<ul style="list-style-type: none"> <li>• It is expected that identifying more aggregates sites will benefit the economy, encouraging sustainable economic growth.</li> </ul>	<ul style="list-style-type: none"> <li>• A lower supply of aggregate could have a constraining effect on economic growth, but it is unlikely that production would be so low as</li> </ul>

**Table 9A - Sustainability Appraisal of Options for Number of Sand and Gravel Sites to Allocate (both options assume the existence of the Aggregates Area of Search)**

Sustainability Objectives			Option 1 Identifying More Sand And Gravel Sites in the Draft Mineral Sites Plan	Option 2 Identifying Less Sand and Gravel Sites in the Draft Mineral Sites Plan
14. To adapt to and mitigate the impacts of climate change.		<ul style="list-style-type: none"> <li>Identifying potentially more sites that might actually be needed is expected to reduce the risk that the Plan will be found unsound on grounds of inadequate provision for aggregates supply.</li> </ul>	<ul style="list-style-type: none"> <li>to significantly limit the economy – this would trigger a review of the Minerals Strategy.</li> <li>The less the number of sites identified, the less the level of expected impact across the Plan area.</li> </ul>	
		<ul style="list-style-type: none"> <li>However, the greater the number of aggregates sites developed, the greater the impact on environment and amenity.</li> </ul>	<ul style="list-style-type: none"> <li>However, having less sites identified in the Plan could possibly make it less responsive to sudden increases in demand.</li> <li>Identifying fewer sites increases the risks that the Plan will be found unsound on grounds of inadequate provision for aggregates supply.</li> </ul>	–
		<ul style="list-style-type: none"> <li>Identifying more sites could cumulatively increase production of greenhouse gases, although the levels would be relatively small.</li> <li>The greater the number of aggregates sites developed, the greater the impact on environment and amenity.</li> </ul>	<ul style="list-style-type: none"> <li>Identifying less sites could reduce production of greenhouse gases, although the levels would be relatively small.</li> <li>The less the number of sites identified, the less the level of expected impact across the Plan area.</li> </ul>	+
		<ul style="list-style-type: none"> <li>Identifying potentially more sites that might actually be needed is expected to reduce the risk that the Plan will be found unsound on grounds of inadequate provision for aggregates supply.</li> </ul>	<ul style="list-style-type: none"> <li>Identifying fewer sites increases the risks that the Plan will be found unsound on grounds of inadequate provision for aggregates supply.</li> </ul>	–



**Table 9A - Sustainability Appraisal of Options for Number of Sand and Gravel Sites to Allocate (both options assume the existence of the Aggregates Area of Search)**

Sustainability Objectives			Option 1 Identifying More Sand And Gravel Sites in the Draft Mineral Sites Plan	Option 2 Identifying Less Sand and Gravel Sites in the Draft Mineral Sites Plan
15. To minimise the negative impacts of waste and minerals development on the transport network, mitigating any residual impacts.			<ul style="list-style-type: none"> <li>Identifying a greater number of sites is likely to have the effect of increasing impacts on the transport network. Mitigation would reduce this to some extent.</li> <li>The greater the number of aggregates sites developed, the greater the impact on environment and amenity.</li> <li>Identifying potentially more sites that might actually be needed is expected to reduce the risk that the Plan will be found unsound on grounds of inadequate provision for aggregates supply.</li> </ul>	<ul style="list-style-type: none"> <li>Identifying fewer sites is likely to have the effect of reducing impacts on the transport network.</li> <li>The fewer the number of aggregates sites developed, the less the impact on environment and amenity.</li> <li>Identifying fewer site increases the risks that the Plan will be found unsound on grounds of inadequate provision for aggregates supply.</li> </ul>
			-	+
16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.				?
			<ul style="list-style-type: none"> <li>Identifying greater or less numbers of sites is not expected to encourage or discourage the use of sustainable transport modes.</li> </ul>	
17. To sustain the health and quality of life of the population.			<ul style="list-style-type: none"> <li>A higher number of sites is likely to have greater impacts on local communities and the environment, and impacts on health.</li> <li>Identifying potentially more sites that might actually be needed is expected to reduce the risk that the Plan will be found unsound on grounds of inadequate provision for aggregates supply.</li> </ul>	<ul style="list-style-type: none"> <li>Identifying/developing fewer sites is likely to have less impact on local communities and the environment.</li> <li>Identifying fewer site increases the risks that the Plan will be found unsound on grounds of inadequate provision for aggregates supply.</li> </ul>
			-	+

**Table 9A - Sustainability Appraisal of Options for Number of Sand and Gravel Sites to Allocate (both options assume the existence of the Aggregates Area of Search)**

Sustainability Appraisal of Options for Number of Sand and Gravel Sites to Allocate (both options assume the existence of the Aggregates Area of Search)		
Sustainability Objectives	Option 1 Identifying More Sand And Gravel Sites in the Draft Mineral Sites Plan	Option 2 Identifying Less Sand and Gravel Sites in the Draft Mineral Sites Plan
<p>18. To enable safe access to countryside and open spaces.</p>	<ul style="list-style-type: none"> <li>• The development of aggregate sites, particularly when worked and restored, has the potential to improve access to the countryside.</li> <li>• The greater the number of sites developed, potentially the greater the benefits that may be received.</li> <li>• Identifying potentially more sites that might actually be needed is expected to reduce the risk that the Plan will be found unsound on grounds of inadequate provision for aggregates supply.</li> </ul> <p style="text-align: center;">+</p>	<ul style="list-style-type: none"> <li>• Developing fewer sites could result in less benefits being realised.</li> <li>• Identifying fewer sites increases the risks that the Plan will be found unsound on grounds of inadequate provision for aggregates supply.</li> </ul> <p style="text-align: center;">-</p>

<p><b>Conclusions</b></p>	<p>It is generally the case that identifying more sand and gravel sites increases the likelihood of environmental impacts. However, the Mineral Planning Authority is confident that the protection provided by the policies of the 2014 Minerals Strategy, along with national policy, is adequate to protect amenity and the environment.</p> <p>It does provide flexibility at the Examination, on the expectation that some of the sites may be removed. There is also no need to include all the sites in the Plan to be adopted.</p> <p>It also provides flexibility during the life of the Plan, if demand was to increase above a level that the allocated sites could meet or if one or more of the allocated were found at a later stage to be unsuitable for development.</p>
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**Table 9A - Sustainability Appraisal of Options for Number of Sand and Gravel Sites to Allocate (both options assume the existence of the Aggregates Area of Search)**

Sustainability Objectives	Option 1 Identifying More Sand And Gravel Sites in the Draft Mineral Sites Plan	Option 2 Identifying Less Sand and Gravel Sites in the Draft Mineral Sites Plan
	<p>The Area of Search designation policy contains criteria to control when unallocated sites from the Area of Search might be approved.</p> <p>On the basis of these findings it is considered appropriate and sustainable to include an Area of Search, provided the conditions under which an unallocated site from within the Area of Search may be developed is carefully controlled.</p>	

## Establishing Aggregate Demand

- 6.31. Consideration has also been given to the various options for establishing the basis for aggregate demand. The National Planning Policy Framework (National Planning Policy Framework) (para. 146) states that mineral planning authorities should plan for a steady and adequate supply of aggregate minerals (sand and gravel and crushed rock) by preparing an annual Local Aggregates Assessment (LAA) based on a rolling average of 10 years sales data and other relevant local information.
- 6.32. National Planning Practice Guidance (March 2014) further clarifies that LAAs should contain a forecast of demand for aggregates based on both the rolling average of 10-years sales data and other relevant local information.
- 6.33. However, there are other options for generating an indication of aggregate demand. Factors which could have an influence on future demand include:
- a. general growth in the economy (as measured by GVA)
  - b. demand for new housing
  - c. undertaking major new infrastructure projects requiring large amounts of aggregate
  - d. general growth in population could also be a factor
  - e. possible supply constraints affecting areas from which sand and gravel is sourced
- 6.34. All these approaches have some disadvantages, mainly arising out of the lack of a reliable, direct and quantifiable link between the factor and demand for aggregate. In seeking to identify a method, it is also important to bear in mind the potential for 'double counting' of growth factors. For example any demand projected from growth in population would overlap with growth in demand projected from increased housing completions and the latter, together with other infrastructure projects, with GVA growth in the construction sector.
- 6.35. Linking aggregates demand directly to population growth is unlikely to be robust as the available information does not present a clear picture of the scale and nature of any inter-relationship. There is no clear signal from current planned specific infrastructure projects over the time period to 2030 and it is concluded that this should be viewed as a neutral influence on aggregate demand.
- 6.36. Whilst it may be expected that there will be some connection between GVA growth and demand for aggregate the nature of the inter-relationship is not clear and GVA is difficult to forecast with any confidence over the timeframe of the Plan. On the other hand such a method has the benefit of relative simplicity and may fit, certainly in the near to mid-term, with the wider economic picture as the economy emerges from recession and construction activity increases.
- 6.37. Linking demand for aggregate with the scale of future housing requirements has advantages, as there is a direct link between house building and demand for aggregate and the proposed rate of house building can be projected over the plan period. On the other hand the quantitative relationship between house building and requirements for aggregate is not clear and there may be uncertainties over the numbers of houses planned to be built in the market areas served by the Mineral Planning Authority in question.
- 6.38. Any method will therefore need to rely on a number of assumptions and it is considered that there may be risks involved in adopting an overly sophisticated approach. The NPPF requires that account should be taken of 10 year historic sales and other relevant local information. It is therefore considered to be appropriate to take a balanced view based on a range of information, including 10 year historic sales, in identifying the level of demand to be planned for. This is the approach taken in the preparation of annual Local Aggregates Assessments.
- 6.39. The figure identified in the Local Aggregates Assessment is used as the annual provision figure in establishing the landbank.

### **Including an Aggregates Area of Search**

- 6.40. Policy MS-2 of the Mineral Sites Plan designates a Sand and Gravel Area of Search (AOS). Should there be a shortfall in sand and gravel supply, then the MPA will permit the development of an unallocated site or sites within the AOS provided that the potential developers of any such site can:
- demonstrate that there is a shortfall in the supply of sand and gravel
  - that the shortfall cannot be met from existing sites and/or new sites allocated through Policy MS-1 of the emerging Mineral Sites Plan
  - there are no permitted sand and gravel reserves capable of being worked but not currently being worked in the vicinity of the site that could be used to meet the identified shortfall and
  - the development of the unallocated site/sites does not prevent or disadvantage any allocated sites in coming forward and
- 6.41. In addition to permitting unallocated sites where there is a demonstrable shortfall in supply, the MPA will also permit unallocated sites in the AOS where the development of such sites can be shown to result in significant environmental gains which deliver a net environmental benefit provided they do not delay or otherwise prejudice the development of sites allocated through this Plan. If it appears that the unallocated site would prejudice development of allocated sites, it will not be permitted.
- 6.42. The benefits of including the Area of Search in the Draft Mineral Sites Plan is that it offers greater flexibility in meeting demand, should there be a constraint to supply or a sharp increase in demand that cannot be met by the allocated sites. However, there is an element of planning blight for the areas covered by the Area of Search as there is an increased likelihood that any part of the Area of Search is more likely to be developed.

## 7. Policy Appraisal

### Background.

- 7.1. There are 9 policies in the Plan, numbered MS-1 through MS-9. Policies MS-1 through MS-7 relate to the provision of mineral sites. Since individual sustainability appraisal assessments have been carried out for all the site nominations, these site allocation policies have not been appraised separately.
- 7.2. Policy MS-2 is an exception to this in that it does not specifically allocate individual sites, but instead allocates an Aggregates Area of Search where aggregate sites not specifically allocated could be permitted provided certain criteria are met.
- 7.3. Policy MS-8 covers the designation of the Puddletown Road Area, an area incorporating the Puddletown Road and surrounding areas. It is intended to facilitate heathland restoration and coherent and long-term site development, management and restoration, with benefits to the environment and to local amenity.
- 7.4. Policy MS-9 relates to safeguarding of mineral sites and infrastructure, developing the provisions of the safeguarding policies in the Minerals Strategy and requiring District/Borough authorities to consult Dorset County Council as Mineral Planning Authority if mineral sites/infrastructure might be threatened by encroaching built development. It is intended to maintain an adequate and appropriate separation between minerals development and built development, and minimise impacts due to encroachment.
- 7.5. These policies are assessed using the 16 sustainability objectives identified through the Sustainability Appraisal Scoping Report and set out in **Table 10** of this report. The Policies are worded as follows:

#### **Policy MS-2: Sand and Gravel Area of Search**

An Area of Search, as shown in Figure 2 and on the Policies Map, is designated with the intention of facilitating the development of sand and gravel sites and maintaining appropriate levels of supply.

Proposals for the development of unallocated sites from within the Area of Search will be permitted if:

- i) there is a demonstrable shortfall in the supply of sand and gravel, or
- ii) the development of an unallocated site offers net environmental benefits that would justify its development, or
- iii) the development of an unallocated site is for the prior extraction of aggregate in advance of strategically important non-mineral development, and
- iv) in the case of i. and ii. above,
  - a. they would not delay or otherwise prejudice the development of allocated site(s) which have the potential to produce the same specific type of aggregate mineral and which would serve the same geographic market, and
  - b. they would not add unacceptable cumulative impacts to the development of allocated or permitted sites.

Applications for the development of non-allocated sites within the designated Area of Search must demonstrate that:

- i) the proposals are in accordance with the development plan, and
- ii) they have considered and addressed all relevant development considerations; and
- iii) any adverse impacts will be mitigated to the satisfaction of the Mineral Planning Authority.

Sites will only be considered where it has been demonstrated that possible effects (including those related to hydrology, displacement of recreation, species, proximity, land management and

restoration) that might arise from their development would not adversely affect the integrity of European and Ramsar sites either alone or in combination with other plans or projects.

#### **Policy MS-8: Puddletown Road Area Policy**

Within the Puddletown Road Area as shown on the Policies Map and in Figure 8, the Mineral Planning Authority will work with operators, landowners, Natural England and the Local Nature Partnership to secure a consistent and coordinated approach to the development, working and restoration of land permitted for mineral development.

This consistent and coordinated approach will:

- i) create a coherent and resilient ecological network, with primary emphasis on restoration of heathland and acid grassland;
- ii) support the management objectives of the Heath/Forest Mosaic Landscape Type;
- iii) avoid or minimise adverse transport, environmental or amenity impacts arising from mineral workings;
- iv) maximise opportunities for biodiversity gains, including through effective and timely restoration of lowland heath and associated habitats and linking restored sites with areas of nature conservation interest;
- v) secure cost-effective and long-term aftercare and management;
- vi) meet environmental and compatible recreational objectives in the area.

Development, restoration, management or other activities will only be undertaken where it can be demonstrated that any possible effects that might result will not adversely affect the integrity of European and Ramsar sites, either alone or in combination with other plans or projects.

#### **Policy MS-9: Preventing Land-Use Conflict**

The mineral sites and associated infrastructure that support the supply of minerals in Bournemouth, Dorset and Poole are safeguarded against development that could unnecessarily sterilise the sites and infrastructure, or prejudice or jeopardise their use, by creating incompatible land uses nearby.

Consultation areas of 250 metres are designated around safeguarded mineral sites and infrastructure. District and Borough Councils within Dorset will consult the mineral planning authority on proposals for non-minerals development partly or wholly within these consultation areas.

### **Result of Assessment**

- 7.6. The sustainability appraisal indicates that all three of these policies perform well against the sustainability objectives and it is expected that these policies will be fit for purpose. No changes are currently considered necessary.



**Table 10 - Sustainability appraisal of Policies MS-2, MS-8 and MS-9.**

<b>Table 10 - Sustainability appraisal of Policies MS-2, MS-8 and MS-9.</b>			
<b>Sustainability Objectives</b>	<b>Policy MS-2: Sand and Gravel Area of Search</b>	<b>Policy MS-8: Puddletown Road Area Policy</b>	<b>Policy MS-9: Safeguarding Minerals Sites and Infrastructure</b>
1. To move waste management up the waste hierarchy and promote net self sufficiency	Not relevant to this policy.	Not relevant to this policy.	Not relevant to this policy.
2. To maintain, conserve and enhance biodiversity	Positive – the Area of Search has been selected to minimise impacts on biodiversity.	Positive – the policy is specifically intended to benefit biodiversity, through effective site management and restoration.	Neutral – this policy not specifically relevant to this Objective.
3. To maintain, conserve and enhance geodiversity.	Neutral – sand and gravel quarries not particularly beneficial to geodiversity..	Neutral/Positive – although this policy is not specifically intended to affect geodiversity, there could be benefits through improved management of the wider area.	Neutral – this policy not specifically relevant to this Objective.
4. To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.	Neutral – development of additional sites, as facilitated by this policy, is expected to be carried out in such a way that impacts on the water environment will be fully mitigated.	Positive – through improved water management from longer-term site development, management and restoration.	Neutral – this policy not specifically relevant to this Objective.
5. To reduce flood risk and improve flood management.	Neutral – flood risk and flood management .	Positive – through improved management and restoration, which could affect the flow of water off the	Neutral – this policy not specifically relevant to this Objective.



**Table 10 - Sustainability appraisal of Policies MS-2, MS-8 and MS-9.**

Sustainability Objectives	Policy MS-2: Sand and Gravel Area of Search	Policy MS-8: Puddletown Road Area Policy	Policy MS-9: Safeguarding Minerals Sites and Infrastructure
	No specific benefits are expected from the development of additional sand and gravel sites.	Puddletown Road ridge and into the Piddle and the Frome.	
6. To maintain, conserve and enhance the historic environment (including archaeological sites, historic buildings, conservation areas, historic parks and gardens and other locally distinctive features and their settings).	Neutral – Minerals development facilitated by this policy would go through the normal assessments to ensure no unacceptable impacts on the historic environment.	Positive – policy is not intended to directly affect the historic environment, but there are likely to be benefits to the historic environment (e.g. historic landscapes) from its application.	Neutral – this policy not specifically relevant to this Objective.
7. To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.	Positive – the Area of Search has been selected to minimise impacts on landscape/visual impacts.	Positive – through improved management and restoration, which is expected to have a benefit on the landscape.	Neutral – this policy not specifically relevant to this Objective.
8. To protect and improve air quality and reduce the impacts of noise.	Neutral – Minerals development facilitated by this policy would go through the normal assessments to ensure no unacceptable impacts on air quality or local amenity.	Neutral – policy is not intended to directly affect air quality/noise, but there could be benefits through improved management.	Positive – this policy offers increased control over the separation between built development and mineral sites and therefore can minimise air quality and noise impacts.

**Table 10 - Sustainability appraisal of Policies MS-2, MS-8 and MS-9.**

Sustainability Objectives	Policy MS-2: Sand and Gravel Area of Search	Policy MS-8: Puddletown Road Area Policy	Policy MS-9: Safeguarding Minerals Sites and Infrastructure
9. To maintain, conserve and enhance soil quality.	Neutral – Minerals development facilitated by this policy would go through the normal assessments to ensure no unacceptable impacts on soil quality.	Neutral – policy is not intended to directly affect soil quality, but there could be benefits.	Neutral – this policy not specifically relevant to this Objective.
10. To conserve and safeguard mineral resources.	Negative – this policy facilitates further development of the sand and gravel resource.	Neutral/Positive – considering the wider Puddletown Road area holistically is expected to lead to improved management and conservation of existing resources.	Positive – this policy will improve the safeguarding of mineral sites and infrastructure, contributing to the conservation and safeguarding of the mineral resource.
11. To promote the use of alternative materials.	Negative – this policy facilitates further development of the sand and gravel resource.	Neutral/Negative - It is unlikely that this policy will promote the use of alternative materials.	Neutral – this policy not specifically relevant to this Objective.
12. To provide an adequate supply of minerals to meet society's needs.	Positive – this policy will facilitate the provision of aggregates and help to ensure an adequate supply.	Positive – this policy is intended to improve the planning and management of the Puddletown Road area, which will include future mineral provision.	Positive – this policy will safeguard mineral sites and infrastructure, which is a key factor in ensuring future supply of minerals.
13. To encourage sustainable economic growth	Positive – this policy is intended to facilitate the development of aggregates quarries, with associated economic benefits, in locations of least biodiversity/landscape impact and where additional benefits environmental benefits will be realised.	Positive – the policy seeks to secure a consistent and coordinated approach to site working and development, intended to improve site development and benefit the economy.	Positive – this policy is intended to minimise threats to on-going mineral production that could result from encroachment by built development. This should encourage both mineral development and built development to grow in a mutually sustainable manner.

**Table 10 - Sustainability appraisal of Policies MS-2, MS-8 and MS-9.**

Sustainability Objectives	Policy MS-2: Sand and Gravel Area of Search	Policy MS-8: Puddletown Road Area Policy	Policy MS-9: Safeguarding Minerals Sites and Infrastructure
<p>14. To adapt to and mitigate the impacts of climate change.</p>	<p>Neutral/Negative – this policy facilitates new sand and gravel sites and these will produce additional greenhouse gases – although the amount that could be produced will be relatively small. Policy CC1 requires that developers include a report on how climate change impacts have been considered and mitigated against.</p>	<p>Positive – working and restoration both have an influence on climate change. This is particularly true for restoration, where the environment created/re-created after working can provide for adaptation or mitigation of impacts of climate change e.g. through opportunities for water storage and management, flood water storage, the creation of new areas of vegetation and habitats to absorb carbon and the provision of green spaces.</p>	<p>Neutral – this policy not specifically relevant to this Objective.</p>
<p>15. To minimise the negative impacts of waste and minerals development on the transport network, mitigating any residual impacts.</p>	<p>Negative – this policy facilitates new sand and gravel sites and these will have impacts on the transport network.</p>	<p>Neutral – policy is not intended to directly affect transport issues and mitigate impacts, but there could be benefits depending on how the site is developed and managed.</p>	<p>Neutral – this policy not specifically relevant to this Objective.</p>
<p>16. To support and encourage the use of sustainable transport modes, imposing no unmitigated negative impacts on them.</p>	<p>Neutral – this policy not specifically relevant to this Objective.</p>	<p>Neutral - it is unlikely that this policy will affect transport arrangements associated with site development.</p>	<p>Neutral – this policy not specifically relevant to this Objective.</p>

**Table 10 - Sustainability appraisal of Policies MS-2, MS-8 and MS-9.**

Sustainability Objectives	Policy MS-2: Sand and Gravel Area of Search	Policy MS-8: Puddletown Road Area Policy	Policy MS-9: Safeguarding Minerals Sites and Infrastructure
<p>17. To sustain the health and quality of life of the population.</p>	<p>Positive – although not specifically focussed on this Objective, locating new quarries in areas of less visual impacts will contribute to quality of life.</p>	<p>Positive – this policy is intended to improve the development, management and restoration of sites, all of which could benefit health and quality of life, particularly through approaches to restoration and the provision/improvement of access/recreational facilities during/after working.</p>	<p>Positive – this policy is intended to ensure that an appropriate separation remains between built development and minerals development – to the benefit of people living and working in areas where there is minerals development.</p>
<p>18. To enable safe access to countryside and open spaces.</p>	<p>Positive – site development and restoration can improve access to the countryside. The more sites developed, potentially the greater the benefits resulting</p>	<p>Positive – this policy is intended to improve recreational opportunities, through appropriate site development, management and restoration. Taking a coordinated approach to site development/management/restoration could offer improved opportunities for access during working and restoration.</p>	<p>Positive – this policy is intended to maintain appropriate open space around minerals sites – this open space can be used to maintain/provide public access to countryside, especially if the minerals development is close to the edge of urban areas.</p>
<p><b>Conclusion:</b></p>	<p>This policy is intended to facilitate the development of aggregates quarries in areas of less landscape/visual/biodiversity impact, supplementing the provision of aggregates from sites formally designated in the Plan. It performs well against the sustainability objectives, concluding that impacts will</p>	<p>This policy is expected to provide a range of benefits during site development and restoration. No changes are considered necessary.</p>	<p>This policy is expected to strengthen existing safeguarding provision and to provide a range of benefits through maintaining an appropriate separation between minerals development and built development. No changes are considered necessary.</p>

**Table 10 - Sustainability appraisal of Policies MS-2, MS-8 and MS-9.**

Sustainability Objectives	Policy MS-2: Sand and Gravel Area of Search	Policy MS-8: Puddletown Road Area Policy	Policy MS-9: Safeguarding Minerals Sites and Infrastructure
	<p>be predominantly positive or neutral (assuming that impacts of new sites are satisfactorily mitigated at planning application stage).</p> <p>No changes are considered necessary.</p>		

## **8. Appraisal of Nominated Sites**

### **Background**

- 8.1. In order to predict the impacts/benefits of the various site allocations and to identify the response to these impacts/benefits, each site nominated to the Mineral Planning Authority has been assessed against all the sustainability objectives derived from the Sustainability Appraisal Scoping Report. This has included temporal assessment, considering the short, medium and long term impacts or in mineral planning terms, possible impacts/benefits at the site preparation, working and restoration/aftercare stages.

### **The Site Appraisal Process**

- 8.2. The Sustainability Appraisal site appraisal process has incorporated two stages, a preliminary technical exercise in which a series of site selection criteria are applied, followed by an assessment of each site against the sustainability objectives and based on the results of the criteria assessment, with commentary on identified impacts or benefits over specified timescales and a recommendation regarding inclusion or exclusion of the site.
- 8.3. The site selection criteria and methodology used initially are set out in Appendix 1 of the 2014 Minerals Strategy. They are intended for use as part of the site selection process and form part of the Sustainability Appraisal itself. The criteria relate directly to both the SEA Directive Issues and the sustainability objectives, as shown in Tables 8 and 9 of this Sustainability Appraisal. There are 25 criteria in all, covering ecological, economic and social issues and providing a standardised approach to assessing mineral site nominations and a clear audit trail to demonstrate how assessments have been undertaken.
- 8.4. Application of the criteria includes recording a subjective assessment of likely impacts/benefits for each criterion and, depending on the anticipated strength of the impacts/benefits, the assignment of a colour according to a ranking devised specifically for each of the 25 criteria. This provides both a written explanation of the level of anticipated impact/benefit and a visual impression of the suitability of any site nomination. If there is a predominance of red/orange scores for any site assessment, this indicates that if the site is to progress it will likely need a higher level of mitigation than another site that records more greens. Figure 2 below is an example of three completed criteria.

**Figure 2: Examples of completed site assessment criteria**

Landscape	
<b>Criterion C7 – Impact on designated landscapes.</b>	<b>B</b>
<p>Significant adverse impact Dorset County Council 23 October 2013</p>	
<b>Criterion C8 – What is landscape capacity to accommodate proposed development.</b>	<b>A</b>
<p>It is considered that there may be an issue regarding cumulative landscape and visual impacts in relation to the existing workings in the area and in this well used and sensitive part of the AONB. The site is enclosed by woodland on all sides apart from its eastern edge. Development would not significantly affect the local landscape and visual context (outside the site), but would affect views from the Purbeck Hills; it would extend the extent of quarrying onto the south facing side of the ridge of land running along Puddletown Road, extending the potential visibility of quarries in this area to a wide area of landscape to the south, including the AONB. However, if the developer can provide modified proposals that do not cause significant harm to views from the Purbeck Hills, and evidence to demonstrate the effects on these views, the capacity of this site could potentially be increased.</p> <p>Dorset County Council 26.11.2012</p>	
<b>Criterion C9 – Impact on historic landscapes.</b>	<b>C</b>
<p>Much of the site, with the possible exception of the lower part of Baker’s Well Valley, would have been heathland before the woodland was planted. This heathland formed part of the setting of the Scheduled Monuments referred to in C11. Unsympathetic extraction and quarrying could have a significant negative impact on the setting of these Monuments, but there is the potential for an improvement in that setting through restoration to heathland.</p> <p>Dorset County Council 4/11/2013</p>	

- 8.5. Completion of the 25 criteria for each site nomination required input from a range of disciplines within Dorset County Council, including landscape, heritage, ecology, geological sciences and highways. The Environment Agency have also provided input.
- 8.6. As stated, this was essentially a technical assessment, providing information about the site nominations and the possible effects of their development. This information was important in its own right, and was also used to inform the actual sustainability appraisal itself, applying the sustainability objectives in a further assessment of each site nomination.
- 8.7. This provides a two stage assessment process, where...
  - Stage 1** is a preliminary technical exercise, assessing all the site proposals through applying the site selection criteria set out in the Minerals Strategy, followed by...
  - Stage 2** which is an assessment of each site against the sustainability objectives and based on the results of the Stage 1 assessment as described above, with commentary on identified impacts or benefits over specified timescales, consideration of secondary/cumulative/synergistic effects, hydrology, health impacts and a recommendation regarding inclusion or exclusion of the site.



8.8. The Stage 1 assessments have been carried out in different phases and are can be seen at: <sup>9</sup>. The results of the Stage 2 assessments are presented separately in **Appendix A** (for sites being taken forward) and **Appendix B** (for sites not being taken forward) and **Appendix C** (sites withdrawn or already permitted).

**Secondary, cumulative and synergistic effects**

- 8.9. The SEA Directive requires the assessment of effects including secondary, cumulative and synergistic effects. These are defined as follows:
- i. Secondary or indirect effects are those that are not as a direct result of the Mineral Sites Plan , but occur at a distance from the original effect or as a result of a complex pathway.
  - ii. Cumulative effects are those effects which, though they may be small in relation to one policy, may combine across the plan (or in association with other plans) to produce an overall effect which is more significant.
  - iii. Synergistic effects are those where the combined effect of a number of policies is greater than the sum of individual effects.

**Examples of cumulative, synergistic and secondary**

Cumulative	<ul style="list-style-type: none"> <li>• dust, emissions, noise, vibration and traffic-related impacts in conjunction with other workings in the vicinity (see secondary impacts below);</li> <li>• loss of habitat or green infrastructure if several sites are being worked at the same time in the same location and there is no comparable habitat nearby;</li> <li>• lowering of groundwater particularly in the vicinity of sensitive natural receptors as a result of simultaneously working a cluster of several sites 'dry'.</li> </ul>
Secondary	<ul style="list-style-type: none"> <li>• use of active sites for temporary flood storage while they are active (for this reason it is considered to be secondary rather than synergistic)</li> <li>• contribution of road traffic generated by mineral workings to congestion and other impacts in nearby villages (clearly this impact could also be considered to be cumulative)</li> </ul>
Synergistic	<ul style="list-style-type: none"> <li>• scope to restore workings for biodiversity gain in line with priorities in each part of the county (recognising that this will result in a net loss of agricultural land);</li> <li>• co-location of aggregates reprocessing facilities with workings to promote increased use of secondary materials (recognising there is only likely to be a net benefit where the workings are fairly close to an urban area otherwise this would involve moving inert waste over some distances by road, offsetting one or all of the resource efficiency benefits.</li> </ul>

8.10. Site Selection Criteria 21 of Appendix A of the Minerals Strategy assesses whether the proposal/site nomination under consideration has any effects on cumulative impacts. Every site nomination has been assessed against this criterion, taking into consideration both mineral and non-minerals development and the outcomes are reported in the site assessments (the Stage 1 assessments referred to above) for all the sites.

8.11. The information from the site assessments has been taken forward into the sustainability appraisal site assessments (the Stage 2 assessments) that have been carried out. Each Stage 2 assessment

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<sup>9</sup> The 2013/14 site assessments can be seen at:  
[http://consult.dorsetforyou.com/portal/minerals\\_and\\_waste/mineral\\_sites\\_plan?tab=files](http://consult.dorsetforyou.com/portal/minerals_and_waste/mineral_sites_plan?tab=files)

The 2015 assessments are available online at are available online at:  
[http://consult.dorsetforyou.com/portal/draft\\_minerals\\_plan?tab=files](http://consult.dorsetforyou.com/portal/draft_minerals_plan?tab=files)

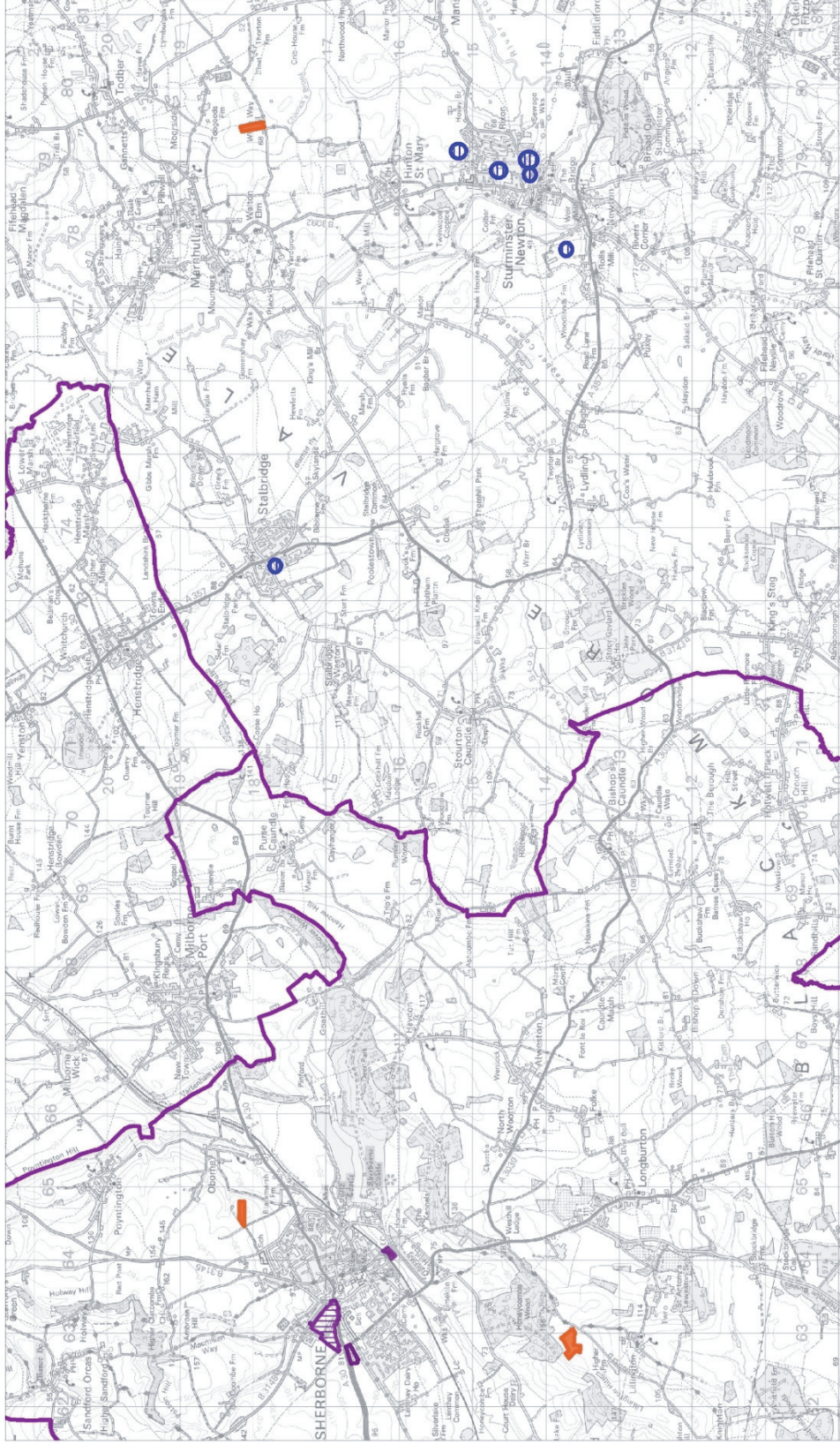


report includes consideration of possible cumulative/secondary/synergistic impacts for each site nomination (see Appendices A, B and C of this Report). None of the sites identified as being suitable to be taken forward are considered to contribute to cumulative impacts that cannot be mitigated. If there are any issues/impacts it is considered that these can satisfactorily be dealt with at the planning application stage.

### **Clusters of sites**

- 8.12. Minerals can only be worked where they are found, which limits spatial options for development of new sites and can make it more likely that mineral sites will be identified in clusters/discrete areas. This is more likely to result in cumulative impacts.
- 8.13. Cumulative/secondary impacts are not restricted to just other minerals or waste development, but also non-minerals development, such as housing and associated infrastructure. This has been considered through a review of existing development plans in Dorset, taking into consideration existing allocations and where appropriate potential future allocations currently going through the plan process. These are identified on a series of maps, set out below.
- 8.14. Given the need to work minerals where they are found, it is often necessary to apply site-specific mitigation at the planning application stage, to address impacts such as cumulative impacts. There are up to five clusters of sites that can be identified, and the following analysis considers the clustering effect, with impacts and mitigation.

**Figure 3 – District/Borough Allocations with Minerals and Waste Proposed Allocations**



**Map 1 - West Dorset and North Dorset council areas - Cumulative Impacts for sites allocated in Mineral Sites Plan**

-  Employment allocations - Purbeck adopted Plan
-  Employment allocations - Purbeck adopted Plan
-  Mineral sites allocated in Bournemouth, Dorset and Poole Mineral Sites Plan
-  Administrative boundaries

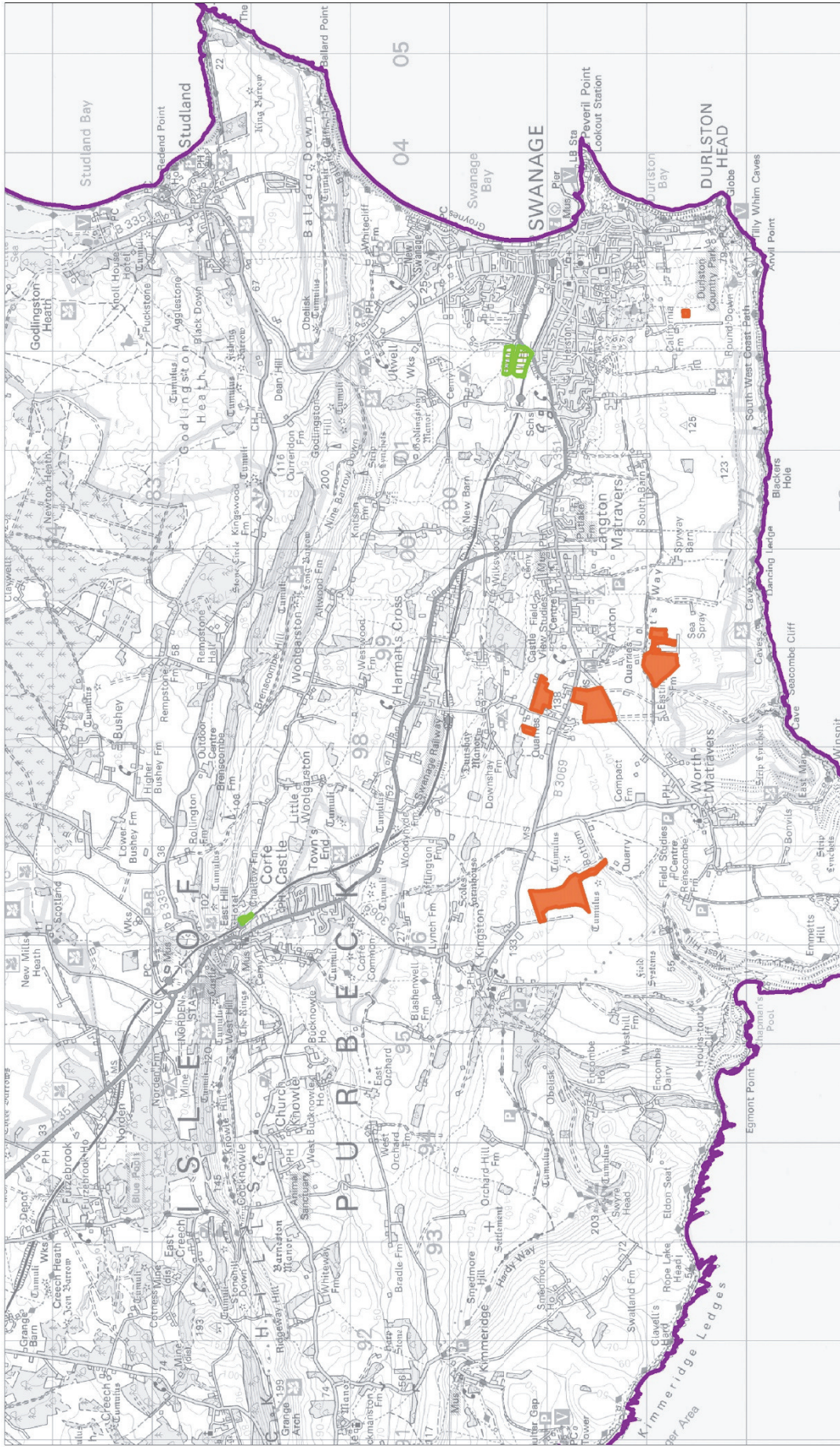
GEOGRAPHICAL INFORMATION SYSTEMS



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**Map 2 - Purbeck council areas - Cumulative Impacts for sites allocated in Mineral Sites Plan**

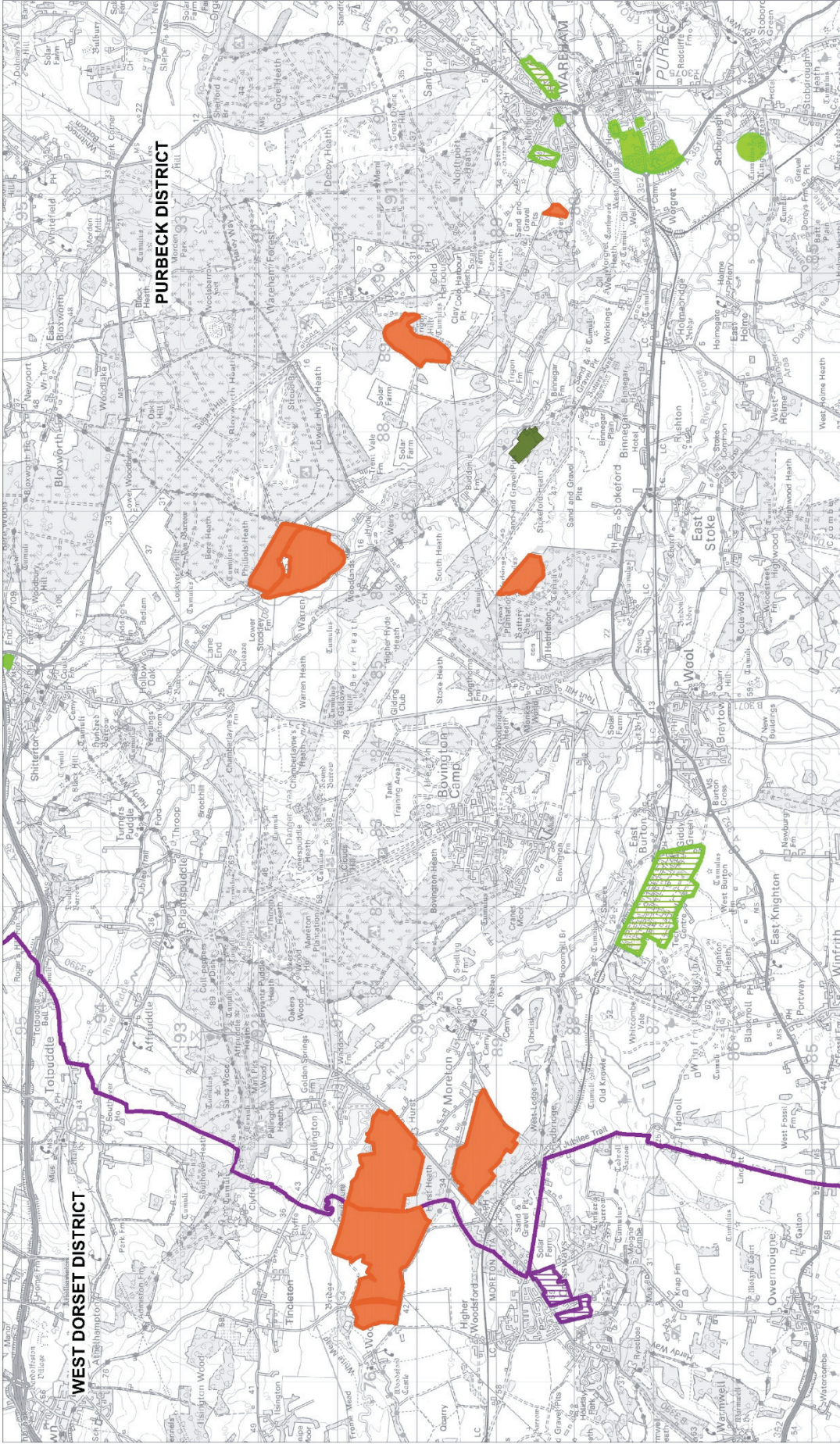
Mineral sites allocated in Bournemouth, Dorset and Poole Mineral Sites Plan





Employment allocations - Purbeck adopted Plan







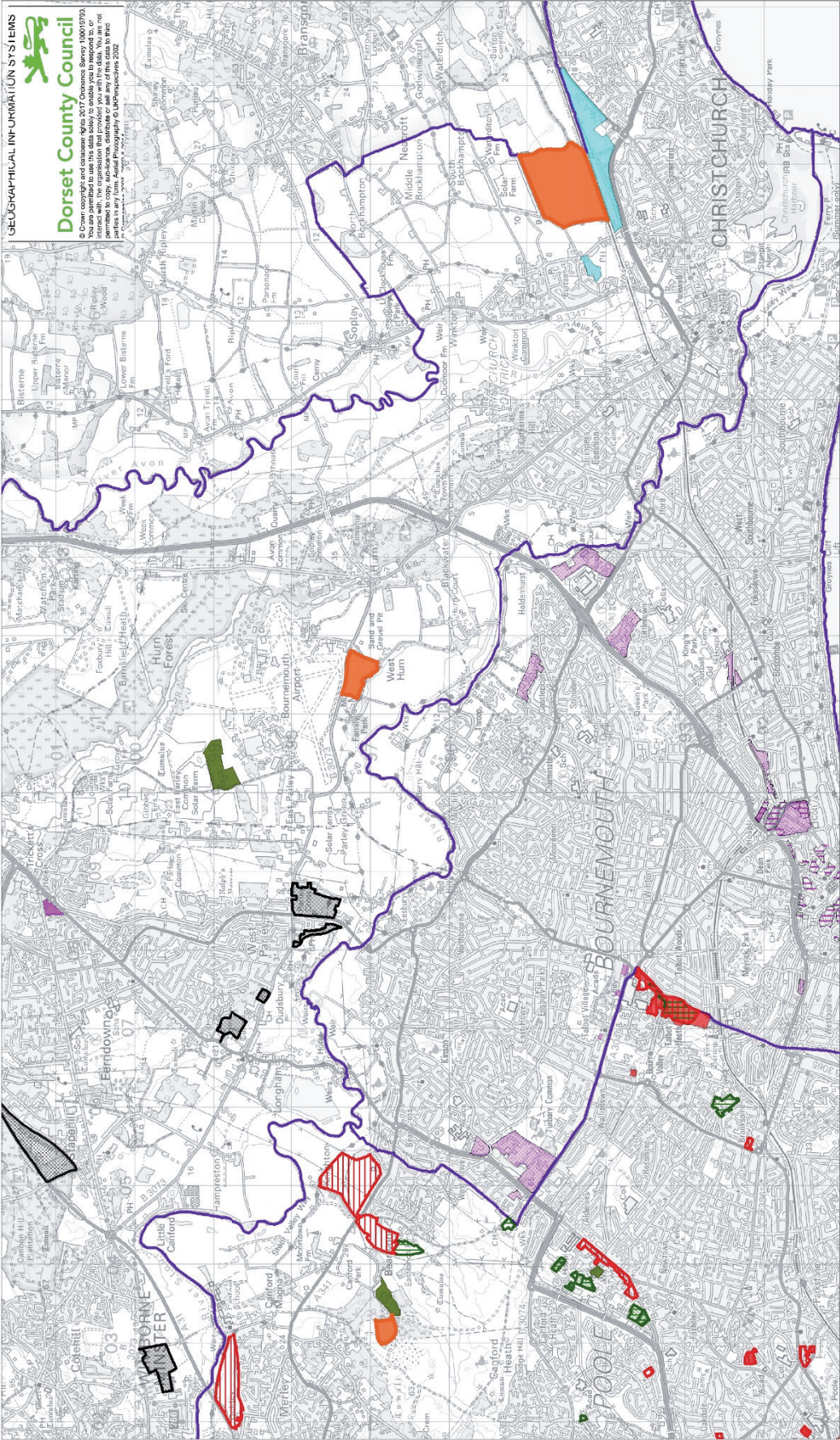
**Map 3 - West Dorset & Purbeck council areas - Cumulative Impacts for sites allocated in Mineral Sites Plan**

-  Area of settlement - Purbeck adopted Plan
-  Employment allocations - Purbeck adopted Plan
-  Mixed Use allocations - West Dorset adopted Plan
-  Administrative boundary
-  Mineral sites allocated in Bournemouth, Dorset and Poole Mineral Sites Plan
-  Mineral sites allocated in Bournemouth, Dorset and Poole Waste Plan





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**Map 4 - Poole, Bournemouth, East Dorset council areas - Cumulative Impacts for sites allocated in Mineral Sites Plan**

- |  |   |  |   |
|--|---|--|---|
|  | Residential allocations - Poole adopted Plan      |  | Mineral sites allocated in Bournemouth, Dorset and Poole Mineral Sites Plan |
|  | Employment allocations - Poole adopted Plan       |  | Mineral sites allocated in Bournemouth, Dorset and Poole Waste Plan         |
|  | Employment allocations - Poole draft Plan         |  | Administrative Authority boundaries   |
|  | Regeneration area - Poole draft Plan              |  |   |
|  | Residential allocations - Poole draft Plan        |  |   |
|  | Employment allocations - Bournemouth adopted Plan |  |   |
|  | Housing allocations - East Dorset adopted Plan    |  |   |
|  | Employment allocations - East Dorset adopted Plan |  |   |
|  | Employment allocations - East Dorset adopted Plan |  |   |
|  | Housing allocations - Christchurch adopted Plan   |  |   |